

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

December 16, 2022

John L. Lubniewski Chief Executive Officer HTG Molecular Diagnostics, Inc. 3430 E. Global Loop Tucson, AZ 85706

> Re: HTG Molecular Diagnostics, Inc. Registration Statement on Form S-1 Filed December 6, 2022 File No. 333-268681

Dear John L. Lubniewski:

We have limited our review of your registration statement to that issue we have addressed in our comment. In our comment, we 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 comment applies 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 this comment, we may have additional comments.

Registration Statement on Form S-1 filed December 6, 2022

Plan of Distribution, page 20

1. We note that you may enter into a securities purchase agreement directly with certain institutional investors but investors that do not enter into a such an agreement shall rely solely on the prospectus in connection with the purchase. Please provide additional disclosure regarding this disparate treatment and how you intend to address details of transactions outside of a securities purchase agreement, such as the number of securities to be purchased. Alternatively, revise to clarify that all investors will enter into the same agreement.

John L. Lubniewski HTG Molecular Diagnostics, Inc. December 16, 2022 Page 2

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.

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.

You may contact Benjamin Richie at 202-551-7857 or Abby Adams at 202-551-6902 with any questions.

Sincerely,

Division of Corporation Finance Office of Industrial Applications and Services

cc: Asa Michael Henin