UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 OR 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported) **April 17, 2018**

LEXARIA BIOSCIENCE CORP.

(Exact name of registrant as specified in its charter)

Nevada	**000-52138**	**20-2000871**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

156 Valleyview Road, Kelowna, BC Canada	**V1X 3M4**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code **(250) 765-6424**

N/A

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

[ ] Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
[ ] Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
[ ] Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
[ ] Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b -2 of this chapter).

Emerging growth company [ ]

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. [ ]

Item 7.01 Regulation FD Disclosure

A copy of the news release announcing that Lexaria has positive topline results upon completion of its first ingestible nicotine *in vivo* (animal) absorption study is filed as exhibit 99.1 to this current report and is hereby incorporated by reference.

Item 9.01 Financial Statements and Exhibits

99.1	Press Release dated April 17, 2018

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

LEXARIA BIOSCIENCE CORP.

/s/ Chris Bunka
Chris Bunka
CEO, Principal Executive Officer

Date: April 17, 2018

Exhibit 99.1

Lexaria Achieves Significant Breakthrough in Alternative Nicotine Delivery Technology

Kelowna, British Columbia – April 17, 2018 – Lexaria Bioscience Corp. (OTCQX: LXRP) (CSE: LXX) (the "Company" or "Lexaria"), a drug delivery platform innovator, is pleased to announce positive topline results upon completion of its first ingestible nicotine *in vivo* (animal) absorption study. Lexaria is pursuing the use of its patented DehydraTECH™ technology as a possible new nicotine delivery method, an edible dose absorbed through the gastrointestinal tract, with potential both as a nicotine replacement therapy as well as an alternative product format for regular tobacco users.

DehydraTECH™ delivered the following major nicotine absorption performance improvements:

- 1,160% faster delivery of equivalent peak quantities of nicotine to the bloodstream than achieved with controls (within 15 min vs. 2.9 hours);
- 148% gain in the quantity of peak nicotine delivery to the bloodstream relative to controls;
- 560% higher brain levels of nicotine where nicotine effects are focused, compared to controls;
- Lower urine levels of nicotine excreted than controls, for enhanced nicotine activity and bioavailability over the course of the study;
- Lower quantities of key liver metabolites in the bloodstream than controls as hypothesized, suggesting bypass of first pass liver metabolism.

Study Design Parameters:

The study was designed to principally assess the relative ingestible nicotine absorption performance of DehydraTECH™-powered formulations compared to concentration-matched control formulations that lacked any form of delivery enabling technology in rats. Nicotine was administered in a nicotine polacrilex derivative format as is widely commercialized today in nicotine replacement therapy products such as chewing gums. Twelve male rats were divided into four groups of three, such that DehydraTECH™ and control formulations were each tested at a 1 mg/Kg and 10 mg/Kg dosage level. Formulations were administered orally and all rats were cannulated for blood collection at multiple intervals over an 8 hour duration post-dosing with the first data collection at the 15-minute mark. Urine and feces were also collected for up to a 24-hour duration post-dosing, and essential organ tissue samples were also collected for examination after the study. All samples were subjected to analytical testing in order to quantify the levels of nicotine therein, as well as the levels of three major liver metabolites thereof, hydroxycotinine, nicotine N'-oxide and cotinine, in order to assess the relative metabolite levels absorbed by the different formulations. Lexaria's hypothesis was tested to prove that its DehydraTECH™ technology would influence more rapid and complete intestinal bioabsorption of nicotine lymphatically with less metabolic degradation by the liver. All animals were also assessed for general tolerability of the administered formulations. The study was conducted at the same independent laboratory in Philadelphia where the Company completed its initial cannabidiol absorption study in 2015.

Results & Observations:

The Lexaria formulations generally achieved faster absorption, higher peak absorption and higher overall quantities of nicotine, on average, in the blood than the concentration-matched control formulations at both the 1mg and 10 mg/Kg doses tested. Furthermore, as previously reported, there were no obvious signs of gastrointestinal distress such as vomiting or diarrhea indicating that the animals appeared to tolerate the treatment well.

Nicotine blood levels were evaluated multiple times over a period of 8 hours after dosing. In the 10mg/Kg dosing arm, the control formulation required nearly 3 hours to reach similar levels of blood absorption that the Lexaria formulation reached in only 15 minutes. Furthermore, the Lexaria formulation went on thereafter to demonstrate peak plasma levels that were 148% of those achieved by the control formulation. If replicated in human studies, these findings are suggestive that Lexaria's technology could prove more effective in elevating blood nicotine levels through edible formats much more quickly and substantially than previously theorized, potentially making ingestible nicotine preparations a viable alternative to today's available product formats while also leading to a more rapid nicotine craving satiation.

Analysis of the liver metabolites revealed, as expected, that overall levels in the blood of two of the three metabolites studied were higher in the control group than in the Lexaria formulation group at the 10 mg/Kg dose. This result was especially pronounced in the 45-minute to 2-hour time interval post-dosing which is consistent with the expected timing of release of metabolites in higher quantity into the bloodstream by the liver following normal physiological processing of ingested nicotine with the control preparation, compared to the DehydraTECH^{TM} technology that is believed to elude first pass liver metabolism. The Lexaria formulation also demonstrated lower quantities of nicotine in the rat urine at both doses, which is consistent with the fact that the levels of nicotine in the rat blood remained higher over the duration of the study with the Lexaria formulation than with the control. The study also revealed that the Lexaria formulation at the 10 mg/Kg level achieved up to 5.6 -times as much nicotine upon analysis of the rat brain tissue than was recovered with the matching control formulation. These findings together perhaps suggest prolongation of nicotine effectiveness with the Lexaria formulation which may also be beneficial in humans to control cravings over an extended time-period from a single edible nicotine dose.

“We are very pleased with these topline study findings demonstrating excellent tolerability and substantially faster, more potent and bioavailable absorption of nicotine in an ingestible format with our DehydraTECH™ technology than controls,” said John Docherty, President. “This data supports further investigation of the many possible benefits of our DehydraTECH™ technology for nicotine delivery with potential both as a nicotine replacement therapy as well as an alternative product format for regular tobacco users over today’s inhaled options.”

Further analysis of the existing data is required, and additional datasets from the study are still being processed and have not yet been received by Lexaria. New studies are being planned to pursue investigatory leads produced.

Lexaria’s patented DehydraTECH™ technology is focused on improved delivery methodologies of many commonly used active pharmaceutical ingredient (“API”) substances. As such, it provides an additional layer of effectiveness that is designed to harmonize with the intellectual property of third parties. Both patented and generic API substances can utilize Lexaria’s patented technology. Lexaria’s long term strategy is to partner with the world’s leading firms as they deliver best-of-class products to their existing large consumer groups.

About Lexaria

Lexaria Bioscience Corp. has developed and out-licenses its disruptive delivery technology that promotes healthier ingestion methods, lower overall dosing and higher effectiveness of lipophilic active molecules. Lexaria has multiple patents pending in over 40 countries around the world and has patents granted in the USA and in Australia for utilization of its DehydraTECH™ delivery technology. Lexaria’s technology provides increases in intestinal absorption rates; more rapid delivery to the bloodstream; and important taste-masking benefits, for orally administered bioactive molecules including cannabinoids, vitamins, non-steroidal anti-inflammatory drugs (NSAIDs), nicotine and other molecules. www.lexariabioscience.com

For regular updates, connect with Lexaria on Twitter(https://twitter.com/lexariacorp)

and on Facebook http://tinyurl.com/y8vzcaam

FOR FURTHER INFORMATION PLEASE CONTACT:
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NetworkNewsWire (NNW)
www.NetworkNewsWire.com

FORWARD-LOOKING STATEMENTS

This release includes forward-looking statements. Statements which are not historical facts are forward-looking statements. The Company makes forward-looking public statements concerning its expected future financial position, results of operations, cash flows, financing plans, business strategy, products and services, competitive positions, growth opportunities, plans and objectives of management for future operations, including statements that include words such as "anticipate," "if," "believe," "plan," "estimate," "expect," "intend," "may," "could," "should," "will," and other similar expressions are forward-looking statements, including but not limited to: that any additional patent protection will be realized or that patent achievements will deliver material results. 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 other factors will not affect the accuracy of such 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 and other factors which may be identified from time to time in the Company's public announcements and filings. There is no assurance that potential future testing of DehydraTECH^{TM} for delivery of nicotine in humans will deliver results similar as the*in vivo* rat study, or meaningful results at all. 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 cannabinoids, nicotine or any other active ingredient. There is no assurance that any planned corporate activity, scientific research or study, business venture, 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.

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