Lexaria Commences Human Clinical Hypertension Study

- *Study to examine DehydraTECH™ CBD's ability to control blood pressure*
- *First of three human clinical studies hoped to validate Lexaria's patented technology for hypertension relief*

Kelowna, British Columbia, April 22, 2021 – Lexaria Bioscience Corp. (Nasdaq: LEXX) (Nasdaq: LEXXW) (CSE: LXX) (the "Company" or "Lexaria"), a global innovator in drug delivery platforms, announces that its human clinical hypertension study HYPER-H21-1 is officially underway. Lexaria's patented DehydraTECH CBD formulation will be examined to assess its ability to control blood pressure and assess impact on inflammation.

"We are very pleased that dosing of human volunteers as part of Lexaria's hypertension study has begun," said Lexaria CEO Mr. Chris Bunka. "Dosing is expected to be completed, on schedule, within several weeks, and we may be in a position to report preliminary data in July or thereabouts. Despite challenges in launching a human clinical study during a global pandemic, Lexaria's Europe-based research partners have done an excellent job of balancing the need for scientific validation for a potential new hypertension treatment, with the required safety protocols currently in place."

HYPER-H21-1 is a randomized, double-blinded, controlled human clinical study expected to involve 24 human volunteers with symptoms of either pre-hypertension, or mild hypertension. A single 300mg dose of an advanced DehydraTECH™ 2.0 CBD formulation will be evaluated relative to a concentration-matched control without Lexaria's DehydraTECH enhancements.

Time series blood pressure and heart rate analyses are the primary objectives of this study. Secondary objectives include speed and rate of absorption of the CBD and its main metabolites (pharmacokinetics or "PK" assessments), as well as evaluation of inflammatory markers associated with cardiovascular disease and gold-standard biomarkers of nitric oxide. This latter measure provides mechanistic insight into the anticipated reduction in blood pressure via vasodilation.

These inflammatory marker assessments may also be applicable to Lexaria's research initiatives in the antiviral therapeutics space whereby effective anti-inflammatory therapies are also useful in treating diseases like COVID-19 or other common pro-inflammatory conditions.

Since a large array of data points will be generated and analyzed, final reporting on this study is likely to be reported in early September.

There are five studies in Lexaria's 2021 hypertension program which are expected to generate data required to further support the validity of using DehydraTECH-processed CBD as a potential hypertension treatment across various applications. Lexaria has received 18 granted patents internationally, including issuances in the European Union and Australia specifically to use DehydraTECH-processed CBD to treat heart disease.

About Lexaria Bioscience Corp.

Lexaria Bioscience Corp.'s proprietary drug delivery technology, DehydraTECH™, improves the way active pharmaceutical ingredients (APIs) enter the bloodstream by promoting healthier oral 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 has repeatedly demonstrated since 2016 with cannabinoids and nicotine the ability to increase bio-absorption by up to 5-10x, reduce time of onset from 1 - 2 hours to minutes, and mask unwanted tastes; and is planned to be further evaluated for orally administered bioactive molecules, including anti-virals, cannabinoids, vitamins, non-steroidal anti-inflammatory drugs (NSAIDs), and nicotine. 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 18 patents granted and approximately 60 patents pending worldwide. For more information, please visit www.lexariabioscience.com.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

This press 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 the Company's ability to carry out research initiatives, receive regulatory approvals or grants or experience positive effects or results from any research or study. 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, 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, delays or cancellations of planned R&D that could occur related to pandemics or for other reasons, 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 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.

INVESTOR CONTACT:

ir@lexariabioscience.com
Phone: 866-221-3341