

Via Facsimile and U.S. Mail
Mail Stop 4720

January 29, 2010

Mr. Chris J. Stern
Chief Executive Officer
Oxygen Biotherapeutics, Inc.
2530 Meridian Parkway, Suite 3084
Durham, North Carolina 27713

**Re: Oxygen Biotherapeutics, Inc.
Form 10-K for the Fiscal Year Ended April 30, 2009
File No. 002-31909**

Dear Mr. Stern:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document 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.

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 filings. 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.

Item 1. Business

Our patents and intellectual property, page 5

1. Please revise to include a more robust discussion of your material patents, including which product groups they relate to and the expiration dates for each. See Item 101(c)(1)(iv) of Regulation S-K for guidance. Additionally, please revise your discussion of each license agreement to indicate the expiration date of the patents covered by the agreement in order to more clearly define the term of each agreement.

Item 9A (T)—Controls and Procedures, page 11

2. Please revise to state the conclusion of your principal executive officer and principal financial officer on the effectiveness of disclosure controls and procedures as of the end of the period covered by the report, as required by Item 307 of Regulation S-K.

Item 15. Exhibits and Financial Statement Schedules, page 23

3. Please file copies of the following two agreements, discussed on page F-12 of the Form 10-K, as exhibits pursuant to Item 601(b)(10) of Regulation S-K:
 - May 2008 Exclusive Worldwide License Agreement with Virginia Commonwealth University; and
 - September 2008 Assignment of Glucose Monitoring Technology to Glucometrics, Inc.

Alternatively, please provide us with an analysis supporting your determination that you are not substantially dependent on either of these agreements.

* * * *

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment 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

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- 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 filings or in response to our comments on your filings.

Please contact Frank Wyman, Staff Accountant, at (202) 551-3660 or Don Abbott, Senior Staff Accountant, at (202) 551-3608, 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 Laura Crotty, Staff Attorney, at (202) 551-3563 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