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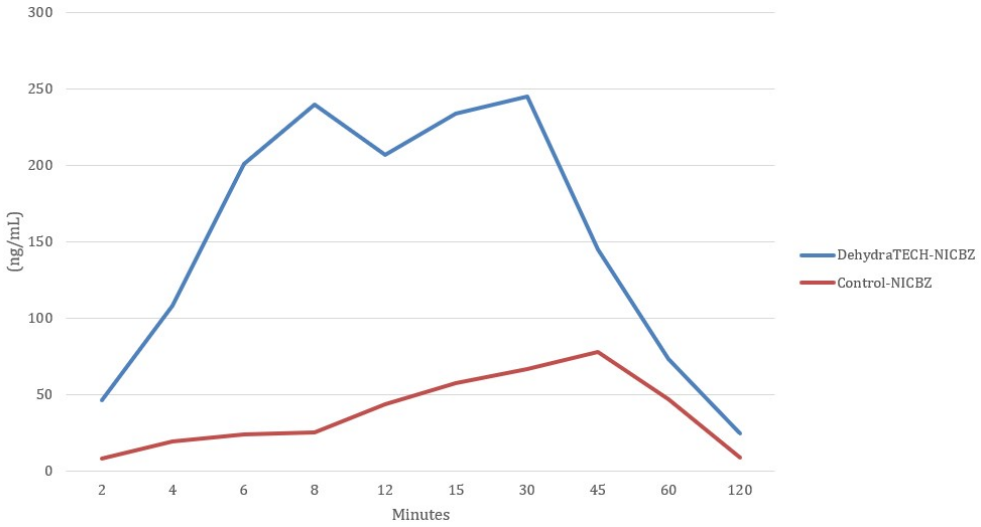
Lexaria's Human Clinical Nicotine Study Completes Dosing as Planned

KELOWNA, BC / ACCESSWIRE / May 8, 2023/ Lexaria Bioscience Corp. (Nasdaq:LEXX) (Nasdaq:LEXXW) (the "Company" or "Lexaria"), a global innovator in drug delivery platforms announces that dosing of the targeted 36 subjects in its human clinical oral nicotine study NIC-H22-1 has been completed.

Human study NIC-H22-1 represents the culmination of several years of work performed by Lexaria on oral nicotine formulations as an alternative to vaping or smoking and may entice the more rapid commercial adoption and distribution of Lexaria's patented DehydraTECH absorption technology in an industry sorely lacking in oral uptake and performance optimizing innovation for many years.

The dangers of cigarette smoking are well known and result in the death of7 million people per year. Nicotine vaping was originally hoped to help wean people off cigarette use but has had mixed results in doing so, and vaping has also been associated with serious health risks. Nicotine vaping is becoming increasingly controversial and is severely limited in certain countries and was, for instance, just banned in Australia and is either banned or restricted in many other countries. By comparison, Lexaria's DehydraTECH-nicotine is already patent granted for oral nicotine delivery in Australia and pending in numerous other countries. The white pouch category, as tested in study NIC-H22-1, is one of thefastest growing, tobacco-free alternatives to smoking and vaping.

Lexaria's DehydraTECH-powered purified nicotine white pouch formulation contains no tobacco. DehydraTECH-nicotine has already shown in multiple sets of animal testing that it can be up to 10-times to 20-times faster and able to deliver up to10-fold higher levels of nicotine into blood plasma from oral absorption than concentration matched controls. If the findings from study NIC-H22-1 also show similar improved performance, this could facilitate a more satisfying oral nicotine experience than any of the leading brands sold around the world today which all rely on outdated formulation technology. Speed of onset is of vital importance to nicotine users and Lexaria's DehydraTECH-nicotine has demonstrated superiority in this regard.



Nicotine Plasma Levels (ng/mL) - DehydraTECH vs. Control From Lexaria's Earlier Animal Study

The oral nicotine pouch category is of intense interest to Lexaria and the nicotine products industry, and its growth is due in part to its reduced risk health outcomes as noted by the Food and Drug Administration ("FDA"). This delivery method, in the white pouch format specifically, which avoids harmful lung outcomes experienced by smokers or vapers, involves absorption primarily through the buccal and sublingual tissues of the mouth, of purified nicotine that has been separated from most other harmful compounds in the tobacco leaf. The global market for the oral nicotine pouch category was US$2.33 billion in 2020 and is growing at a rapid CAGR of 30.7% and is expected to reach $21.84 billion in 2027.

About Study NIC-H22-1.

Study NIC-H22-1 is a human pharmacokinetic randomized, double blinded, cross-over study conducted in a minimum of 36 human volunteers that are current cigarette smokers, wherein each person visited the laboratory to be dosed three times over several weeks. During each visit only one oral nicotine pouch was administered and evaluated: either DehydraTECH-nicotine; On! brand manufactured by Altria; or Zyn brand manufactured by Swedish Match. While 36 people have to date completed their dosing, Lexaria expects a small number of additional person(s) who were over enrolled into the study to also complete dosing in the immediate future.

The primary study objectives are to determine the quantity of nicotine in blood at various time points and vital-sign data collection including blood pressure, heart rate and respiratory rate. Subjective evaluations related to throat burn, user experience, gastrointestinal experience and more are also being conducted.

The study is fully funded from internal company resources. Sample and data analysis is already underway and will be reported upon as soon as possible and Lexaria will provide further updates and any relevant material findings in due course from this study as they become available.

About Lexaria Bioscience Corp.

Lexaria Bioscience Corp.'s patented drug delivery technology, DehydraTECH™, improves the way active pharmaceutical ingredients (APIs) enter the bloodstream through oral delivery. Since 2016, DehydraTECH has repeatedly demonstrated the ability to increase bio-absorption with cannabinoids, antiviral drugs, PDE5 inhibitors and more. DehydraTECH has also evidenced an ability to deliver some drugs more effectively across the blood brain barrier. Lexaria operates a licensed in-house research laboratory and holds a robust intellectual property portfolio with 30 patents granted and many 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. The Company provides links to third-party websites only as a courtesy to readers and disclaims any responsibility for the thoroughness, accuracy or timeliness of information at third-party websites. 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 or links to third-party websites contained herein, whether as a result of any new information, future events, changed circumstances or otherwise, except as otherwise required by law.

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