December 21, 2023

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

Biosystems, Inc.

Statement on Form S-3

2023

Re: Rapid Micro

Registration

Filed December 15,

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