

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

September 15, 2021

Ian McDonald
Chief Executive Officer and Director
Bright Minds Biosciences Inc.
Suite 1500, 1055 West Georgia Street, PO Box 11117
Vancouver, British Columbia, Canada, V6E 4N7

Re: Bright Minds Biosciences Inc.
Amendment No. 3 to Registration Statement on Form 20-FR12G
Filed August 27, 2021
File No. 000-56296

Dear Mr. McDonald:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response and any amendment you may file in response to these comments, we may have additional comments.

Amendment No. 3 to Registration Statement on Form 20-F

Principal Products, page 19

1. Please revise the study outcome descriptions in the table presenting your preclinical trials to disclose your objective observations from the trials without concluding that the product candidate was effective or had an impact on the observed results. Any conclusions regarding efficacy are within the sole authority of the FDA. For example, you may indicate that test subjects treated with your product candidate experienced 47% fewer binge eating episodes than those participants that were not treated with your product candidate. However, stating that the product candidate suppressed the number of binge eating episodes by 47% presents an inappropriate statement about the efficacy of the product candidate. Please review the description of the study outcomes and revise the descriptions of the outcome accordingly.

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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.

You may contact Lynn Dicker at 202-551-3616 or Eric Atallah at 202-551-3663 if you have questions regarding comments on the financial statements and related matters. Please contact Jordan Nimitz at 202-551-6001 or Suzanne Hayes at 202-551-3675 with any other questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Michael Shannon, Esq.