



Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance
Division of Corporation Finance
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: Oncobiologics, Inc.

Amendment No. 1 to Draft Registration Statement on Form S-1 Submitted December 18, 2015 CIK No. 0001649989

Ladies and Gentlemen:

On behalf of Oncobiologics, Inc. ("Oncobiologics" or the "Company"), we submit this letter in response to comments received from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") by letter dated December 30, 2015 (the "Second Comment Letter") with respect to the Company's Confidential Amendment No. 1 to Draft Registration Statement on Form S-1 submitted to the Commission on December 18, 2015. We are also responding to Comment 14 of the Staff's comment letter dated December 11, 2015 (the "First Comment Letter," and together with the Second Comment Letter, the "Comment Letters") with respect to the Company's Confidential Draft Registration Statement on Form S-1 submitted to the Commission on November 16, 2015, which we previously have advised would be responded to supplementally. Concurrently with the submission of this response letter, the Company is publicly filing a revised Registration Statement on Form S-1 (the "Form S-1"). In addition to addressing the comments raised by the Staff in the Second Comment Letter, the Company has revised the Form S-1 to update other disclosures.

For the convenience of the Staff, the numbering of the paragraphs below corresponds to the numbering of the comment in the Comment Letters, the text of which we have incorporated into this response letter for convenience in italicized type and which is followed by the Company's response. In the responses below, page number references are to the Form S-1.

Our Pipeline, page 1

1. We refer to your table on page 1 and our prior comment 3. Please revise your disclosure in this section regarding ONS-4010 to identify the approved therapeutic use for the referenced product. In addition, please state whether you intend to seek the same indication and how your product is intended to be delivered. If you have not determined an indication or method of delivery for ONS-4010, please so state.

Response: The Company respectfully acknowledges the Staff's Comment and has revised the disclosure on page 3 of the Form S-1 to include the disclosure from page 85 of the Form S-1 regarding the approved therapeutic use of the referenced product and the method of delivery. The Company further advises the Staff that ONS-4010 is a preclinical biosimilar product candidate, and, as indicated on pages 3 and 85 of the Form S-1, the Company has not yet determined the proposed therapeutic indication for which approval will initially be sought as such determination is done in consultation with applicable regulatory authorities.



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Risks Associated with Our Business, page 4

2. We note your response to our prior comment 4. Please revise your disclosure in your revised bullet points to address the risk associated with your license agreement(s) (e.g. Selexis) to include the patents licensed pursuant to the agreement(s) and the risk associated with obtaining third party commercialization agreements.

Response: The Company respectfully acknowledges the Staff's Comment and has revised the disclosure on page 4 of the Form S-1 accordingly.

Collaboration and License Agreements, page 85

3. Please revise your disclosures relating to Swiss Franc (CHF) payments to provide for the U.S. dollar equivalent.

Response: The Company respectfully acknowledges the Staff's Comment and has revised the disclosure on page 87 of the Form S-1 accordingly.

Intellectual Property, page 88

4. Please revise your disclosure to explain the meaning and significance of "PCT." In that regard, describe briefly the process of obtaining such patent, the benefits or potential protections of the pending PCT, whether patents have been granted pursuant to a PCT for biosimiliars, and in what jurisdictions you are currently seeking patent protection.

Response: The Company respectfully acknowledges the Staff's Comment and has revised the disclosure on page 89 of the Form S-1 accordingly. The Company supplementally advises the Staff that a patent cannot be granted pursuant to the PCT (patents can only be granted in national or regional patent offices).

Agreements with our Named Executive Officers, page 104

5. We note that your employment agreement with Dr. Mohan terminates upon the company's initial public offering of stock. We also note your dependence on Dr. Mohan as disclosed on page 5. Please revise your disclosure to discuss whether you intend to enter into or extend Dr. Mohan's current employment agreement. Please make any corresponding changes to the corresponding risk factor on page 41.

Response: The Company respectfully acknowledges the Staff's Comment and has revised the disclosure on pages 42 and 106 of the Form S-1 accordingly.

Stock-Based Compensation and PSU Obligation, page 68

14. We may have additional comments on your accounting for equity issuances including stock compensation and beneficial conversion features. Once you have an estimated offering price, please provide us an analysis explaining the reasons for the differences between recent valuations of your common stock leading up to the IPO and the estimated offering price.

Response: The Company acknowledges the Staff's Comment and respectfully advises the Staff that the Company's outstanding stock-based compensation awards as of September 30, 2015 are substantially comprised of performance-based stock units, or PSUs, which are liability classified and therefore subject to re-measurement based on the then fair value of the Company's common stock until the award is settled or extinguished. As of September 30, 2015, the Company has recorded stock-based compensation expense using \$7.475 per share, which was the then fair value that was established through contemporaneous arms-length transactions with new investors purchasing the Company's common stock.

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Please contact me at (212) 479-6721, Daniel Goldberg at (212) 479-6722 or Divakar Gupta at (212) 479-6474 with any questions or further comments regarding our response to the Staff's comment.

Sincerely,

/s/ Yvan-Claude Pierre

Yvan-Claude Pierre

cc: Pankaj Mohan, Oncobiologics, Inc., via e-mail Lawrence Kenyon, Oncobiologics, Inc., via e-mail Edwin O'Connor, Goodwin Procter LLP, via e-mail Thomas M. Koncsics, KPMG LLP, via e-mail