Lexaria Issues Progress Report on First Human Clinical Study of 2021, HYPER-H21-1

- *Dosing is complete in first of three human clinical studies hoped to validate Lexaria's patented technology for hypertension relief*
- *Study tested an advanced "DehydraTECH™ 2.0" CBD formulation*
- *Second human clinical study, HYPER-H21-2, to commence immediately*

Kelowna, British Columbia, June 7, 2021 – Lexaria Bioscience Corp. (Nasdaq: LEXX) (Nasdaq: LEXXW) (CSE: LXX) (the "Company" or "Lexaria"), a global innovator in drug delivery platforms, is pleased to report that treatment and dosing in its human clinical study (HYPER-H21-1) have been completed ahead of schedule.

HYPER-H21-1 focused on testing DehydraTECH-enabled cannabidiol ("CBD") for potential use as a hypertension treatment alternative. Twenty-four human volunteers aged 45 to 65 were dosed within this study, all of whom tolerated treatment well with no serious adverse events or side effects observed or reported.

"Completing this work in the midst of the COVID-19 pandemic was challenging and we acknowledge and commend the dedication and work ethic of our Europe-based research partners and all parties involved," said Chris Bunka, CEO of Lexaria. "Blood samples from the study volunteers will be shipped this week to our U.S. and Canadian analytical testing laboratory partners, and we expect to complete all sample and data analyses and reporting ahead of schedule, by July or August instead of the end of Q3 as previously indicated."

Study HYPER-H21-1 followed a randomized, double-blinded, controlled design in human volunteers with documented pre-hypertension or mild hypertension. A single 300 mg dose of an advanced "DehydraTECH 2.0" CBD formulation was evaluated relative to a concentration-matched control without Lexaria's DehydraTECH enhancements. The study was conducted by independent, third-party service providers bearing responsibility for all study recruitment, procedures and analytical testing.

Evaluation of time series blood pressure and heart rate analyses were the primary objectives of this study. Important secondary objectives included 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 is intended to provide mechanistic insight into the anticipated reduction in blood pressure via vasodilation.

The inflammatory assessments (including both anti- and pro-inflammatory biomarkers) may also be applicable to Lexaria's research initiatives in the antiviral therapeutics sector whereby effective anti-inflammatory therapies are also useful in treating diseases like COVID-19 or other common pro-inflammatory conditions.

In addition, Lexaria is pleased to announce that its second human clinical study of 2021, HYPER-H21-2, will begin immediately. The study's 16 human volunteers will be pre- or mildly hypertensive and will received three separate doses of 150 mg each of DehydraTECH 2.0-enabled CBD versus placebo (total dose of 450mg). HYPER-H21-2 includes 24-hour continuous ambulatory (portable) monitoring of blood pressure and heart rate, together with evaluations of central arterial stiffness, physical activity and sleep quality (e.g., total sleep time, total wake time, and sleep efficiency). All treatment and dosing visits in this study should be completed in or around July. The Company expects to complete all sample and data analyses quite rapidly with reporting in late September or thereabouts, though preliminary outcomes may be reported earlier if available.

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. DehydraTECH 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 19 patents granted and approximately 60 patents pending worldwide. For more information, please visit www.lexariabioscience.com.

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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 U.S. 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

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

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