



DIVISION OF  
CORPORATION FINANCE

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

August 24, 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. 2 to Registration Statement on Form 20-FR12G**  
**Filed August 13, 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. 2 to Registration Statement on Form 20-F

Item 4. Information on the Company, page 19

1. We note your response to our prior comment 1 indicating that 5-HT2A + 5-HT2C is material because it has many potential therapeutic applications. This is a potential reason to continue to develop the product candidate and an reason for believing that it may have long term potential, it does not explain why you currently believe it is sufficiently material to your current business to include in the pipeline table. To the extent you continue to believe it is sufficiently material, please include more information about the candidate in your registration statement, including a description of your preclinical studies and a description of your PsychoGenics collaboration.
2. We note your response to comment 2. Please quantify your disclosures related to the the reduced number of fentanyl seeking episodes and binge easting episodes.

Ian McDonald  
Bright Minds Biosciences Inc.  
August 24, 2021  
Page 2

3. Please include a discussion of the material terms of your NIH program(s).

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 202-5513663 or Lynn Dicker at 202-5513616 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.