

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

February 13, 2025

Meeshanthini Dogan Chief Executive Officer Cardio Diagnostics Holdings, Inc. 311 W. Superior Street, Suite 444 Chicago, IL 60654

> Re: Cardio Diagnostics Holdings, Inc. Registration Statement on Form S-3 Filed February 7, 2025 File No. 333-284775

Dear Meeshanthini Dogan:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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.

Please contact Tamika Sheppard at 202-551-8346 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: P. Rupert Russell