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Lexaria Provides Guidance on Upcoming R&D

KELOWNA, BC / ACCESSWIRE /February 1, 2021 / Lexaria Bioscience Corp. (NASDAQ:LEXX)(NASDAQ:LEXXW)(CSE:LXX) (the "Company" or "Lexaria"), a global innovator in drug delivery platforms, announces applied R&D programs to begin immediately.

Lexaria recently closed an oversubscribed financing of US$11 million that has greatly enhanced the Company's ability to conduct applied R&D designed to evidence effectiveness of its patented DehydraTECH^{TM} drug delivery technology across multiple classes of bioactive substances or drugs. In the weeks to come, Lexaria expects to announce many new studies designed to provide initial evidence expected to support further study and commercial exploitation. All studies referenced within this press release are fully funded from existing Company resources.

DehydraTECH-CBD For Hypertension

Two new studies announced for the first time today are HYPER-A21-1 and HYPER-A21-2, each of which have completed their initial design phase and contracts have been entered with the third party laboratory that will be performing the work. Animal dosing is expected to occur in February/March with results in April/May followed by analysis and reporting when completed. In each of these studies, up to four different formulations of DehydraTECH-processed CBD will be utilized including recent enhancements intended to further optimize the delivery of CBD in the animal test groups and measuring for performance indicators such as rapidity and quantity of delivery to the bloodstream and brain. Some of the formulations represent Generation 2.0 DehydraTECH improvements not yet commercially released. Additional work is expected that will also evaluate impacts upon real-time blood pressure in animals at the doses studied.

These studies are expected to deliver additional important data to Lexaria in its efforts to further support the validity of using DehydraTECH-processed CBD as a potential hypertension treatment. 1.1 Billion people suffer from hypertension which currently represents a US$28 billion market.

In its 2018 human clinical study, Lexaria evidenced that DehydraTECH-processed CBD lowered human blood pressure whereas generic CBD did not. Since then, Lexaria has received granted patents in the European Union and Australia to use DehydraTECH-processed CBD to treat heart disease, and as such, investigation of DehydraTECH processed CBD as a possible treatment for hypertension will be an ongoing pursuit during 2021. Additional planned study work in 2021 will include a second human clinical study in

pre- and mildly-hypertensive subjects which the Company intends to initiate after shipment of the clinical test articles to the clinical site is completed, pending regulatory clearances for importation as previously announced.

DehydraTECH with Antivirals for COVID-19

In two studies first announced December 22, 2020, Lexaria will be testing four additional antiviral drugs currently in use for various applications as detailed below. Those drugs include remdesivir, a nucleotide reverse transcriptase inhibitor (or, "NtRTI") and three additional drugs known to target the main protease associated with SARS-CoV-2 infection. The first of these studies VIRAL-A20-2, has completed its initial design phase, the contract has been entered with the third party laboratory that will be performing the work, and animal dosing is expected to occur in February/March with results in May/June followed by analysis and reporting when completed. The second of these two studies (VIRAL-A20-3) is still in the initial design planning stages and the Company will provide updates on its status as this work progresses.

Also referenced in Lexaria's announcement of December 22, 2020 was a planned study to evaluate the relative antiviral activity of certain DehydraTECH formulations in an effort to kill the virus in an established cell culture model of SARS-CoV-2 infected cells. This is study VIRAL-C21-3 and the contract is in place and design aspects are nearly complete with the third-party laboratory that will be performing this work, which is expected to be underway in March, with results in May/June followed by analysis and reporting when completed. If successful, Lexaria would expect to subsequently design and undertake an *in vivo* efficacy program to determine if DehydraTECH-enabled antiviral drug formulations offer performance enhancement when given orally to SARS-CoV-2 infected animals.

Lexaria's business plan relies on applied R&D programs to generate confirmatory results and data enabling pursuit of commercial opportunities and/or corporate relationships. Lexaria's prospective business partners expect evidence that demonstrates initial effectiveness of DehydraTECH in improving drug delivery characteristics, prior to entering negotiations that might include utilization of DehydraTECH in existing or new drug classes. As such, Lexaria considers these applied R&D studies to be a vital early step in establishing commercial relationships with potential industry partners to utilize DehydraTECH within their existing product lines or in the development of new product lines.

Applied R&D studies often also provide test data that supports existing patent applications, and at times produces data that could support additional new patent applications.

Lexaria also announces that the studies referenced within this press release are only a fraction of those under investigation or early-stage design. Additional studies in these and other fields are expected to be announced in upcoming weeks spanning a range of bioactive substances of interest to Lexaria including antiviral drugs; CBD for hypertension; THC pharmacokinetics; nicotine in oral mucosal tissue; NSAIDs; PDE5 inhibitors; estrogen; vitamin D3; and pharmacokinetic evaluations with certain minor cannabinoids.

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, 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.

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