

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

December 21, 2023

Robert Spignesi Chief Executive Officer Rapid Micro Biosystems, Inc. 1001 Pawtucket Boulevard West, Suite 280 Lowell, MA 01854

> Re: Rapid Micro Biosystems, Inc. Registration Statement on Form S-3 Filed December 15, 2023 File No. 333-276081

Dear Robert Spignesi:

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 Benjamin Richie at 202-551-7857 with any questions.

Sincerely,

Division of Corporation Finance Office of Industrial Applications and Services

cc: Adam Johnson