



DIVISION OF  
CORPORATION FINANCE

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

September 14, 2018

Jonathan P. Mow  
Chief Executive Officer  
PhaseBio Pharmaceuticals, Inc.  
Regus Del Mar  
12707 High Bluff Drive, Suite 200  
San Diego, CA 92130

**Re: PhaseBio Pharmaceuticals, Inc.  
Amendment No. 1 to Draft Registration Statement on Form S-1  
Submitted August 31, 2018  
CIK No. 0001169245**

Dear Mr. Mow:

We have reviewed your amended registration statement and have the following comment.

Please respond to this letter by amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our August 24, 2018 letter.

Amendment No. 1 to Draft Registration Statement on Form S-1 submitted August 31, 2018

Prospectus Summary  
Overview, page 1

1. We note your revisions in response to our prior comment 2 and continue to object to your characterization of PB2452 as "first-in-class." Adding the qualifier "potentially" does not address our concerns that your product candidate is in the early stages of development and has only been tested on healthy patients. Please remove this statement.

Jonathan P. Mow  
PhaseBio Pharmaceuticals, Inc.  
September 14, 2018  
Page 2

You may contact Tabatha Mccullom at 202-551-3658 or Jim Rosenberg at 202-551-3679 if you have questions regarding comments on the financial statements and related matters. Please contact Irene Paik at 202-551-6553 or Mary Beth Breslin at 202-551-3625 with any other questions.

Sincerely,

Division of Corporation Finance  
Office of Healthcare & Insurance

cc: Darren K. DeStefano - Cooley LLP