

Lexaria BioScience Receives Ethics Board Approval to Conduct Exploratory Clinical Study using Cannabidiol for Blood Pressure Reduction

Complements previously published data that cites Lexaria's TurboCBD to demonstrate a significant 5% reduction in mean arterial blood pressure

Kelowna, British Columbia– July 28, 2020 – Lexaria Bioscience Corp. (OTCQX: LXRP) (CSE: LXX) (the “Company” or “Lexaria”), a global innovator in drug delivery platforms, announced that it has received ethics board approval by a European university research hospital to conduct an exploratory clinical study (the “Study”) using cannabidiol (“CBD”) formulated together with its patented DehydraTECH™ technology to assess blood pressure reduction potential in volunteers with pre- or mild hypertension. This is a new study that Lexaria has not previously disclosed, designed to be of interest to potential future pharmaceutical partners.

The Study will be a double-blinded, placebo-controlled, cross-over pilot study in which 24 volunteers (12 males and 12 females, aged 45-70 years) will be randomized to receive a 300 mg dose of CBD with or without DehydraTECH™ formulation enhancement in oral capsule form across two separate study visits. The primary outcome will be automated measures of blood pressure and heart rate. Secondary outcome measures will include circulating plasma concentrations of CBD and assessment of key inflammatory markers associated with cardiovascular disease.

This Study is intended to complement Lexaria’s previous clinical study from 2018 as published in the peer-reviewed medical journal *Advances in Therapy*, in which a single 90mg dose of Lexaria’s TurboCBD™ oral capsule formulation provided evidence of lower blood pressure, higher blood flow to the brain, faster delivery onset of CBD into the bloodstream, and larger quantities of CBD within the blood compared to a single 90mg dose of generic CBD in healthy, normotensive volunteers (see: <https://www.ncbi.nlm.nih.gov/pubmed/31512143>).

The blood pressure findings from the 2018 study demonstrated a significant 5% reduction in mean arterial blood pressure (MAP) when normalized to end-tidal CO₂ at peak blood levels of CBD with Lexaria’s TurboCBD™ compared to placebo (95% CI; p=0.016), which was not observed with the dose-matched positive control formulation for which there was no significant decrease in MAP compared to placebo (95% CI; p=0.27). Lexaria hopes to demonstrate that these findings will be preserved and improved upon in its upcoming study where it plans to use higher dosing compared to its 2018 study, and evaluate performance in a pre- and mildly hypertensive population more representative of consumers who may benefit from blood pressure control and reduction.

“Lexaria believes that this Study, if positive, will strengthen its value proposition pursuant to its intention to seek out pharmaceutical industry partnering opportunities with its DehydraTECH™

platform technology,” said Chris Bunka, Chairman and CEO of Lexaria. “Positive results in this Study are expected to be of particular interest to the antihypertensive products sector that is valued at over \$22 billion.”

Hypertension is a major contributor to cardiovascular disease in the world today affecting in excess of 1 billion people around the world, although only an estimated 13% of those affected have their hypertension under control according to the Centers for Disease Control and Prevention. While numerous effective drug therapies exist to treat hypertension, they are often associated with a host of unwanted side effects including an increase in potassium loss known as hypokalemia in the body, respiratory effects, dizziness, weakness, reduced kidney function, gastrointestinal issues and other complications. By comparison, cannabidiol is known to be an exceptionally well-tolerated drug substance, but due to its fat-soluble nature, it is also poorly absorbed via oral administration absent drug delivery technology intervention such as Lexaria’s DehydraTECH. If shown to be effective in Lexaria’s study, this work may pave the way to the development of potent cannabidiol therapy for blood pressure conditions at relatively low doses and without many of the side effects of conventional drug therapies.

Lexaria expects to have results from the Study around November of this year and will provide updates to its shareholders and followers as the data is analyzed and available.

About Lexaria

Lexaria Bioscience Corp’s. (OTCQX: LXP, CSE: LXX) proprietary drug delivery technology, DehydraTECH™, improves the way active pharmaceutical ingredients (APIs) enter the bloodstream by promoting healthier ingestion methods and increasing the effectiveness of fat-soluble active molecules, thereby lowering overall dosing. The Company’s technology can be applied to many different ingestible product formats, including foods, beverages, oral suspensions, tablets, and capsules. DehydraTECH increases bio-absorption by up to 5-10x, reduces time of onset from 1 - 2 hours to 10 - 20 minutes, and masks unwanted tastes for orally administered bioactive molecules, including anti-virals, cannabinoids, vitamins, non-steroidal anti-inflammatory drugs (NSAIDs), nicotine, and other molecules. Lexaria has licensed DehydraTECH to multiple companies including a world-leading tobacco producer for the development of smokeless, oral-based nicotine products and for use in industries that produce cannabinoid beverages, edibles, and oral products. Lexaria operates a licensed in-house research laboratory and holds a robust intellectual property portfolio with 16 patents granted and over 60 patents pending worldwide. For more information, please visit www.lexariabioscience.com.

FORWARD-LOOKING STATEMENTS

This release includes forward-looking statements. Statements as such term is defined under applicable securities laws. These statements may be identified by words such as "anticipate," "if," "believe," "plan,"

"estimate," "expect," "intend," "may," "could," "should," "will," and other similar expressions. Such forward-looking statements in this press release include, but are not limited to, statements by the company relating to the conclusions reached from the company's Phase 1 study and the ultimate suitability of DehydraTECH to deliver nicotine through oral methods. Such forward-looking statements are estimates reflecting the Company's best judgment based upon current information and involve a number of risks and uncertainties, and there can be no assurance that the Company will actually achieve the plans, intentions, or expectations disclosed in these forward-looking statements. As such, you should not place undue reliance on these forward-looking statements. Factors which could cause actual results to differ materially from those estimated by the Company include, but are not limited to, government regulation and regulatory approvals, managing and maintaining growth, the effect of adverse publicity, litigation, competition, scientific discovery, the patent application and approval process, the inherent uncertainties in the initiation, ongoing assessment and completion of preclinical and clinical studies, whether interim results from a clinical study will be predictive of the final results of the study or the results of future studies, the risk that trials and studies may be delayed and may not have satisfactory outcomes, potential adverse effects arising from the testing or use of products utilizing the DehydraTECH technology, the Company's ability to maintain existing collaborations and realize the benefits thereof, and other factors which may be identified from time to time in the Company's public announcements and periodic filings with the US Securities and Exchange Commission on EDGAR. There is no assurance that existing capital is sufficient for the Company's needs or that it will be able to raise additional capital. There is no assurance the Company will be capable of developing, marketing, licensing, or selling edible products containing any active ingredient. There is no assurance that any planned corporate activity, scientific research or study, business venture, letter of intent, technology licensing pursuit, patent application or allowance, consumer study, or any initiative will be pursued, or if pursued, will be successful. There is no assurance that any of Lexaria's postulated uses, benefits, or advantages for the patented and patent-pending technology will in fact be realized in any manner or in any part. No statement herein has been evaluated by the Food and Drug Administration (FDA). Lexaria-associated products are not intended to diagnose, treat, cure or prevent any disease.

Any forward-looking statements contained in this release speak only as of the date hereof, and the Company expressly disclaims any obligation to update any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise, except as otherwise required by law.

The CSE has not reviewed and does not accept responsibility for the adequacy or accuracy of this release.

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