



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 6010

June 26, 2008

Via Facsimile and U.S. Mail

Mr. Brian K. Hutchison
Chief Executive Officer
RTI Biologics, Inc.
11621 Research Circle
Alachua, FL 32615

Re: RTI Biologics, Inc.
Form 10-K for the year ended December 31, 2007
Filed February 27, 2008
Form 10-Q for the quarter ended March 31, 2008
File No. 0-31271

Dear Mr. Hutchison:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise future filings 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 may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, 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 year ended December 31, 2007

Item 1. Business, page 1

1. We note your disclosure that BioCleanse[®] is a patented tissue sterilization process that is designed to provide surgeons and patients with tissue implants that are free of spores, fungi, bacteria and viruses. We also note that you use bovine tissue in the production of some of your products. In your future filings, please address whether the BioCleanse[®] process removes prions. Please include any related risk factor disclosure. We also note your disclosure that the FDA has "reviewed" the BioCleanse[®] process. Please also clarify whether the FDA has approved the BioCleanse[®] process and clarify for your investors the distinction, if any, between review and approval.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 29

Critical Accounting Policies, page 30

Valuation of Long-Lived Assets and Investments, page 31

2. Considering the amount and frequency of impaired long-lived assets recorded, we note your disclosures herein regarding such matters are only mentioned in a broad context. Please revise future filings to expand your discussion of this critical accounting estimate to provide greater insight into the quality and variability of the significant estimates and assumptions that are used in determining the amount of any goodwill and intangible impairments. Specifically, address why the estimates bear the risk of change and analyze, to the extent material, such factors as how you arrived at the estimates, how accurate the estimates have been in the past, how much the estimates have changed in the past and whether the estimates are reasonably likely to change in the future. Refer to SEC Release 33-8350.

Item 11. Executive Compensation, page 45

Annual Bonus Plan, page 49

3. We note that you have not disclosed the necessary targets to be achieved in order for your named executive officers to earn their annual cash incentive under the Annual Bonus Plan. Please provide such disclosure in your future filings, as applicable. To the extent you believe that disclosure of the information, on a historical basis, would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. Refer also to Question 3.04 of the Item 402 of Regulation S-K Interpretations available on our website at www.sec.gov. In discussing

how difficult or likely it will be to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm.

Consolidated Financial Statements, page 68

Consolidated Statements of Cash Flows, page 74

4. We note, according to disclosure in Note 9, during the year ended December 31, 2006, in conjunction with entering into an amended distribution agreement, you paid MSD a fee of \$3 million of which \$2.4 million related to acquiring exclusivity rights which were recorded as an intangible asset. Please disclose in future filings why this amount was included under changes in assets and liabilities rather than classified as cash flows from investing activities. In this regard, tell us how your presentation of goodwill and other intangible assets under cash flows from operating activities complies with paragraphs 22 and 23 of SFAS 95.
5. Please reconcile the amount recorded as cash outflow for business combination to disclosures made in Note 10 in reference to business combination costs. We note that the latter costs represented acquisition costs associated with the Tutogen merger.

Note 14. Income Taxes, page 89

6. With three consecutive periods of reporting net loss, please tell us and disclose in future filings the reason(s) why you continue to present a partial valuation allowance rather than a full valuation. Please refer to paragraphs 23 and 24 of SFAS 109 in your response.

Form 10-Q for the Quarterly Period Ended March 31, 2008

Item 1. Condensed Consolidated Financial Statements, page 1

Note 11. Restructuring Charge, page 13

7. We note that you recognized a restructuring charge of \$368,000 resulting from severance payments and termination of certain employees. In future filings, beginning with the period in which an exit plan is initiated, until the exit plan is completed, provide the following disclosures required by SFAS 146:
 - a. A description of the exit or disposal activity, including the facts and circumstances leading to the expected activity and the expected completion date;
 - b. For each major type of cost associated with the activity (for example, one-time termination benefits, contract termination costs, and other associated costs):
 - 1) The total amount expected to be incurred in connection with the activity, the amount incurred in the period, and the cumulative amount incurred to date
 - 2) A reconciliation of the beginning and ending liability balances showing separately the changes during the period attributable to costs incurred and

- charged to expense, costs paid or otherwise settled, and any adjustments to the liability with an explanation of the reason(s) therefor
- c. The line item(s) in the statement of operations in which the costs in (b) above are aggregated; and
 - d. If a liability for a cost associated with the activity is not recognized because fair value cannot be reasonably estimated, that fact and the reasons therefor.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 16

Three Months Ended March 31, 2008 Compared With Three Months Ended March 31, 2007, page 17

Restructuring Charge, page 19

8. We note that you implemented a formal restructuring plan which resulted in \$368,000 of expenses in the first quarter of 2008. Please expand future MD&A to include discussion of the likely effects of management's plans on financial position, future operating results and liquidity unless it is determined that a material effect is not reasonably likely to occur. You should identify the periods in which material cash outlays are anticipated and the expected source of their funding. You should also discuss material revisions to exit plans, exit costs, or the timing of the plan's execution, including the nature and reasons for the revisions. The expected effects on future earnings and cash flows resulting from the exit plan should be quantified and disclosed, along with the initial period in which those effects are expected to be realized. In later periods if actual savings anticipated by the exit plan are not achieved as expected or are achieved in periods other than as expected, MD&A should discuss that outcome, its reasons, and its likely effects on future operating results and liquidity. Refer to SAB Topic 5-P.4.

Item 4. Disclosure Controls and Procedures, page 22

9. Please amend your filing to include the conclusions required by Item 307 of Regulation S-K with respect to RTI Biologics, Inc.

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As appropriate, please 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 response 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 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 and

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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 writing, 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.

You may contact David Burton, Staff Accountant, at (202) 551-3626 or me at (202) 551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Alan Morris, Staff Attorney at (202) 551-3601 or Tim Buchmiller, Legal Reviewer at (202) 551-3635 if you have questions on other comments. In this regard, do not hesitate to contact Kevin L. Vaughn, Accounting Branch Chief, at (202) 551-3643.

Sincerely,

Lynn Dicker
Reviewing Accountant