

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

December 20, 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
File No. 333-268681
Supplemental Response dated December 20, 2022

Dear John L. Lubniewski:

We have reviewed your proposed amendments to the registration statement and have the following comment. In our comment, 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 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 these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our December 16, 2022 letter.

Supplemental Response filed December 20, 2022

Potential Modification of Certain Outstanding Warrants, page 21

1. We note the proposed revised disclosure that, "[i]n connection with this offering, [you] may amend the terms of outstanding warrants" originally issued March 21, 2022, to change the exercise price and expiration date to coincide with those of the warrants in this offering, as inducement of the holder(s) of those warrants to participate in this offering. Based on this disclosure and the additional marked changed pages you provided supplementally, it appears you should revise this offering to include the registration of these warrants and identify the existing investor(s) who will receive the repriced warrants in the offering. In addition, tell us why the cost of the warrant repricing should not be included as an offering expense. Refer to Item 511 of Regulation S-K. Finally,

John L. Lubniewski HTG Molecular Diagnostics, Inc. December 20, 2022 Page 2

please provide the proposed changed pages you submitted earlier today with your response, or under separate cover as correspondence in Edgar. We may have additional comments.

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

Sincerely,

Division of Corporation Finance Office of Industrial Applications and Services

cc: Asa Michael Henin