

June 22, 2021

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

Biosystems, Inc.

Statement on Form S-1  
2021

Re: Rapid Micro

Amendment No. 2 to  
Draft Registration

Submitted June 10,

CIK No. 0001380106

Dear Mr. Spignesi:

We have reviewed your amended draft 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to this comment and your amended draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 2 to Draft Registration Statement on Form S-1

Prospectus summary  
Our market, page 6

1. We note your revised disclosure on pages 7 and 95 that opportunities in adjacent markets and upstream/downstream workflow processes could increase your TAM by a combined \$18 billion to \$32 billion. Please revise to disclose whether these estimates are based on the study you commissioned from Health Advances LLC. If not, describe the basis for these estimates. Additionally, please expand your disclosure to describe how you are currently positioned to expand into adjacent markets and launch products addressing workflow processes not currently addressed by your Growth Direct MQC solution.

Robert Spignesi  
Rapid Micro Biosystems, Inc.  
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You may contact Jenn Do at 202-551-3743 or Daniel Gordon at 202-551-3486 if you have questions regarding comments on the financial statements and related matters. Please contact David Gessert at 202-551-2326 or Laura Crotty at 202-551-7614 with any other questions.

Sincerely,

FirstName LastNameRobert Spignesi

Division of

Corporation Finance

Comapany NameRapid Micro Biosystems, Inc.

Office of Life

Sciences

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cc: Wesley C. Holmes

FirstName LastName