

NeonMind Announces Positive Preclinical Results Demonstrating the Efficacy of Psilocybin in Reducing Weight Gain in Obese Animal Subjects

Data Further Validates Psilocybin as a Drug Candidate for Obesity and Supports Development of NeonMind's Drug Programs NEO-001 and NEO-002

Oakville, Ont. – March 23, 2022: NeonMind Biosciences Inc. (CSE: NEON) (OTCQB: NMDBF) (FRA: 6UF) ("NeonMind" or the "Company"), an integrated drug development and wellness company focused on bringing innovative psychedelic-based treatments to people suffering from obesity and mental health disorders, announced today it has released preclinical data demonstrating the efficacy of psilocybin in reducing weight gain in obese subjects. In previous preclinical studies, NeonMind has shown efficacy in reducing weight gain in healthy subjects with normal weight. This latest study suggests a broader therapeutic potential of psilocybin in weight management and supports the current development track of NeonMind's drug candidates.



The data from NeonMind's preclinical models revealed a novel finding for its drug candidates: the ability to target visceral fat. Increased visceral fat is linked to poorer cardiometabolic health and reduction in this

type of fat is important in weight loss and better overall health outcomes. Additional findings from the preclinical models in obese subjects include:

- Statistical significance compared to the control group for both absolute and relative weight gain;
- Efficacy seen within days of administration;
- Reduced food consumption compared to control group;
- No safety signals.

The positive results further reinforce the drug development opportunity of NeonMind's two lead psilocybin-based drug candidates targeting obesity. Moreover, the novel findings provide opportunities to enhance their commercial profiles. These candidates include NEO-001, which employs psilocybin as an agonist at the serotonin 5- HT2A receptor, and NEO-002, which utilizes low-dose psilocybin as an agonist at the 5-HT2C receptor, which controls appetite.

"These latest findings show psilocybin's ability to modulate weight gain, which is absolutely critical for any drug candidate targeting obesity and weight loss," said Robert Tessarolo, President & CEO of NeonMind. "In two separate rodent studies, we have shown that psilocybin has efficacy in modulating weight in both obese and normal subjects. This is important given visceral fat is associated with increased comorbidities and poorer health outcomes. These findings show promise for the future development of psilocybin-based treatments for obesity, which may also lead to improved cardiovascular and metabolic health."

Dr. Alasdair Barr, primary investigator of NeonMind's preclinical study, commented, "These preclinical studies are bringing to light novel findings in an under-researched psychedelic modality: psilocybin-based weight management. We were able to explore key mechanisms that drive obese behavior and have come away with further evidence that psilocybin could potentially lead to a reduction in weight gain in various patient sub-types."

The manuscript has been submitted to a leading industry peer-reviewed journal for publication.

About NeonMind Biosciences Inc.

NeonMind operates two divisions: (i) a pharmaceutical division engaged in drug development of psychedelic compounds with two lead psilocybin-based drug candidates targeting obesity; and (ii) a medical services division focused on launching specialty mental health clinics that integrate psychedelic therapeutics into traditional psychotherapy settings.

In its pharmaceutical division, NeonMind has two distinct psilocybin drug development programs targeting obesity. NeonMind's lead candidate, NEO-001, employs psilocybin as an agonist at the serotonin 5- HT2A receptor, which is involved in the hallucinogenic effect of psychedelics. The Company's second drug candidate, NEO-002, employs low-dose psilocybin as an agonist at the 5-HT2C receptor, which controls appetite.

NeonMind and its strategic partners are building NeonMind-branded specialty mental health clinics in Canada that incorporate evidence-backed innovative treatments to address a variety of mental health needs. For more information on NeonMind, go to www.NeonMindBiosciences.com.

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The Canadian Securities Exchange has not reviewed, approved nor disapproved the contents of this news release.

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