



DIVISION OF  
CORPORATION FINANCE

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

August 4, 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.**  
**Amended Registration Statement on Form 20-FR12G**  
**Filed July 29, 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. 1 to Registration Statement on Form 20-F

Item 4. Information on the Company, page 19

1. We note your response to comment 8 and reissue the comment. Please eliminate the columns labeled "Early Pre-clinical" and "Late Pre-clinical" and replace them with one column representing pre-clinical trials. Additionally, please explain why you revised the indication for 5-HTC2C from "Dravet syndrome" to "undisclosed seizure disorder." To the extent that you are no longer developing this candidate for treatment of Dravet syndrome, please explain this change in your plans for the development of this product candidate. If you are still developing this candidate for Dravet syndrome, please restore this information to the table. The target indication is material information and is therefore required disclosure. With respect to 5-HT2A + 5-HT2C, given the early stage of development and the fact that you have not yet identified an indication, please provide the basis for your determination that it is a material to your business and appropriate to

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include in your pipeline table.

2. We note your response to comment 7. Please revise the description of results related to efficacy to provide objective information about the results, as opposed to conclusions about the efficacy. For example, please revise the following types of conclusions:
  - "significant protection against MES;"
  - "reduces fentanyl seeking behavior;" and
  - "suppressed binge intake."

Additionally, delete "Proven to be" from the top of the Major Objective column. These trials are early stage and are not considered to be proof of safety or efficacy.

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

Sincerely,

Division of Corporation Finance  
Office of Life Sciences

cc: Michael Shannon, Esq.