

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

May 21, 2025

Elisa Luqman Chief Financial Officer Cardio Diagnostics Holdings, Inc. 311 West Superior Street Suite 444 Chicago, IL 60654

Re: Cardio Diagnostics Holdings, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2024

File No. 001-41097

Dear Elisa Luqman:

We have completed our review of your filing. 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.

Sincerely,

Division of Corporation Finance Office of Life Sciences