



DIVISION OF
CORPORATION FINANCE

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

June 9, 2022

Mark Hilz
Chief Executive Officer
Heart Test Laboratories, Inc.
550 Reserve St.
Suite 360
Southlake, Texas 76092

Re: Heart Test Laboratories, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed June 6, 2022
File No. 333-265024

Dear Mr. Hilz:

We have reviewed your amended registration statement and have the following 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. Unless we note otherwise, our references to prior comments are to comments in our June 1, 2022 letter.

Amendment No. 1 to Form S-1 filed June 6, 2022

Capitalization, page 61

1. We note from your pro forma as adjusted column that you have increased cash by the total net offering proceeds of \$7.2 million. Please explain to us why total shareholders' (deficit) equity and total capitalization was increased by \$8.5 million rather than \$7.2 million of net offering proceeds. Revise as necessary.

Mark Hilz
Heart Test Laboratories, Inc.
June 9, 2022
Page 2

2. Please tell us and revise your filing to explain how you determined the common shares that your bridge note, \$1.5 million convertible note and Series A preferred shares will convert into upon your initial public offering. Please also explain, with reference to the conversion terms for your Series A preferred shares as set forth on page F-22, how you determined that the conversion of the Series A preferred shares are probable of occurring.

You may contact Tara Harkins at 202-551-3639 or Jeanne Baker at 202-551-3691 if you have questions regarding comments on the financial statements and related matters. Please contact Jordan Nimitz at 202-551-5831 or Suzanne Hayes at 202-551-3675 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Steve Jacobs, Esq.