



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3561

September 7, 2017

Via E-mail

Peter Maag
Chief Executive Officer
CareDx, Inc.
3260 Bayshore Boulevard
Brisbane, California 94005

**Re: CareDx, Inc.
Registration Statement on Form S-1
Filed August 25, 2017
File No. 333-220183**

Dear Mr. Maag:

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.

General

1. It appears you are attempting to register the resale of 1,791,755 shares of common stock issuable pursuant to certain Conversion Agreements and that such shares have not yet been issued. We also note that the issuance of such shares is contingent upon approval of shareholders in accordance with NASDAQ requirements. Please provide your analysis showing how you determined that there was a completed private placement under Section 4(a)(2) of the Securities Act 1933 prior to your attempt to register the resale of the 1,791,755 shares. Refer to Securities Act Sections CDI 134.01 and Securities Act Forms CDI 116.19 for guidance.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

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Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Ruairi Regan at (202) 551-3269 or Pamela Howell, Special Counsel, at (202) 551-3357 if you have any questions.

Sincerely,

/s/ Pamela Howell
for

John Reynolds
Assistant Director
Office of Beverages,
Apparel and Mining

cc: Jeffrey T. Hartlin, Esq.
Paul Hastings LLP