

Mail Stop 6010

July 14, 2006

Dr. Michael Fonstein
Chief Executive Officer and President
Cleveland Biolabs, Inc.
11000 Cedar Avenue, Suite 290
Cleveland, Ohio 44106

Re: Cleveland Biolabs, Inc.
Amendment No. 3 to Registration Statement on Form SB-2
Filed July 10, 2006
File No. 333-131918

Dear Dr. Fonstein:

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. 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.

Selling Stockholders, page 61

1. Please revise your disclosure to identify the natural persons who beneficially own the shares held by entities identified in your selling stockholder table.

Exhibits

2. Given the final sentence in the penultimate paragraph of Exhibit 5.1, please file an updated opinion on the date you plan to go effective on the registration statement.

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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover

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letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact Praveen Kartholy at (202) 551-3778 or Brian Cascio, Accounting Branch Chief, at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Donald C. Hunt at (202) 551-3647 or me at (202) 551-3444 with any other questions.

Sincerely,

Perry Hindin
Special Counsel

cc (via fax): Ram Padmanabhan, Esq. – Katten Muchin Rosenman LLP