



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

DIVISION OF
CORPORATION FINANCE

June 27, 2013

Via E-mail

Steve Reichling
Chief Financial Officer
Accelerate Diagnostics, Inc.
3950 South Country Club Road, Suite 470
Tucson, AZ 85714

**Re: Accelerate Diagnostics, Inc.
Registration Statement on Form S-3
Filed June 4, 2013
File No. 333-189065**

Dear Mr. Reichling:

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. Where 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.

Calculation of Registration Fee

1. Please file all required information that you have omitted from your document, including the number of securities offered. Refer to Regulation S-K Item 501(b)(2) and Question 227.02 of the Securities Act Rules Compliance and Disclosure Interpretations, available on the Commission's website. We also note that you have not yet filed required exhibits.

Prospectus Cover Page

2. Please revise your prospectus where appropriate to clarify that you are not registering the standby purchase transaction with Abeja, and that the shares of common stock sold to Abeja pursuant to the standby purchase agreement, if any, will be "restricted securities" as that term is defined in Rule 144 under the Securities Act of 1933. Because it appears that you initiated the transaction with Abeja prior to filing this registration statement, you must complete the transaction with Abeja privately. Also, please tell us the extent to

which Abeja will participate in the rights offering, in addition to acting as a standby purchaser.

3. We note your disclosure regarding your discretion to extend the offering period. In addition to disclosing the initial subscription period expiration date, please also disclose the latest date to which the offering may be extended. Also, disclose whether subscribers will be able to revoke their exercise in the event of an extension, amendment or modification to the subscription arrangement. If they will not, please add a risk factor to discuss the risk of submitting an irrevocable subscription to an offering with an uncertain expiration date.

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.

Steve Reichling
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Please contact Louis Rambo at (202) 551-3289 or Daniel Morris at (202) 551-3314 with any questions.

Sincerely,

/s/ Daniel Morris for

Amanda Ravitz
Assistant Director

cc: Jeffrey A. Scudder
Snell & Wilmer LLP