Bright Minds Biosciences announces participation in upcoming scientific conferences and partnering events

- *Bright Minds Biosciences will present scientific posters about various programs in development, including BMB-101, BMB-201 and BMB-202*
- *Bright Minds Biosciences will participate in BIO Europe partnering event and Chicago Biocapital Summit to present its innovation in neuroscience*

NEW YORK, Oct. 03, 2024 -- Bright Minds Biosciences Inc. (NASDAQ: DRUG), a pioneering company focused on developing highly selective 5-HT2 agonists for the treatment of drug-resistant epilepsy, depression, and other CNS disorders, is excited to announce its participation in the upcoming scientific conferences:

- **Neuroscience 2024** annual meeting, organized by the Society for Neuroscience (SfN), will take place in Chicago, October 5–9.
- **Therapeutic Development at NINDS** Chicago, October 7, 2024. Bright Minds will discuss its progress in epilepsy (ETSP) and pain (PSPP) programs and collaboration with NIH.
- **BIO-Europe**, Europe's leading partnering event – Stockholm, Sweden, November 4-6.
- **Chicago Biocapital Summit**, a showcase of Midwest biotech innovation, organized by Chicago Biomedical Consortium – Chicago, November 6-7.
- **AES Annual Meeting 2024**, Los Angeles, December 6-10. Bright Minds Biosciences will present data for BMB-101, lead 5-HT2C agonist for the treatment of rare epilepsies.

Presentations by Bright Minds Biosciences will include:

Title: Novel 5-HT2A-selective agonists with well-characterized PK profile and short duration of action
Poster Number: PSTR041.28 / N5
Presentation date and location: October 5, 2024, 1:00 PM - 5:00 PM MCP Hall A

Title: Phase I Study to Evaluate the Safety, Tolerability, and Pharmacokinetics of Single and Multiple Ascending Oral Doses of novel 5-HT2C agonist, BMB-101, in Fed and Fasted Adult Healthy Human Volunteers
Poster Number: 1.532
Presentation date and location: Poster Session 1, Saturday, December 7. South Hall H, Level 1

Title: BMB-101 and Biased 5-HT2C Agonism: A Novel Approach for Sustained Epilepsy Management
Poster Number: 1.533
Presentation date and location: Poster Session 1, Saturday, December 7. South Hall H, Level 1

Option Grants

The Company is also pleased to announce that it has granted 70,000 options (the “Options”) to employees and members of the board of directors, to purchase 70,000 Shares pursuant to the Company’s share option plan. The Options are exercisable at an exercise price of $1.65 per Share for a period of five (5) years from the date of grant. The Options are subject to vesting periods over the course of the term of the Options.

About BMB-101

BMB-101 is a novel scaffold 5-HT2C Gq-protein biased agonist developed using structure-based drug design. It was explicitly designed for chronic treatment of neurological disorders where tolerance and drug resistance are common issues. Biased agonism at the 5-HT2C receptor is one of its key features and adds another layer of functional selectivity within a well-validated target. BMB-101 works exclusively via the Gq-protein signaling pathway and avoids beta-arrestin activation, which is crucial to minimize the risk of receptor desensitization and tolerance development. This provides a novel mechanism, anti-epileptic drug designed to provide sustained seizure relief in hard-to-treat patient populations. In preclinical studies, BMB-101 has demonstrated efficacy in animal models of Dravet Syndrome and numerous models of generalized seizures.

In Phase 1 clinical studies, BMB-101 was given to 64 healthy volunteers in a Single Ascending Dose (SAD), Multiple Ascending Dose (MAD) and food-effects study. BMB-101 was demonstrated to be safe and well tolerated at all doses. No Serious Adverse Events (SAEs) were observed, and Adverse Events (AEs) were mild in nature and in line with on-target effects for serotonergic drugs.

An extensive target-engagement study was conducted using both fluid biomarkers (transient prolactin release) and physical biomarkers (Quantitative Electroencephalogram, qEEG). Both methods confirmed robust central target engagement. A qEEG

signature typical for anti-epileptic drugs was observed, with a selective depression of EEG power at frequencies observed during epileptic seizures. Furthermore, a potentiation of frontal gamma-power was observed in this study which could indicate the potential for improved cognition.

About Bright Minds Biosciences
Bright Minds Biosciences is a biotechnology company developing innovative treatments for patients with neurological and psychiatric disorders. Our pipeline includes novel compounds targeting key receptors in the brain to address conditions with high unmet medical need, including epilepsy, depression, and other CNS disorders. Bright Minds is focused on delivering breakthrough therapies that can transform patients' lives.

Bright Minds Biosciences has developed a unique platform of highly selective serotonergic agonists exhibiting selectivity at different serotonergic receptors. This has provided a rich portfolio of NCE programs within neurology and psychiatry.

Forward-Looking Statements

This news release contains "forward-looking information". Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. Forward-looking statements in this news release include design, progress, and completion of the BREAKTHROUGH *Study, future clinical development of BMB-101, and future intended use or therapeutic benefit of BMB-101 to treat refractory epilepsy disorders. A variety of factors, including known and unknown risks, many of which are beyond our control, could cause actual results to differ materially from the forward-looking information in this news release. These factors include the company's financial position and operational runway, regulatory risk to operating in the pharmaceutical industry, and inaccuracies related to the assumption made by management relating to general availability of resources required to operate the studies noted in this news release. Additional risk factors can also be found in the Company's public filings under the Company's SEDAR+ profile at www.sedarplus.ca. Forward-looking statements contained herein are made as of the date of this news release and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. The Company undertakes no obligation to update forward-looking statements if circumstances, management's estimates or opinions should change, except as required by securities legislation. Accordingly, the reader is cautioned not to place undue reliance on forward-looking statements.*

The Canadian Securities Exchange has neither approved nor disapproved the information contained herein and does not accept responsibility for the adequacy or accuracy of this news release.

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