



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3561

February 16, 2016

Via E-mail

Neil Lyons
Chief Financial Officer
Cleveland BioLabs, Inc.
73 High Street
Buffalo, New York 14203

**Re: Cleveland BioLabs, Inc.
Registration Statement on Form S-3
Filed January 29, 2016
File No. 333-209232**

Dear Neil Lyons:

We have limited our review of your registration statement to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. Given the relative size of the offering to your outstanding shares held by non-affiliates, the relationship of certain of the selling shareholders to you, the circumstances under which the selling shareholders received the shares, and the amount of time that the selling shareholders have held the shares, it appears that the resale of securities is by or on behalf of the issuer. Under Rule 415, equity securities offered by or on behalf of the issuer cannot be sold in an "at the market offering" unless the offering meets the requirements of Rule 415(a)(1)(x). As it appears that you do not meet the transaction requirements for registration of a primary offering on Form S-3, you would have to include a price for the shares and disclose that the selling shareholders are underwriters that will conduct their offering at a fixed price for the duration of the offering. Please refer to Securities Act Rule C&DI 612.09 for guidance. Please revise or provide your analysis as to why you do not believe this is an at the market offering.

2. We note that the Form 8-K you filed on May 11, 2015, pertained to events that occurred on May 4, 2015. This filing appears to have been delinquent based on the requirements set forth in General Instruction B.1 to Form 8-K. Please explain how you meet the eligibility requirements for registration on Form S-3 as set forth in Instruction I.A.3(b) or refile the registration statement on the appropriate form.

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 the information the Securities Act of 1933 and all applicable Securities Act rules require. 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement, please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

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Please contact Kathleen Suellentrop at (202) 551-4256 or Pamela Howell at (202) 551-3357 with any other questions.

Sincerely,

/s/ Pamela Howell
for

John Reynolds
Assistant Director

cc: David Wolpa, Esq.
McGuire Woods LLP