

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended August 31, 2023

or

TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from [] to []

Commission file number 000-52138

Lexaria Bioscience Corp.

(Exact name of registrant as specified in its charter)

<u>Nevada</u> State or other jurisdiction of incorporation or organization	<u>20-2000871</u> (I.R.S. Employer Identification No.)
<u>#100 – 740 McCurdy Road, Kelowna BC Canada</u> (Address of principal executive offices)	<u>VIX 2P7</u> (Zip Code)

Registrant's Telephone number, including area code: **250-765-6424**

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Name of Each Exchange On Which Registered</u>
N/A	N/A

Securities registered pursuant to Section 12(g) of the Act:

<u>Title of Class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, Par Value \$0.001	LEXX	Nasdaq
Warrants	LEXXW	Nasdaq

Indicate by check mark if the registered is a well-known seasonal issuer, as defined in Rule 405 the Securities Act Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act Yes No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the last 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-K (§229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by a 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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant period pursuant to §240.10D-1(b)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of February 28, 2023, the last day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the common stock held by non-affiliates of the registrant was approximately \$16.2 million, based on the average of the closing price of the registrant's shares of common stock on February 28, 2023.

Indicate the number of shares outstanding of each of the registrant's classes of common stock as of the latest practicable date.

10,276,641 common shares as of November 20, 2023.

DOCUMENTS INCORPORATED BY REFERENCE

None.

TABLE OF CONTENTS

Item 1.	Business	4
Item 1A.	Risk Factors	13
Item 1B.	Unresolved Staff Comments	19
Item 2.	Properties	20
Item 3.	Legal Proceedings	20
Item 4.	Mine Safety Disclosures	20
Item 5.	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	21
Item 6.	Selected Financial Data	23
Item 7.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	23
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	27
Item 8.	Financial Statements and Supplementary Data	28
Item 9.	Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	47
Item 9A.	Controls and Procedures	47
Item 9B.	Other Information	47
Item 10.	Directors, Executive Officers and Corporate Governance	48
Item 11.	Executive Compensation	52
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	55
Item 13.	Certain Relationships and Related Transactions, and Director Independence	56
Item 14.	Principal Accounting Fees and Services	56
Item 15.	Exhibits, Financial Statement Schedules	57

Cautionary Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K (“this report”) contains forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. Any statements contained herein that are not statements of historical fact may be forward-looking statements relating to future events or our future financial performance and are based on our present beliefs, assumptions, and information currently available to us. In some cases, forward-looking statements can be identified by terminology such as “may”, “will”, “should”, “could”, “targets”, “goal”, “expects”, “plans”, “anticipates”, “believes”, “estimates”, “predicts”, “potential” or “continue” and other comparable terminology or the negative of these terms.

These statements contain predictions and involve known and unknown risks, including the risks in the section entitled “Risk Factors” set forth in Item 1(A) in this report, uncertainties and other factors that may cause our or our industry’s levels of activity, performance, achievements, or actual results to be materially different from any future levels of activity, performance, achievements, or results expressed or implied by these forward-looking statements. Although we contend that the expectations reflected herein are reasonable, we cannot guarantee levels of activity, performance, achievements, or future result.

Forward-looking statements in this report include statements about, among other things: the status, progress and results of our research programs; our ability to obtain regulatory approvals for, and the level of market opportunity for, our product candidates; our business plans, strategies and objectives, including plans to pursue collaboration, licensing or other similar arrangements or transactions; our expectations regarding our liquidity and performance, including our expense levels, sources of capital and ability to maintain our operations as a going concern; the competitive landscape of our industry; and general market, economic and political conditions.

We caution placing undue reliance on any forward-looking statements as they speak only as of the date on which such statements were made, and we do not assume any obligation to update any forward-looking statement or to reflect the occurrence of an unanticipated event. New factors may emerge, and it is not possible to predict all factors that may affect our business and prospects. Further, management cannot assess the impact of each factor on the business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Solely for convenience, tradenames and trademarks referred to in this report appear without the “®” or “TM” symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights to these tradenames or trademarks, as applicable. All tradenames, trademarks, and service marks included or incorporated by reference in this report are the property of Lexaria Bioscience Corp.

As used in this report, the terms “Lexaria” “we”, “us”, “our” and “Company” mean Lexaria Bioscience Corp. and/or our subsidiaries, unless otherwise indicated.

PART 1

Item 1. Business

Company Overview

Lexaria Bioscience Corp. is a biotechnology company developing the enhancement of the bioavailability of a broad range of fat-soluble active molecules and active pharmaceutical ingredients (“APIs”) using our patented DehydraTECH™ drug delivery technology. DehydraTECH combines lipophilic molecules or APIs with specific long-chain fatty acids and carrier compounds that improve the way they enter the bloodstream, increasing their effectiveness and allowing for lower overall dosing while promoting healthier oral ingestion methods.

DehydraTECH can be used with a wide range of active molecules encompassing fat-soluble vitamins, pain medications, hormones, PDE5 inhibitors, antivirals, nicotine and its analogs, and cannabinoids. Our technology can be applied to a variety of therapeutic indications, including hypertension and heart disease, and diabetes. DehydraTECH can be implemented in a multitude of ingestible or topically administered product formats including foods, beverages, oral suspensions, tablets, capsules, creams, lotions, and skin patches. It is suitable for use with a variety of product formats including pharmaceuticals, nutraceuticals, over-the-counter products, and consumer packaged goods.

DehydraTECH is a technology incorporated into the formulation and manufacturing process of new or existing orally ingestible and topical products. The procedure involves fusing the active ingredient as a delivery “payload” together with certain fatty acids and infusing the mixture into a substrate material. Using controlled dehydration processing, it combines the payload and fatty acids together at a molecular level. The newly combined molecules are then integrated into production of the end-product using any number of dosage formats. From foods and beverages to cosmetics and nutraceuticals, this technology extends across many product categories beyond the primary pharmaceutical focus of the Company. DehydraTECH formulations have been found in some cases to reduce the need for unwanted sweeteners or chemical masking agents used for flavor- and odor-blocking, allowing manufacturers to create low-sugar products with fewer calories and artificial sweeteners.

The Company has developed extensive experience from the formulation and production of its demonstration products, in various formats, that enables us to provide expert advice to our licensees with the integration of DehydraTECH in their products for the purpose of providing a more palatable and efficient delivery of bioactive molecules.

Lexaria supports our licensee’s products with our technology. A part of our business plan is to encourage new and existing participants to license and utilize DehydraTECH to enable enhanced performance of their products. These products cross a wide range of lipophilic bioactive molecules including nicotine and cannabidiol (“CBD”) with additional molecules of interest continually being evaluated.

Intellectual Property

Lexaria’s involvement with the foundational technology to DehydraTECH dates back to 2014 when it entered into a strategic relationship with Poppy’s Teas LLC, and the original inventors of DehydraTECH, who had filed two initial US provisional patent applications for the technology. The strategic relationship evolved into the acquisition by Lexaria of Poviva Tea, LLC (formerly Poppy’s Teas LLC) which entity was then converted from a limited liability company to a corporation under the name Poviva Corp. (“Poviva”). Poviva is now the wholly-owned subsidiary of Lexaria and the named owner of all of the patents filed in connection with DehydraTECH. Lexaria has been granted an exclusive license to use DehydraTECH technology from Poviva for a period of time ending 25 years after the date of the last patent granted to Poviva. Since our first patent grant in 2017 for DehydraTECH, we have continued to pursue patent applications internationally in regions that are considered to have the highest commercial potential and, to date, have been allowed/granted 37 patents worldwide as of the date of this filing. Our pursuit and development of our technology has expanded our potential area of impact, both geographically and by sector.

Our current patent portfolio includes patent family applications or grants pertaining to Lexaria’s method of improving bioavailability and taste, and the use of DehydraTECH as a delivery platform, orally or topically, for a wide variety of Active Pharmaceutical Ingredients (“APIs”) encompassing cannabinoids; fat soluble vitamins; NSAIDs pain medications; and nicotine and its analogs. The pending and granted patents also cover the manufacturing and processing methods used to combine fatty acids with active pharmaceutical ingredients. This includes heating and drying methods and use of excipients and substrates.

The Company currently has several applications pending worldwide and due to the complexity of pursuing patent protection, the quantity of patent applications will vary continuously as each application advances or stalls. We continue to investigate national and international opportunities to investigate expansions and additions to our intellectual property portfolio. Patents have been filed specifically for the use of DehydraTECH with cannabinoids for the treatment of heart disease and hypertension to support our anticipated Investigational New Drug (“IND”) application with the Food and Drug Administration (“FDA”), and for treatment of epilepsy.

[Table of Contents](#)

We will continue to seek beneficial acquisitions of intellectual property if and when we believe it is advisable to do so. Due to the inherent unpredictability of scientific discovery, it is not possible to predict if or how often such new applications might be filed or patents issued.

Below we summarize Lexaria's allowed/granted patents.

Issued Patent #	Patent Family
US 9,474,725 B1	#1 Food and Beverage Compositions Infused With Lipophilic Active Agents and Methods of Use Thereof
US 9,839,612 B2	
US 9,972,680 B2	
US 9,974,739 B2	
US 10,084,044 B2	
US 10,103,225 B2	
US 10,381,440	
US 10,374,036	
US 10,756,180	
AU 2015274698	
AU 2017203054	
AU 2018202562	
AU 2018202583	
AU 2018202584	
AU 2018220067	
EP 3164141	
JP 6920197	
CDN 2949369	
AU 2016367036	#2 Methods for Formulating Orally Ingestible Compositions Comprising Lipophilic Active Agents
JP 6963507	
MX 388 203 B	
AU 2016367037	#3 Stable Ready-to-Drink Beverage Compositions Comprising Lipophilic Active Agents
IN 365864	
JP 6917310	
MX 390001	
JP 7232853	
CDN 2984917	
CDN 3093414	#6 Transdermal and/or Dermal Delivery of Lipophilic Active Agents
JP 7112510	#7 Lipophilic Active Agent Infused Compositions with Reduced Food Effect
AU 2019256805	#8 Compositions Infused with Nicotine Compounds and Methods of Use Thereof
CDN 3096580	
CDN 3111082	#14 Lipophilic Active Agent Infused Tobacco Leaves and/or Tobacco Materials and Methods of Use Thereof
US 11,311,559	#18 Compositions and Methods for Enhanced Delivery of Antiviral Agents
AU 2021261261	
US 11,700,875	#20 Compositions and Methods for Sublingual Delivery of Nicotine
US 11,666,544	#21 Compositions and Methods for Treating Hypertension
US 11,666,543	

Patents granted in the year ended August 31, 2023

In fiscal 2023, the Company's patent portfolio expanded to include three new patent families. This further protects our exclusivity in the use of DehydraTECH with sublingual delivery of nicotine, treatment of hypertension and delivery of lipophilic active agents via transdermal or dermal delivery. These patents are as follows:

- our first ever Canadian patent granted in our 6th patent family, to use DehydraTECH to more efficiently deliver lipophilic active agents via transdermal or dermal delivery.
- our first-ever US patent granted in our 20th patent family, expands upon Lexaria's international intellectual property rights to apply DehydraTECH enhancement technology to the sublingual delivery of nicotine. The patent covers many different forms of nicotine including free base nicotine, nicotine salts, polymer resins of nicotine and other forms of nicotine complexes.
- two US patents granted in our 21st patent family which recognizes DehydraTECH's ability, when combined with CBD, to treat hypertension.

Research and Development

Lexaria incurred \$3,666,721 (2022- \$1,842,675) in R&D expenditures during fiscal 2023. Specific programs are in ongoing development and are prioritized relative to our financial and operational ability to undertake each research phase for specific APIs. Due to our expanding portfolio coverage, we continue to explore accelerated timetable options for testing, research, and further development. Our ongoing R&D programs are always subject to our existing financial resources and our ability to raise capital to fund them.

The Company regularly pursues new R&D programs that investigate potential commercial applications for the incorporation of DehydraTECH. These include, but are not limited to, ongoing programs to explore different therapeutic indications that DehydraTECH-enhanced drug products can be utilized for the purpose of treatment options. Currently, our primary research program is the investigation of CBD for the reduction of hypertension leading to an upcoming application under the FDA for an IND. Other programs include DehydraTECH formulation development and testing with nicotine for oral pouches and prospective nicotine replacement therapy, human hormones, CBD for diabetes, dementia and others. Depending on the number of programs undertaken, R&D budgets are expected to vary significantly. It is in our best interests to remain flexible at this early stage of our R&D efforts in order to capitalize on potential novel findings from early-stage tests and thus redirect research into specific avenues that offer the most reward.

Lexaria has conducted a number of pharmacokinetic studies designed to provide potential early-stage indications of enhancing delivery characteristics of various drugs for potential future use. Our first human clinical study was published in 2019 under the title *Examination of a New Delivery Approach for Oral Cannabidiol in Healthy Subjects: A Randomized, Double-Blinded, Placebo-Controlled Pharmacokinetics Study*, where we demonstrated that DehydraTECH delivered higher volumes of CBD into the human circulatory system and did so more quickly than a concentration-matched positive control. The study demonstrated a statistically significant reduction in human blood pressure (“BP”) from the DehydraTECH processed CBD, versus no statistical reduction in human blood pressure from the positive control. The results of this study significantly influenced the direction of Lexaria’s research and development of its DehydraTECH technology and led to four subsequent human trial studies, with our most recent study HYPER-H21-4 being completed during the fiscal year and resulting in seven (7) peer reviewed publications *Antihypertensive effects of CBD are mediated by altered inflammatory response: A sub-study of HYPER-H21-4 trial*, Journal of Functional Foods; *Chronic effects of oral cannabidiol delivery on 24h ambulatory blood pressure in patients with hypertension (HYPER-H21-4): a randomized, placebo-controlled, and crossover study*, Cannabis and Cannabinoid Research; *Chronic Effects of Effective Oral Cannabidiol Delivery on 24-h Ambulatory Blood Pressure and Vascular Outcomes in Treated and Untreated Hypertension (HYPER-H21-4): Study Protocol for a Randomized, Placebo-Controlled, and Crossover Study* Journal of Personalized Medicine; *CBD supplementation reduces arterial blood pressure via modulation of the sympatho-chromaffin system: A substudy from the HYPER-H21-4 trial*, Biomedicine & Pharmacotherapy; *Effects of CBD supplementation on ambulatory blood pressure and serum urotensin-II concentrations in Caucasian patients with essential hypertension: A sub-analysis of the HYPER-H21-4 trial*, Biomedicine & Pharmacotherapy; *The Influence of Oral Cannabidiol on 24-h Ambulatory Blood Pressure and Arterial Stiffness in Untreated Hypertension: A Double-Blind, Placebo-Controlled Cross-Over Pilot Study*, Advances in Therapy; and *Differences in Plasma Cannabidiol Concentrations in Women and Men: A Randomized, Placebo-Controlled, Crossover Study*, International Journal of Molecular Sciences.

During fiscal 2023 Lexaria marked significant milestones in utilizing DehydraTECH-processed CBD for investigating heart disease and hypertension; and separately, for nicotine delivery via an oral pouch format, as a non-combusted, reduced-risk alternative to smoking. The following studies are the most recent contributors to our applied R&D programs that were completed in fiscal 2023. These studies have been entirely funded through the Company’s existing cash resources.

Hypertension: HYPER-H21-4

HYPER-H21-4 was the most ambitious study Lexaria had ever undertaken and was supported from the successful outcomes from our other 2021 human hypertension studies. This study was intended to “de-risk” outcomes prior to Lexaria’s planned entry into formal investigational new drug (“IND”) regulatory pathways for the use of DehydraTECH-CBD to treat hypertension and possibly other forms of cardiovascular disease. The study protocols were approved by the Independent Review Board in December 2021 with the program commencing in April 2022 and dosing completion in July 2022. The primary efficacy outcome from the study was the data related to 24-hour ambulatory blood pressure. Secondary study outcomes included: vascular health including arterial stiffness and autonomic balance; electrocardiogram analysis; brain structure and function through magnetic resonance imaging (MRI) testing; blood biomarkers (including renal, hepatic inflammation, lipids such as cholesterol); sleep quality / daytime sleepiness / sleep disorders; actigraphy, geriatric depression scale, perceived stress, and Beck anxiety inventory.

The study consisted of 66 volunteers between the ages of 40-70 and used a double blinded, randomized cross-over design, which utilized a placebo control. Some volunteers were recruited who were using hypertension drugs such as angiotensin-converting enzyme inhibitors, with or without diuretics, to help evaluate the efficacy of DehydraTECH CBD with and without other hypertension treatments.

In October 2022 Lexaria announced initial findings from HYPER-H21-4 evidencing a sustained drop in blood pressure (BP) in normally active hypertensive patients following multiple weeks of oral CBD therapy, using Lexaria’s patented DehydraTECH-CBD capsule formulation. The primary safety and efficacy objectives of the study were successfully achieved. BP was significantly reduced by 2.5 weeks and was sustained over the full 5-weeks of dosing using relatively low doses of CBD (as compared to other regulator approved pharmaceutical CBD applications) as a direct result of the well-established drug delivery efficiencies of Lexaria’s DehydraTECH technology. These reductions in BP were achieved with zero serious adverse events being reported. Also, there were no adverse changes observed in liver enzymes which is an important clinical safety biomarker of oral CBD therapy. Of note, these significant decreases in BP were achieved using relatively low doses of DehydraTECH-CBD as a direct result of the well-established drug delivery efficiencies of Lexaria’s DehydraTECH technology.

There were no serious adverse events to report as a result of the program dosing. This demonstrates a noteworthy safety and tolerability profile relative to conventional anti-hypertensive medications. This is a major achievement for Lexaria, as avoiding serious adverse events at clinically efficacious doses will be a primary requirement to achieve eventual regulatory marketing authorizations.

Another important discovery from study HYPER-H21-4 was that the decreases in BP were similar in persons currently being treated with standard of care BP medications as in persons who were not undergoing any current standard of care BP treatment. This observation is suggestive that Lexaria's DehydraTECH-CBD has the potential to offer additive BP reduction benefits on top of any degree of improvements the standard of care medications achieved for those patients before entry into the study. This additive improvement as an adjunct therapy, together with the exceptional safety profile of DehydraTECH-CBD, could become a significant value enhancer should it eventually enter the marketplace as an approved hypertension treatment.

In February 2023, additional results from the data analyses revealed modulation of a circulating compound called catestatin in the blood of study subjects which may point to a unique mechanistic benefit upon cardiovascular regulation with DehydraTECH-CBD treatment. Catestatin is a multifunctional peptide known to have inhibitory effects on the sympathetic nervous system in the pathophysiology of hypertension.

In May 2023, final results from HYPER-H21-4 revealed that blood-plasma levels of interleukin 8, 10, and 18, being pro-inflammatory biomarkers known to be linked to cardiovascular disease, were reduced significantly by ~19%, ~27%, and ~43%, respectively.

Overall, HYPER-H21-4 resulted in the above-noted seven peer reviewed publications and data sets which further strengthens and supports the case for DehydraTECH-CBD offering distinctive mechanistic benefits for the treatment of hypertension.

Epilepsy: EPIL-A21-1

In March 2022, Lexaria commenced an initial animal study to determine if DehydraTECH-CBD evidences superior treatment of seizure activity when compared to Epidiolex. Epidiolex is an FDA-approved oral solution prescription CBD available to children 1 year of age and older to treat seizures associated with Lennox-Gastaut syndrome, Dravet syndrome or tuberous sclerosis complex. In September 2019, Epidiolex was approved for use in all 27 member countries of the European Union. Epidiolex was developed by GW Pharmaceuticals plc and is now sold by Jazz Pharmaceuticals subsequent to their 2021 takeover of GW Pharmaceuticals. Epidiolex's effectiveness was studied in three randomized clinical trials involving a total of 516 patients and was shown to be effective in reducing the frequency of seizures when compared to placebo.

Lexaria's animal study utilized a vehicle-controlled, acute animal seizure model induced by electrical stimulation ("MES"), with DehydraTECH-enhanced CBD 2.0 formulations administered at lower doses than were required with Epidiolex to inhibit seizures. EPIL-A21-1 found that dosages of 50 mg/kg and 75 mg/kg DehydraTECH-CBD was more efficacious than Epidiolex in reducing or eliminating seizure activity; however 100 mg/kg doses of Epidiolex as compared to DehydraTECH-CBD was shown to have greater efficacy in eliminating seizure activity. Lexaria performed a second MES animal seizure study to measure time to peak efficacy at various post-dosing time points. At the 30-minute timepoint, 50% of the animals dosed with DehydraTECH-CBD showed partial reduction or full elimination of seizure activity whereas 100% of the Epidiolex-dosed animals were exhibiting full seizure activity. At the 60-minute timepoint 87.5% of the animals dosed with DehydraTECH-CBD showed partial reduction or full elimination of seizure activity compared to 62.5% of the Epidiolex-dosed animals showing partial reduction or full elimination of seizure activity. Epidiolex showed some enhanced seizure reduction capabilities at later time points in the study.

Additional work has been completed in this animal study program EPIL-A21-1 to establish an ED50 (i.e., the dose required to achieve seizure inhibition in 50% of the animals tested) for DehydraTECH-CBD, where ED50 determination is a common performance metric in preclinical animal studies for developmental therapeutics. This study confirmed that the DehydraTECH 75 mg/Kg dose was established as the calculated ED50.

The results from EPIL-A21-1 may result in further studies should funding and resources be available.

Hormone Therapy: HOR-A22-1

During fiscal 2023, Lexaria completed and reported on its HOR-A22-1 tolerability and PK pilot study in animals using a DehydraTECH-estradiol composition. Results evidenced that the DehydraTECH-estradiol formulation achieved an average peak concentration in the bloodstream that was roughly nine times (900%) higher than that achieved with the control formulation. As well, because estradiol is known to be quickly converted into the metabolite estrone by cells in the uterus, mammary glands and liver, estrone levels were also quantified in the study, which revealed that levels of the estrone metabolite were also significantly higher with the DehydraTECH formulation showing greater than a twenty-fold (2,000%) improvement in delivery as compared to the control formulation. Lexaria also discovered that the area under the curve findings for its DehydraTECH-estradiol formulation were at least fifteen times (1,500%) greater for estradiol and over one hundred and twenty-five times (12,500%) greater for estrone than the control.

The results from this study may lead Lexaria to investigate the potential use of DehydraTECH for human hormone therapies.

Diabetes: DIAB-A22-1

DIAB-A22-1, was a 56-day animal program undertaken by a third-party testing laboratory located in Canada to explore the ability of DehydraTECH-CBD to potentially treat diabetes, a disease whereby the body does not produce sufficient insulin, leading to higher-than-normal levels of sugars in the blood. The results from this study were announced in March and June 2023 and evidenced the following achievements of DehydraTECH-CBD in obese diabetic-conditioned animals:

- Lowered blood glucose levels by 19.9% ($p < 0.05$)
- Lowered overall body weight by 7% sustained over 8 weeks
- Witnessed a statistically significant increase in locomotor activity ($p < 0.05$)
- Lowered triglyceride levels by more than 25% ($p < 0.007$)
- Lowered blood urea nitrogen levels by 27.9% ($p < 0.001$)

Based on these results, Lexaria is planning to undertake a human diabetes clinical study to investigate whether any of these improvements will be evidenced in humans. Subject to completion of a study design that receives the necessary IRB approval, Lexaria intends to conduct this human diabetes study at the same medical research hospital in Europe that it has utilized for its recent human clinical hypertension studies.

Dementia: DEM-A22-1

Lexaria had previously demonstrated in animal studies that DehydraTECH-CBD crosses the blood brain barrier (“BBB”) much more effectively than originally thought possible. Based on this validation, in November 2022 we commenced an investigation as to whether DehydraTECH-CBD might have some positive effect on dementia. The inconclusive results from the efficacy animal study, DEM-A22-1 were reported on in June 2023, with the determination that any future investigations using DehydraTECH-CBD as a treatment for dementia will require an improved study design with a longer duration with the potential addition of DehydraTECH-nicotine which may have additive efficacy potential.

Smoking Cessation: NIC-H22-1

In November of 2022 we received independent review board approval for human clinical nicotine study NIC-H22-1, a 36-person human PK randomized, double blinded, cross-over study conducted in current cigarette smokers, wherein each person visited the laboratory to be dosed three times over a period of weeks. During each visit only one oral nicotine pouch was administered and evaluated: either DehydraTECH-Nicotine; on!TM brand manufactured by Altria; or ZynTM brand manufactured by Swedish MatchTM. Predetermined questionnaires for subjective evaluation will be used for each oral nicotine pouch, and blood samples were taken 8 times per visit to conduct objective evaluations related to the quantity of nicotine in blood at various time points. Subjective evaluations related to throat burn, user experience, gastrointestinal experience were also conducted. Dosing for this study completed in May 2023 and the resulting data confirmed that Lexaria’s oral nicotine pouch was statistically significantly faster in the median time required to reach comparable maximum nicotine concentrations within the bloodstream, than both on! (15% faster) and ZYN (over 20% faster).

Participants in the study also answered a number of subjective questions about their experience with the three oral pouch products and the results indicated that the Lexaria oral pouches resulted in no moderate to severe graded hiccups, lowest frequency of severe nausea and several instances of the highest positive endorsement ratings with respect to tolerability, pleasure, euphoria & head rush and mouth & throat burn.

Lexaria now seeks to commercialize DehydraTECH-Nicotine with suitable industry partners based on its clinical and intellectual property advancements.

Business Development

Hypertension

Approximately 1.28 billion people worldwide suffer from hypertension - elevated blood pressure - and it is recognized as one of the world’s top health problems. Only 21% of people with hypertension have it under control which demonstrates enormous unmet need. Among persons 50 years of age or older, isolated systolic hypertension is the most common form of hypertension, and systolic blood pressure can be more important than diastolic blood pressure as an independent risk predictor for coronary events, stroke, heart failure, and end-stage renal disease.

Drugs focused on blood pressure and related conditions are some of the best selling drugs in the world. LipitorTM, used to treat high cholesterol and reduce the risk of heart disease, has generated \$163 billion in revenue from 1992 until 2021. PlavixTM is used to prevent heart attack and stroke, has sold \$84 billion from 1992 until 2017. There are several hypertension drugs that each generate \$1 billion per year or more in revenue. Hypertension, valued at \$20.5 billion in 2021 and expected to reach \$39.5 billion by 2030, is one subset of the broader cardiovascular disease category, which is estimated as a \$82.5 billion market in 2023.

Lexaria is determined to fill the need for a safe, effective, tolerable treatment for hypertension and have a meaningful impact on comorbidity-related costs and deaths with our DehydraTECH-CBD. In pre-clinical and exploratory studies conducted to-date, Lexaria has evaluated through in vivo, in vitro, and human clinical testing the repeatedly evidenced efficacy in utilizing DehydraTECH-CBD to reduce blood pressure while avoiding serious negative adverse effects. Efficacy and lack of negative side effects are two major objectives of FDA-registered clinical studies. With the continued favorable results from our 2021-2023 HYPER programs, we have begun the Investigational New Drug (“IND”) application process. Lexaria has retained the services of a regulatory affairs and quality assurance consultancy group that assisted us with the preparation of our pre-IND meeting with the FDA. They are now assisting us with our protocol finalization and IND filing which we hope to submit by the end of the calendar year.

During the 2022 fiscal year, we filed a pre-IND meeting request with the U.S. Food and Drug Administration (“FDA”) regarding the development of Lexaria’s DehydraTECH-CBD for the treatment of hypertension. The FDA sent a positive written response from its pre-IND meeting regarding DehydraTECH-CBD and confirmed its agreement with Lexaria’s proposal to pursue a 505(b)(2) new drug application (“NDA”) regulatory pathway for its program. This abbreviated pathway typically enables a quicker route to commercial approval than a traditional 505(b)(1) NDA pathway. Within this communication the FDA agreed that additional non-clinical studies are not required prior to initiation of the DehydraTECH-CBD IND program, given the compelling data presented by Lexaria and others regarding the safety and tolerability of CBD. This supports Lexaria’s belief that our recent human clinical study program would support our pursuit of eventual FDA registrations.

Lexaria’s new IND-enabling program is made possible through successfully completed studies that have provided support for more ambitious commercial goals. Recently achieved successful results from HYPER-H21-4 study along with the historical results from its HYPER-H21-3, HYPER-H21-3, HYPER-H21-1 and our 2018 human clinical study, along with a number of successful animal studies demonstrating pharmacokinetic (“PK”) performance; and the molecular characterization work completed through Canada’s National Research Council, have together established a strong body of evidence for Lexaria’s DehydraTECH-CBD. These studies have shown that DehydraTECH-CBD demonstrates superior bio absorption upon oral administration and is effective at reducing blood pressure with no significant unwanted side effects.

During fiscal 2023, Lexaria has been working diligently with its third-party regulatory and clinical advisors in the development of its IND study protocol, has interviewed and selected its contract research organization, InClin Inc. as announced on April 24, 2023, and has been developing its clinical trial DehydraTECH-CBD drug product in order to obtain the stability data needed for its IND application to the FDA. As announced in its news release of August 30, 2023, Lexaria is waiting on one of its third party material suppliers to complete certain analytical and stability testing, which we expect to be completed prior to the end of the calendar year, to be followed with the filing of our IND application with the FDA.

Nicotine

Most nicotine consumed worldwide is delivered through smoking cigarettes. Worldwide, over 6 million deaths per year are attributed primarily to the delivery of nicotine through the act of smoking. This is according to the Centers for Disease Control and Prevention, which also estimates that over \$170 billion per year is spent just in the U.S. on direct medical care costs for adult smokers. Lexaria hopes to see the reduction of common but less healthy nicotine administration methods by way of enabling development of safe and effective oral nicotine dosage formats.

The oral nicotine pouch category is one of the fastest growing segments of the nicotine industry due in part to its reduced risk health outcomes as noted by the FDA. This delivery method, in the white pouch format specifically, involves absorption primarily through the buccal tissues of the mouth, of purified nicotine that has been separated from most other harmful compounds in the tobacco leaf and avoids harmful lung outcomes experienced by smokers or vapers. The global market for the oral nicotine pouch category was US\$2.33 billion in 2020 and is expected to reach \$21.84 billion in 2027.

DehydraTECH-Nicotine Research

During fiscal 2023, Lexaria expanded on its previously completed ingestible nicotine *in vivo* (animal) absorption study work conducted in 2018, which had found that DehydraTECH formulations delivered some major nicotine absorption performance improvements in rats: 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.

As noted above, Lexaria conducted its first human clinical trial (NIC-H22-1) to test its DehydraTECH-Nicotine formulation in an oral pouch format which confirmed that DehydraTECH-processed nicotine was faster than other commercial oral pouch products in the median time required to reach comparable maximum nicotine concentrations within the bloodstream.

Nicotine Patents

In June 2023, Lexaria received its Canadian patent for *Compositions Infused With Nicotine Compounds and Methods of Use Thereof* which builds on its previously issued Australian patent within the same family.

In July 2023 Lexaria received its first US patent in a new patent family entitled *Compositions and Methods For Sublingual Delivery of Nicotine* which includes claims for many types of nicotine, including nicotine benzoate, nicotine ditartrate, nicotine citrate, nicotine polacrilex, and many others, for use in sublingual delivery formats like oral pouches.

In August 2023, Lexaria received its first Canadian patent in a new patent family entitled *Lipophilic Active Agent Infused Tobacco Leaves and/or Tobacco Materials and Methods of Use Thereof*. This patent recognizes Lexaria's innovations in infusing tobacco leaves directly with drugs or active molecules such as nicotine with or without cannabinoids for potential applications such as treating nicotine addiction.

Lexaria believes that further potential patent awards in these families would serve to support significant competitive advantages in the nicotine white pouch category, as well as other oral nicotine product formats such as pills, tablets, lozenges, capsules, gums and sprays. As Lexaria demonstrates the benefits of DehydraTECH enabled oral nicotine pouches as an alternative to smoking cigarettes as a delivery method for nicotine, there are increased possibilities of engaging in licensing arrangements with major tobacco companies.

Nicotine Collaborations

In April of 2022 the Company announced new agreements with Altria Client Services, LLC ("Altria") in effect until March 31, 2023. Under the terms of these agreements, Lexaria received a fee to provide certain DehydraTECH powder-based nicotine formulations to be evaluated by Altria. Lexaria is not aware of Altria's current intentions with regard to DehydraTECH. In 2019, the Company entered into a definitive agreement with Altria to fund the R&D of DehydraTECH technology as it relates to nicotine. In exchange for a minority equity interest (16.67%) in our subsidiary Lexaria Nicotine LLC, Altria was to fund up to \$12 million for Lexaria Nicotine to conduct milestone-based clinical investigations utilizing DehydraTECH. Altria did not exercise its First Warrant Tranche to invest a further staged payment into Lexaria Nicotine and that warrant therefore expired on October 8, 2020 along with Altria's former exclusive access to DehydraTECH for nicotine in the US market.

Other Research

Lexaria's IND study will consume the majority of its financial resources and management time once it is undertaken, however, as noted above, based on the results from its DIAB-A22-1 study, Lexaria is also planning to undertake a human diabetes clinical study to investigate whether any of the improvements witnessed in the animal subjects would also be evidenced in humans. Lexaria intends to complete a study design and will endeavour to obtain ethics board approval for this human diabetes study by the end of calendar 2023.

Lexaria is also preparing a study program, pending funding availability, to investigate whether DehydraTECH could have any effect on GLP-1 drugs currently approved by FDA for treatment of diabetes and for weight loss.

Licensing

Lexaria has strategically structured its organization to obtain the most value from its DehydraTECH patented technology and has provided its subsidiary companies with exclusive rights to use DehydraTECH or sublicense DehydraTECH with specific molecules, namely, THC, CBD, Nicotine, and all other molecules.

Lexaria Nicotine LLC, (16.667% owned by Altria Ventures Inc.) holds the exclusive rights to the use or sublicense of DehydraTECH with nicotine molecules. As at the fiscal year ended August 31, 2023, Lexaria Nicotine LLC has one perpetual non-exclusive global license issued to Altria Client Services LLC for DehydraTECH-Nicotine.

In January 2021, Lexaria's wholly-owned subsidiary, Lexaria CanPharm ULC sold its exclusive license rights and assigned all sublicenses for the use of DehydraTECH with non-pharmaceutical THC-related assets to Hill Incorporated (formerly Hill Street Beverage Company Inc.) ("Hill Inc."). The remaining consideration outstanding for the acquisition of this license, is a promissory note bearing an original value of CDN\$2 million which is reduced quarterly based on royalty payments of 5% of the gross proceeds received by Hill Inc. from DehydraTECH infused products or sublicenses issued for the use of DehydraTECH.

Lexaria Hemp Corp. holds the exclusive license to the use of DehydraTECH with cannabis that contains less than 0.3% THC for non-pharmaceutical products. As at the fiscal year ended August 31, 2023, Lexaria Hemp Corp. had the following active licenses:

- Non-exclusive license with Hill Inc. for all product formats globally;
- Non-exclusive license with Boldt Runners Corporation for oral pouch and oral mulch products in the US, South Africa, Europe and Japan;
- Non-exclusive license with Cannfections Group Inc. for chocolates and candy in Canada;
- Non-exclusive license with Bevnology LLC for all product formats globally excluding Japan, Korea and China;
- Exclusive perpetual license (other than the rights held by Hill Inc. and Boldt Runners Corporation) with Premier Anti-Aging Co. Ltd. (as assigned pursuant to its absorption merger with Premier Wellness Science Co. Ltd.) ("Premier") for all product formats in Japan.

[Table of Contents](#)

In order for Premier, a cosmetics and skin-care company listed on the Tokyo Stock Exchange, to continue to retain ongoing exclusivity for DehydraTECH in Japan, it must take-over the minimum quarterly payments to Lexaria which, during the first five years of the agreement, amount to a minimum of \$4.5 million. The license for the Japanese market is perpetual assuming that Premier submits all required payments.

In addition to the minimum payments, Lexaria will also receive royalty revenue from DehydraTECH licensed product sales under the agreed terms.

Lexaria Pharmaceutical Corp. (“LEXX Pharma”) holds the exclusive rights to license DehydraTECH in connection with all molecules other than cannabis and nicotine, with the exception that it can produce and sublicense rights to produce cannabis DehydraTECH products that required physician consultation and were intended to treat a therapeutic indication. On July 26, 2023 LEXX Pharma agreed to limit its exclusive rights to the use or sublicense of DehydraTECH for all of the noted molecules solely in connection with products that were created with the intention to treat a therapeutic indication and required physician consultation. As of the fiscal year ended August 31, 2023 LEXX Pharma had the following active licenses:

- Non-exclusive license with AnodGen Biocetical for pharmaceutical and medical product applications incorporating DehydraTECH-infused psychoactive cannabinoid powders and medical product applications incorporating DehydraTECH-infused non-psychoactive cannabinoid powders within Europe including the UK, Australia and New Zealand. This license is dormant and we are not aware if AnodGen will be capable of exercising their business plan.
- Non-exclusive license with Valcon Medical A/S for bulk powder formats, as solid oral dosage forms such as powder-filled capsules, and compressed tablets, pills and oral melts, and in topical creams or lotions with or without patch integration that incorporate DehydraTECH-infused cannabinoids for the purposes of medical product applications within Europe including the UK. Valcon has not communicated their intentions or timeline of development of products utilising this license.

On July 26, 2023, Lexaria issued its new subsidiary, Lexaria Nutraceutical Corp., an exclusive license to the use of DehydraTECH for all molecules, excluding those associated with nicotine or cannabis, solely in association with non-pharmaceutical products. As at the fiscal year ended August 31, 2023, Lexaria Nutraceutical Corp. had the following active licenses:

- Non-exclusive license with Bevnology LLC for various non-pharmaceutical product formats in the US;
- Exclusive, world-wide, perpetual and sublicenseable license with SulfoSyn Limited for the use of DehydraTECH with the molecule sulforaphane;

Competition

The biopharmaceutical industry is characterized by intense competition and rapid innovation. We believe the key competitive factors that will affect the development and commercial success of any DehydraTECH enhanced product candidates are efficacy, safety, tolerability, reliability, convenience of use, price, and reimbursement. We face competition from segments of the pharmaceutical, biotechnology and other related markets that pursue the development of API delivery platforms. We anticipate facing intense and increasing competition as new more advanced API delivery technologies become available. There can be no assurance that our competitors are not currently developing, or will not in the future develop, technology that is equally or more effective or is more economically attractive than any of our current or any enhanced versions of DehydraTECH.

Our competitors may be able to develop other drug delivery platforms that are able to achieve similar or better results than DehydraTECH. Our competitors include major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies, universities, and other research institutions. Many of our competitors have substantially greater financial, technical, and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations and well-established sales forces. Established pharmaceutical companies may also invest heavily to accelerate discovery and development of novel therapeutics or to in-license novel therapeutics that could make DehydraTECH-enabled product candidates obsolete. Smaller or early-stage companies may also prove to be significant competitors, particularly as they develop novel approaches to oral or topical drug delivery that DehydraTECH is focused on.

Mergers and acquisitions in the biotechnology and pharmaceutical industries result in even greater concentration of resources and capital in our competitors. Our competitors, either alone or with collaborative partners, may succeed in developing, acquiring, or licensing API delivery technologies that are more effective, safer, more easily commercialized or less costly than DehydraTECH.

Competition in alternative health sectors and consumer products in the U.S. is fierce. We expect to encounter competitive threats from existing and new participants in the sector with competing technologies. Food supplements, organic foods, and health food markets are all well established and the Company and/or its licensees will face many challenges within these markets. Although Poviva Corp. has filed patent applications to protect intellectual property, there is no assurance that patents beyond those already issued will be granted nor that other firms may not file superior patents pending. Lexaria is aware of other competing technologies that claim to also enhance the bio absorption of bioactive molecules as DehydraTECH has repeatedly demonstrated through *in vitro* and *in vivo* scientific testing. By and large, these technologies are mostly forms of nanotechnology that generally claim to enable the formation of microencapsulated microemulsions of active ingredients. These technologies can enable exceptional water solubility of ingredients and can impart improved intestinal bio absorption as a result, but do not necessarily offer the breadth of performance and value enhancing benefits that Lexaria’s DehydraTECH technology offers to its licensees.

Competition in nicotine, alternative nicotine delivery and nicotine cessation sectors in the U.S. is comprised of long-established entities, brands, and new technologies competing to create less harmful options. The sectors are complicated by the significant historical empirical data of older products or technologies versus the more limited published supporting data regarding the effects of new products or technologies. Due to the size of the sectors we expect to encounter competitive threats from existing participants and unknown new entrants. There is no assurance that other technologies already deployed, or in development, will not form the basis of product formats that competitors or consumers choose to utilize. It is also possible that historic delivery methods that have been in use and the familiarity with them may prevent adoption of products utilizing DehydraTECH in alternative delivery formats. Competing technologies or products may utilize known delivery formats or entirely new and unforecastable formats. Lexaria has demonstrated through scientific testing that DehydraTECH delivers nicotine rapidly and effectively through oral delivery. We believe that if we can educate and influence consumers to adopt a food-grade edible product format, and if US regulatory bodies authorize such format, we may be able to offer a competitively successful new product format that utilizes DehydraTECH.

While we are an early adopter providing technology to the cannabinoid sector, there are a large number of public companies that have claimed to be involved in the sector in some fashion, and an unknown number of private companies. Our current strategies may prove to be ineffective as the sector grows and matures, and if so, we will have to adapt quickly to changing sectoral circumstances. Accordingly, the Company intends to aggressively pursue technology out-licensing opportunities not only within the cannabinoids and nicotine sector where we are already active, but also across other sectors where DehydraTECH is patent allowed and/or pending, including opportunities in the vitamin and supplements sector and the pain relief sector.

Lexaria believes DehydraTECH offers a host of benefits beyond what competing technologies can offer, including superior oral palatability, a more appealing and all-natural ingredient compositional profile from an oral product and beverage formulation perspective, more predictable time of delivery into bloodstream and certain target tissues, and superior scalability and cost effectiveness from a manufacturing perspective. Lexaria believes that DehydraTECH is significantly distinguished from competing technologies in these respects and has a view of growing the breadth and number of licensees who will adopt DehydraTECH into their product offerings. Lexaria believes that these competitive advantages together with our wealth of scientific data showing noteworthy bio absorption enhancements with DehydraTECH constitute a compelling value proposition for its prospective licensees. We intend to continue to pursue license arrangements in the multiple bioactive ingredient sectors identified in its issued and pending patent applications.

Compliance with Government Regulation

The U.S. Farm Bill, was passed in December 2018, and removed certain restrictions on advertising, marketing, banking, and other financial services as well as allowing interstate commerce for hemp and hemp-derived CBD. It also facilitated the removal of barriers for intellectual property protections under federal law such as patents and trademarks. However, the Farm Bill preserves the FDA's authority to regulate products that contain hemp-derived CBD and to date the FDA has not issued an approval for any CBD products, other than one cannabis-derived and three cannabis-related drug products. Accordingly, the ambiguity regarding the incorporation of CBD into ingested and topical products has had significant impacts on the industry segments to which we license DehydraTECH and could potentially change some of the regulatory compliance risks that may affect our business.

As well, while more than thirty-nine states in the U.S. have passed some form of legislation related to that state's permission to grow, cultivate, sell, or use marijuana and/or CBD for medical purposes or for recreational use, legislation is not necessarily harmonious between states and in most circumstances, it is not legal to transport cannabis-related products across state lines.

Lexaria legally conducts R&D on cannabis ingredients in our Canadian federally licensed laboratory in compliance with all federal and local Canadian laws. We abide by U.S. federal law that provides for certain exemptions for agricultural hemp and certain by-products to be manufactured and sold in the U.S. DehydraTECH is only licensed to those companies that have met and comply with state regulations for the sale and distribution of cannabis related products in their licensed operating territories.

DehydraTECH has applications in completely separate sectors such as vitamins, CBD for applications under pursuit for medical applications registered with the FDA, and nicotine. We are continuing formulation development for research and validation purposes in each of these areas. We have a formal relationship with the Altria Group and have conducted R&D with that company related to the possible development of nicotine oral products. If we do enter any of these sectors, we may be exposed to and of necessity may have to comply with all local, state, and federal regulations in each of those sectors. As a result of the possibility of Lexaria being involved in a number of disparate business sectors, compliance with government regulations could require significant resources and expertise from our Company.

Employees and Contractors

We utilize employees and consultants for the Company's intellectual property development and licensing and business operations. Our Company relies on the business and technical experience of our existing management, on the technical abilities of consulting experts, and on the technical and operational abilities of its operating partner companies to identify and evaluate business opportunities. We currently have five full time salaried employees under contract and may add personnel to expand our internal R&D capacity. None of our employees are represented by a labor union and we consider our employee relations to be good. We outsource virtually all analytical work to independent third-party laboratories located in the USA, Canada, and Europe.

[Table of Contents](#)

Our executive personnel are entitled to incentives as set by our Compensation Committee. All executives, directors, employees and select contractors are eligible for participation in the Company's equity incentive plan, the primary purpose of which is to attract, retain and motivate our team members by granting stock-based compensation awards.

Subsidiaries

Lexaria Bioscience Corp. has the following wholly owned subsidiaries;

- Lexaria CanPharm ULC (which is wholly-owned by Lexaria CanPharm Holding Corp.),
- Lexaria CanPharm Holding Corp.,
- Poviva Corp.,
- Lexaria Hemp Corp.,
- Kelowna Management Services Corp.,
- Lexaria Nutraceutical Corp. and
- Lexaria Pharmaceutical Corp.,

and our majority owned (83.333%) subsidiary Lexaria Nicotine LLC. Altria Ventures Inc. owns a 16.667% equity interest along with certain other rights in Lexaria Nicotine LLC.

Available Information

Lexaria's common stock is quoted on the Nasdaq under the symbol "LEXX" and certain warrants are quoted under LEXXW. We file annual, quarterly, and current reports, proxy statements and other information with the U.S. Securities Exchange Commission (the "SEC"). These filings are available to the public on the internet at the SEC's website at <http://www.sec.gov>. Lexaria Bioscience Corp. is a British Columbia based reporting issuer in Canada and as such, we are required to file certain information and documents at www.sedarplus.ca

Our corporate website is www.lexariabioscience.com. This website address is not intended to function as a hyperlink and the information contained on our website is not intended to be a part of this Report. We make available free of charge on <https://www.lexariabioscience.com/investors/regulatory-filings/> our annual, quarterly, and current reports, and amendments to those reports if any, as soon as reasonably practical after we electronically file such material with, or furnish it to, the SEC. Further details on our research programs are provided in our 2022 and 2023 Form 10-K filings. We may, from time to time, provide important disclosures to investors by posting them in the Investor Relations section of our website.

The address of our principal executive office and research laboratory is #100-740 McCurdy Road, Kelowna, British Columbia, Canada V1X 2P7. We maintain our registered agent's office and our U.S. business office at Nevada Agency and Transfer Company, 50 West Liberty, Suite 880, Reno, Nevada 89501. Our telephone number is (250) 765-6424.

Item 1A. Risk Factors

Lexaria operates in the intensely competitive biotechnology industry and is subject to numerous risks. Investment in this sector involves a high degree of risk. You should carefully consider the risks described below as well as other information in this report. The occurrence of any of the events, circumstances or developments described below could materially and adversely affect our business, financial conditions, results of operations and our future prospects. Our actual results could differ from those in forward looking statements as a result of numerous factors including the risks described below.

A. Risks Associated with our Business and Industry

DehydraTECH-enabled pharmaceutical products may not successfully proceed to commercialization.

The advancement of DehydraTECH-enabled pharmaceutical products will be subject to successful completion of multi-phase testing under significant regulatory requirements and testing protocols, such as those required by the US Food and Drug Administration (FDA) and comparable foreign regulators. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier studies. It is possible we could face similar setbacks. The effects of such reversions could cause significant delays or abandonment of testing with negative effect to our business through financial loss, industry credibility and/or a temporary or permanent decline in valuation of our Company.

If we are unable to retain and hire qualified personnel, we may not be able to implement our business plan successfully.

In developing DehydraTECH, we rely upon our employees, consultants, contractors, and collaborators. Our current business prospects are dependent on the principal members of our executive team, the loss of whose services could make it difficult for us to manage our business successfully and to achieve our business objectives. The loss of the services of any key research, product development, regulatory and technical personnel, or our inability to hire new personnel with the requisite skills, could restrict our ability to carry out our R&D programs and/or develop our product candidates. Each position in a small company carries relatively greater duties and responsibilities than that position would in a larger organization. The loss of any of our key personnel could result in severe disruptions to our operations and business plans. Our ability to identify, attract, integrate, and retain additional qualified key personnel is critical to our success. Competition for skilled research, product development, regulatory and technical personnel is intense, and we may not be able to recruit and retain the personnel we need.

We face substantial competition, which may result in others discovering, developing and/or commercializing technology or products similar to ours before or more successfully than us.

Our commercial and/or licensing opportunities may be reduced or potentially eliminated if our competitors develop and commercialize products utilizing a similar technology that compete directly with those incorporating DehydraTECH. Significant delays in the development of our product candidates could allow competitors to bring products to market before us which may impair the ability to commercialize our product candidates. This could result in reduced sales and negative pricing pressure on our technology lessening our ability to increase or even sustain revenues and causing deterioration of market prospects.

Our competitors could also develop drugs that are more effective, more widely used and less expensive than our technology supports. They may also be more successful in manufacturing and marketing their products. Competitors could acquire regulatory approval of their products before we are able to obtain patent protection or other intellectual property rights, limiting our ability to license our respective patents and/or develop or commercialize a product candidate. These appreciable advantages could render our product candidates non-competitive or obsolete before we can recover the expenses of research, development, and commercialization.

Our competition includes pharmaceutical and biotechnology companies, educational institutions, and research foundations. They may have substantially greater capital resources, research and development workforce and facilities and superior marketing experience than Lexaria. They may be able to respond more rapidly to new regulations and/or devote greater resources to the development and promotion of their business model. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, and in acquiring technologies and technology licenses competitive to our programs or of potential use to our business.

Early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors and could increase their ability to rapidly gain market share.

As a result of these factors, management cannot be certain that the Company will be able to compete against current or future competitors or that competitive pressure will not seriously harm our business.

Any failure in protecting our intellectual property may have a negative impact adverse effect on our ability to develop and licence DehydraTECH.

Because patents involve complex legal and factual questions, the issuance, scope, validity, and enforceability of patents cannot be predicted with certainty. Some of our patent pending applications will not be granted as patents. Even if patents are issued, they may not be granted with claims of sufficient breadth to protect DehydraTECH technology or may not provide us with a competitive advantage over other products or technologies. Issued patents may be challenged, invalidated, or circumvented. If they are invalidated or found to be unenforceable, we could lose the ability to exclude others from making, using, or selling the inventions claimed. An issued patent does not give us the automatic right to use the patented technology or commercialize a product using the technology. Third parties may have blocking patents that could be used to prevent us from developing our products, selling our products, or commercializing our DehydraTECH technology. Others may also independently develop products or technologies similar to those that we have developed or may reverse engineer or discover our trade secrets through proper means.

Technological R&D in the bioscience industry involves a lengthy, expensive process with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete our studies or trials.

We could encounter numerous unintended and unforeseen events including but not limited to the following:

- regulators or institutional review boards (“IRBs”), or ethics committees may not authorize us or our investigators to commence a study or trial at a prospective trial site. There is no assurance that we will be able to satisfy their approval conditions in a timely fashion if at all, whether due to financial or other unforeseen constraints;
- the ability or failure to reach acceptable terms with prospective trial sites and contract research organizations (“CROs”). These terms can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- the IRB may disagree with our design or change the requirements for approval even after it has incorporated their review and comments;
- authorities may impose a hold on or suspend a program due to any number of factors, including a request for further information or other administrative actions, results of competitors programs, noncompliance with changing regulatory requirements or a finding that the participants are being exposed to unacceptable health risk or changes in governmental regulations;

- studies or trials of various APIs may produce negative or inconclusive results. We may decide or regulators may require us to conduct additional studies or trials. We may decide to abandon development programs related to those APIs;
- the number of participants required may be larger than anticipated. Participants may drop out or fail to return for follow-up at a higher rate than we anticipate. Initial enrolment may take longer than scheduled. We may be unable to recruit a sufficient number of suitable participants;
- the participants and sites in our studies or trials may not comply with required protocols rendering the results insufficient or uninterpretable;
- the cost of studies or trials of an API may be greater than anticipated and we may lack adequate funding to continue;
- any changes in regulatory requirements and guidance that require amending or submitting new protocols;
- regulators may require the submission of additional data or impose other requirements before granting permission to proceed.

Our R&D costs will increase with delays in testing and/or regulatory approvals. We do not know whether any of our projected studies or trials will begin as planned, will need to be restructured once commenced, or will be completed on schedule, or at all. Any delays in our development programs could significantly impact our share value, business prospects, financial condition, and results of operations.

If we are unable to obtain and maintain sufficient patent protection, or if the scope of the patent protection is not sufficiently broad, our competitors could develop technology similar to ours.

We may not be able to effectively enforce our intellectual property rights throughout the world. Our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws. Patent laws of some foreign countries do not provide protection to the same extent as the laws of the United States. These factors could make it difficult for us to stop the infringement of our patents or the misappropriation of our intellectual property rights. Legal actions to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and resources from other aspects of our business. We cannot ensure that we will be able to initiate or maintain legal efforts in all jurisdictions which could limit the markets for our technology and reduce possible future revenues.

We are dependent on the services of third parties and unsatisfactory performance will negatively affect our Company.

We rely on third parties to conduct, supervise, and monitor our R&D programs. Third-party service providers are not our employees, and except for remedies available to us under contract, we cannot control whether or not they devote sufficient time, skill, and resources to our programs. We remain responsible for ensuring that each of our programs are conducted in accordance with the applicable protocol, legal, regulatory and scientific standards.

If third parties do not successfully carry out their contractual duties in meeting expected deadlines or not conducting our R&D programs or preclinical studies as prescribed, if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our protocols, regulatory requirements or for other reasons, we or our collaborators may be subject to regulatory enforcement or other legal actions.

Resultant data generated in our preclinical programs may be deemed unreliable and our studies and trials may need to be repeated, extended, delayed, or terminated. We may be delayed in or unable to obtain marketing approvals for our product candidates or to successfully commercialize our product candidates. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed.

We also rely on third party suppliers and manufacturers to provide us with the facilities, materials, and services to manufacture our DehydraTECH compounds for our research programs and our B2B customers. It is possible that such third parties may not successfully carry out their contractual obligations, meet expected deadlines, adhere to our protocols, or comply with regulatory requirements. This could result in the lost revenue or program delays. Demand for our services may be adversely affected if customers lose confidence in the quality of our services or the industry's practices. Adverse publicity may discourage businesses from contracting our services and could have a material adverse effect on future revenue generation.

Agreements with third parties conducting services on our behalf might terminate for a variety of reasons, including a failure to perform by the third parties. If any of these terminate, we may be unable to enter into arrangements with alternative providers or to do so on commercially reasonable terms. Switching or adding additional third parties involve increased management time, focus, regulatory approvals and/or additional cost. Any delays in our manufacturing capabilities or research studies may have a material adverse impact on our business, financial condition and prospects.

Any failure to prevent or mitigate security breaches and improper access to or disclosure of our data or our user data could result in the loss or misuse of such data, which could harm our business and reputation and diminish our competitive position

Awareness and sensitivity to personal data breaches and cyber security threats is at an all-time high. Our computer systems and those of our contractors and consultants are vulnerable to damage from unauthorized access, computer viruses, telecommunications and electrical failures, and natural disasters. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our R&D programs. We depend on digital technologies for the successful operation of our business, including corporate email communications to and from employees, licensees, consultants and third-party providers, collection, use and retention of investor data, security systems with respect to our Health Canada licensed laboratory and maintenance of confidential information.

As part of our business model, we collect, retain, and transmit confidential information over public networks. We may be vulnerable to targeted or random personal data or security breaches, acts of vandalism, computer malware, misplaced or lost data, programming and/or human errors, or other similar events. Any misappropriation of our internal confidential or personal information gathered, stored or used by us, be it intentional or accidental, could have a material impact on the operation of our business, including severely damaging our reputation and our relationships with licensees, employees and investors. We may incur further significant costs implementing additional security measures to protect against new or enhanced data security or privacy threats, or to comply with current and new international, federal, and state laws governing the unauthorized disclosure of confidential and personal information which are continuously being enacted. We could also experience loss of revenues resulting from unauthorized use of proprietary information including our intellectual property. We could also face sizable fines, significant breach containment and notification costs to supervisory authorities and the affected data subjects, and increased litigation as a result of cyber security or personal data breaches.

We may be subject to claims that our employees, consultants, or independent contractors have wrongfully used or disclosed alleged trade secrets.

We employ, and may employ in the future, individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. We could be subject to claims that the Company or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Successful claims could result in our loss of valuable intellectual property rights or personnel in addition to suffering monetary damages. Even if we are successful in any litigation, it could result in substantial costs and be a distraction to management with an adverse impact on our business.

Risks related to the effects of COVID-19

The outbreak of the coronavirus (COVID-19) has evolved into a global pandemic. The extent to which the virus impacts our business and operating results will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information that may emerge concerning the virus, its variants, and the actions to contain the coronavirus or treat its impact, among others.

With the continued spread of the virus, our business operations could be interrupted or delayed. It is possible that our R&D programs could be adversely affected by the restrictions imposed during the pandemic. Travel restrictions, lock-down quarantines or other such limitations may hamper our ability to conduct our R & D programs. In some of our programs, particularly our human studies, participant recruitment and enrolment, participant dosing, distribution of results, study monitoring and data analysis may be paused or delayed due to the effects that the pandemic has in different localities. If the virus continues to spread, some participants and clinical investigators may not be able to comply with clinical trial protocols. We currently utilize third parties to conduct our R&D programs and in the production of our B2B customers' products. These relationships could be adversely impacted by any future covid-related restrictions. It is possible that our supply chain may be disrupted, limiting our ability to manufacture products for our R&D operations or for our B2B customers.

The spread of COVID-19 and its variants has caused a broad global impact which could have a material economic effect on our business. While the potential economic impact brought by and the duration of the pandemic may be difficult to assess or predict, it has already caused, and is likely to result in further significant disruption of global financial markets, which may reduce our ability to access capital either on favorable terms or at all. Inflation and recession or other sustained adverse economic events resulting from the pandemic could materially and adversely affect our business and the market for or value of our common stock.

B. Risks Associated with our Financial Condition

Without additional financing to develop our business plan, our business may fail.

We have generated only minimal revenue from our business and anticipate that we will need to raise further financing to conduct and grow our business. We can provide no assurance that we will be able to secure such financing. The most likely source of future funds presently available to us is through the sale of equity capital. Any sale of share capital will result in dilution to existing security-holders.

The longer-term growth of our business depends on our ability to expand our portfolio of patents and industry segments where DehydraTECH is demonstrably applicable, which may require substantial financial resources and may ultimately be unsuccessful.

There can be no assurance that we will achieve significant revenues or profitable operations or will generate adequate funds to continue our intellectual property development. Many factors, such as competition, patent protection, appropriate regulatory approvals, availability of personnel, and market acceptance of our services can influence the revenue and profitability potential. As a result, we may experience material fluctuations in future operating results on a quarterly and annual basis which could materially affect our business, financial condition, and operating results.

The R&D programs required to evidence that DehydraTECH's demonstrated efficacy also works with other APIs and molecules to develop the evidence may ultimately be unsuccessful. We cannot be certain that our overall business model within any particular sector will ever come to fruition, and if they do, may not generate meaningful profits. We may not recover all or any portion of our capital investment in our research and technology development, marketing, or other aspects of the business.

We may enter into collaborations with third parties for the development and commercialization of our product candidates. If we fail to enter into such collaborations, or such collaborations are not successful, we may not be able to capitalize on the market potential of our product candidates.

We face significant competition in seeking appropriate partners. Our ability to reach a definitive agreement in any collaboration depends in part on our assessment of their resources, expertise and intent, the terms and conditions of the proposed agreement and the evaluation of numerous factors by the proposed collaborator. Our ability to generate revenues from these arrangements will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a product candidate, reduce or delay our development programs. This might delay our potential development schedule or reduce the scope of research activities or increase our expenditures. We may have to undertake further discovery or preclinical development activities at our own expense. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development activities, we may not be able to further develop our product candidates or continue to develop our product candidates and our business may be materially and adversely affected.

Future collaborations may involve the following risks whereby collaborators may:

- not perform their obligations as expected or terminated an agreement for their convenience. If terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates. We could face difficulty in attracting new collaborators. The markets' perception of our business could be adversely affected.
- have significant discretion in determining the efforts and resources that they will apply. We would have limited control over the amount and timing of resources. They may provide insufficient funding for product development of our selected targets.
- have us repeat or conduct new discovery and preclinical development or delay, stop or abandon discovery and preclinical development of a product candidate.
- view product candidates discovered in collaboration as competitive with their existing product candidates or products. They may cease to devote resources to the development of collaborative product candidates.
- independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates if they conclude that competitive products are more likely to be successfully developed than our products.
- use their proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property.
- become involved in a business combination which, subject to its contractual obligations, might detract from or terminate the development of any of our product candidates.

C. Risk Associated with Current Regulatory Environments

Our product candidates are in an early stage of development and may fail or experience significant delays or may never advance to the clinical stage, which may materially and adversely impact our business.

All of our R&D programs are in the preclinical development stage and our future success heavily depends on the successful development of our DehydraTECH product candidates which may never occur. These product candidates could be delayed, not advance into the clinic, or unexpectedly fail at any stage of development. Before we can commence clinical trials for a product candidate, we must conduct extensive preclinical and other non-clinical tests in order to support an investigational new drug ("IND") application, including IND-enabling good laboratory practice toxicology studies. Preclinical studies and clinical trials are expensive, difficult to design and can take many years. There is no assurance that we will be able to successfully develop our product candidates, and we may focus our efforts and resources on product candidates that may prove to be unsuccessful.

We cannot be certain of the outcome of preclinical testing and clinical studies and results from these studies may not predict the results that will be obtained in later phase trials of our product candidates. Even if we are able to complete our preclinical studies and planned clinical trials in line with our projected timelines, results from such studies and trials may be not replicated in subsequent preclinical studies or clinical trial results. Additionally, such studies may be delayed due to events beyond our control. As a result, we cannot guarantee that we will be able to submit INDs, or similar applications, within our projected timelines, if at all, or that the FDA, or similar regulatory authorities, will allow us to commence clinical trials.

Pharmaceutical products incorporating DehydraTECH has never been approved for the treatment of disease.

In order to commercialize a product that utilizes DehydraTECH for the treatment of any disease, we and/or our commercial partner must obtain regulatory product approvals for treatment of a particular indication. Satisfying regulatory requirements is an expensive process that typically takes many years. There are compliance requirements covering R&D, testing, manufacturing, quality control, labelling, and promotion of drugs for human use. To obtain necessary regulatory approvals we must complete clinical trials demonstrating that our product is safe and effective for a particular indication. There can be no assurance that any product enhanced by DehydraTECH will be proven to be safe and effective, that clinical trials will demonstrate the necessary safety and effectiveness of the product candidates, or that we will be successful in obtaining regulatory approval for any treatment developed, even if such safety and effectiveness are demonstrated.

We may encounter obstacles in obtaining regulatory approval from the FDA or other international regulatory organizations during clinical trials including:

- clinical trials may not yield sufficiently conclusive results for regulatory agencies to approve the use of DehydraTECH;
- DehydraTECH enhanced formulations may fail to be more effective than current therapies, or to be effective at all;
- DehydraTECH enhanced formulations may have adverse side effects, which could cause them to be delayed or precluded from receiving regulatory approval or otherwise expose us to significant commercial and legal risks;
- it may take longer than expected to determine whether or not a treatment is effective;
- patients involved in the clinical trials may suffer severe adverse side effects even up to death, whether as a result of treatment with DehydraTECH enhanced formulations, the withholding of such treatment, or other reasons whether within or outside of our control;
- patients enrolled in the clinical trials may not have the characteristics necessary to obtain regulatory approval for a particular indication or patient population;
- failure to obtain and/or maintain, any required governmental approvals;
- if approval for commercialization is granted, it is possible the authorized use will be more limited than is necessary for commercial success, or that approval may be conditioned on completion of further clinical trials or other activities, which will cause a substantial increase in costs;
- if granted, approval may be withdrawn or limited if problems with DehydraTECH enhanced formulations emerge or are suggested by the data arising from their use or if there is a change in law or regulation.

Any success achieved at a given stage of the clinical trials does not guarantee that the future achievement of success at any subsequent stage, including without limitation, final FDA approval.

Delays or rejections in the regulatory approval process because of additional government regulation resulting from future legislation or administrative action, or from changes in the policies of the FDA or other regulatory bodies during the period of product development, clinical trials, or regulatory review may occur. Failure to comply with applicable regulatory requirements may result in criminal prosecution, civil penalties, recall or seizure of products, total or partial suspension of production, or an injunction preventing certain activity, as well as other regulatory action against our product candidates or our Company.

We currently have no commercial pharmaceutical products and therefore generate no revenue from pharmaceutical products and may never be able to develop marketable pharmaceutical products. We have no experience in filing the applications necessary to obtain approval and expect that we will need to rely on CROs and regulatory consultants to assist us with this process. Regulatory approval also requires the submission about the product manufacturing process and the inspection of the manufacturing facilities. Our success is dependent on our or a third parties' ability to successfully navigate the risks and obstacles associated with obtaining FDA clearance for any DehydraTECH enhanced formulated product.

Pharmaceutical products using DehydraTECH with CBD as an API have never been approved for the treatment of any disease.

To date the FDA has approved only limited use of cannabinoids for the treatment of any disease or condition. The FDA has approved one cannabinoid-derived drug product for the treatment of seizures associated with Lennox-Gastaut syndrome and Dravet syndrome and three synthetic cannabinoid-related drug products for the treatment of nausea and vomiting caused by cancer chemotherapy. While we expect any product candidates that we develop will be regulated as a new drug under the Federal Food, Drug, and Cosmetic Act, the FDA could decide to regulate them or any other products incorporating DehydraTECH under a different regulatory regime. The lack of policies, practices or guidelines may hinder or slow review by the FDA of any regulatory filings that we may submit. The FDA may respond to these submissions by defining requirements that we may not have anticipated.

Regulation of non-pharmaceutical hemp-based CBD products is evolving.

We cannot predict the nature of any future laws, regulations, interpretations, or their application to non-pharmaceutical hemp-based CBD. It is probable that regulations may be enacted that will be directly applicable to our business. Violations, alleged or otherwise, could disrupt our business or the business of our licensees. Any compliance deficiencies with future government regulation could increase our operating costs.

[Table of Contents](#)

In the US, interstate shipment of hemp-derived non-pharmaceutical CBD from one state to another is legal only where both states have laws and regulations that allow for the production and sale of such products and that qualify under the Farm Bill. The marketing and sale of DehydraTECH products containing hemp-derived non-pharmaceutical CBD is limited by such factors and is restricted to such states. A repeal or adverse amendment of laws and regulations that are now favorable to the distribution, marketing, and sale of finished products of hemp-derived CBD our licensees intend to sell could significantly limit, restrict, or prevent us from generating revenue related to these DehydraTECH enabled non-pharmaceutical products. Any such repeal or adverse amendment of now favorable laws and regulations could have an adverse impact on our business plan with respect to such revenues.

Controlled substance legislation differs between localities. Legislation in certain jurisdictions may restrict or limit our ability to develop and commercialize products using DehydraTECH.

We currently have licensees who produce hemp-derived non-pharmaceutical CBD products. The Farm Bill delegates the authority to the states to regulate and limit the production of these products within their territories. Many states now have laws and regulations that allow for the production and sale of hemp-derived CBD products. We can offer no assurance that these state laws will not be repealed or amended which could render these products illegal. Such actions would adversely impact our product revenue and royalties derived from DehydraTECH-enabled CBD products.

D. Risks Associated with Securities Markets and Ownership of our Common Stock

The trading price of the shares of our common stock could be highly volatile and as such investors could incur substantial losses.

Prospects for companies in the biotechnology industry may be regarded generally as uncertain given the nature of the industry and, accordingly, investments in biotechnology companies should be regarded as speculative. We have experienced erratic share price and trading volume movement of our common stock which could be influenced by any number of factors including those extraneous to our operating performance and business prospects.

Our by-laws do not contain anti-takeover provisions, which could result in a change of our executive management and directors if there is a take-over of our Company.

We do not currently have a shareholder rights plan or any anti-takeover provisions in our by-laws. Without any anti-takeover provisions, there is no deterrent for an unwanted take-over of our Company. This could result in a change of management, business strategy, a lower enterprise valuation than anticipated and/or dilution of current shareholdings.

We do not intend to pay any dividends on our shares.

We have not declared or paid any dividends on our shares since inception. We intend to retain any earnings to implement our business plan. Investors seeking dividend income should not invest in our shares.

Purchasers of our shares may incur dilution.

We are authorized to issue up to 220,000,000 shares. Pursuant to Nevada corporate law, our Board has the authority to approve additional share issuances, and to determine the rights, preferences, and privileges of such shares, without consent of any of our stockholders, though pursuant to Nasdaq Rules, stockholder approval may be required for certain of these actions. We may issue shares in the future to raise working capital resulting in shareholders dilution in the ownership of our Company.

We are a “smaller reporting company” under the SEC’s disclosure rules and have elected to comply with the reduced disclosure requirements applicable to smaller reporting companies.

As a smaller reporting company, we have elected to adopt the accommodations for scaled-back disclosure in our SEC filings, resulting in less information about our Company being available compared to other public companies. We are also a non-accelerated filer and are not required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002. Our internal controls over financial reporting will not receive the level of review provided by the process relating to the auditor attestation included in annual reports of issuers that are subject to these requirements.

We cannot predict if investors will find our common shares less attractive because we are not required to comply with more robust disclosure or the auditor attestation requirements. If investors find our common shares less attractive as a result, there may be a less active trading market for our common shares and trading prices may be negatively affected.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Description of Property

The Company headquarters is in Kelowna, British Columbia Canada in a leased facility with 2,250 square feet of office space to accommodate our finance and administrative functions as well as a Health Canada approved research lab of approximately 1,000 square feet accommodating our in-house research and development team. The current lease has been extended for an additional five years expiring on November 14, 2028. We believe our current facilities are suitable and adequate for the Company's current operational requirements.

Item 3. Legal Proceedings

We are not party to any material, pending or existing legal proceedings against our Company or its subsidiaries nor are we involved as a plaintiff in any other material proceeding or pending litigation. There are no other proceedings in which any of our directors, executive officers, or affiliates, or any registered or beneficial stockholder, is an adverse party or has a material interest adverse to Lexaria or any of its subsidiaries.

Item 4. Mine Safety Disclosures

Not Applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

On January 12, 2021, the Company's common stock and warrants began trading on the National Association of Securities Dealers Automated Quotations Stock Market ("Nasdaq") under the trading symbols "LEXX" and "LEXXW", respectively. Prior to this date the Company's common stock was quoted on the OTCQX under the symbol "LXRP." Our common shares were previously quoted on the Canadian Securities Exchange ("CSE") under the symbol "LXX" until July 8, 2021.

The stock market in general has experienced extreme stock price fluctuations in the past few years. In some cases, these fluctuations have been unrelated to the operating performance of the affected companies. Many companies have experienced dramatic volatility in trading volumes and the market prices of their common stock. The Company believes that several factors, both within and outside of its' control, could cause the daily volumes and price of the Company's common stock to fluctuate. There were 8,091,650 common shares issued and outstanding as of August 31, 2023 (5,950,998 at August 31, 2022). As of November 20, 2023, there were approximately 35 shareholders of record.

Dividend Policy

We have never declared or paid any dividends on our capital stock. Our current policy is to retain earnings, if any, for use in our operations and in the development of our business. As a result, we anticipate that only appreciation of the price of our common stock, if any, will provide a return to investors for at least the foreseeable future. Any future determination related to dividend policy will be made at the discretion of our Board of Directors ("our Board") and will depend on, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our Board may deem relevant.

Recent Sales of Unregistered Securities

During the year ended August 31, 2023, the Company did not issue any restricted common shares.

Warrants

During the year ended August 31, 2023, 2,106,000 warrants were issued, none were exercised, and 7,500 were cancelled. The 2,106,00 warrants issued have an exercise price of \$0.95 and are exercisable until May 11, 2028.

Equity Compensation Plan Information

We have no long-term incentive plans other than the equity incentive plan described below.

Equity Incentive Plan

Securities authorized for issuance under equity compensation plans

Plan Category	Number of securities to be based upon exercise of outstanding options, warrants and rights (a)	Weighed-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plan [excluding securities reflected in column (a)] (c)
Equity compensation plans not approved by shareholders	Nil	Nil	Nil
Equity compensation plans approved by shareholders	446,936	\$ 3.36	63,497
Total	446,936	\$ 3.36	63,497

All future option issuances shall be made under the Equity Incentive Plan. Our Board may amend, suspend, or terminate this Plan or any portion thereof subject to the approval of any requisite regulatory authority. No such amendment, suspension or termination shall alter or impair any outstanding unexercised Options or any rights without the consent of such Participant. If this Plan is suspended or terminated, the provisions of this Plan and any administrative guidelines, rules and regulations relating to this Plan shall continue in effect for the duration of such time as any Option remains outstanding.

On May 9, 2023, the Company's shareholders approved two proposals to amend the Equity Incentive Plan. The approval of the first proposal authorized the Board to amend the Equity Incentive Plan by increasing the maximum number of shares issuable to 10% of the issued share capital as at May 31, 2023 and the second proposal authorized the Board to amend the Equity Incentive Plan to allow for an evergreen formula whereby on January 1 of each calendar year the number of shares issuable pursuant to the Equity Incentive Plan may be increased, at the discretion of the Board, to 10% of the issued share capital as at December 31 of the preceding year. As the Company still has the ability to issue options for the purchase of up to 109,497 common shares under its Equity Incentive Plan (being the 63,497 shares issuable as at fiscal year end and an additional 46,000 shares issuable due to options which expired on September 6, 2023), it has not yet filed a Form S-8 Registration Statement for the registration of the additional shares issuable pursuant to the approved proposals.

Convertible Securities

Pursuant to our Equity Incentive Plan, during the year ended August 31, 2023, we granted stock options to directors, officers, employees, and consultants that enable the option holders to purchase 69,600 common shares of the Company. Options were granted at prices of: 3,400 at \$3.04, 41,200 at \$1.96, 5,000 at \$2.73 and 20,000 at \$0.87 and have five year terms. The 69,600 options granted and vested during the year had a fair value of \$89,057 using the Black Scholes valuation method and the non-cash expense was included in consulting compensation. Further, during the year ended August 31, 2023, 267,969 previously granted options with exercise prices ranging from \$9.60 to \$4.80 were repriced to \$3.00 following shareholder approval obtained at the Company's annual shareholder meeting held on May 9, 2023. See Note 16.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Not applicable.

Item 6. Selected Financial Data

As a "Smaller Reporting Company", this Item and the related disclosure is not required.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

This discussion and analysis contain forward-looking statements that involve not only risks and uncertainties but also changes in condition, significance, value and other factors as described in "Risk Factors" and elsewhere in this Annual Report on Form 10-K. Our actual results of operations, performance, financial position and business prospects and opportunities for this fiscal year and the periods that follow could differ materially from those expressed in or implied by forward-looking statements. This discussion and analysis should be read in conjunction with our consolidated financial statements and the accompanying notes related thereto that appear in this Report.

The following management's discussion and analysis of financial condition and results of operations ("MD&A") is provided to enhance the readers understanding of our results of operations and financial condition for the year ended August 31, 2023, and in comparison, to the year ended August 31, 2022.

Executive Summary

Lexaria's DehydraTECH patented technology improves the delivery of bioactive compounds while promoting healthy ingestion methods, lowers overall dosing, and is highly effective in active molecule delivery available in a range of formats from oral ingestible to oral buccal/sublingual to topical products. DehydraTECH substantially improves the rapidity and quantity of API transport to the blood plasma and brain using the body's natural process for distributing fatty acids via the oral route. This technology extends across many categories beyond the primary pharmaceutical focus of the Company from foods and beverages to cosmetic products and nutraceuticals.

Lexaria is advancing several R&D activities in both preclinical and planned future clinical programs. Our primary focus during the year was on our investigations of CBD for the reduction of hypertension. We previously completed human studies on hypertension with results that were supportive of our plans to file an Investigational New Drug ("IND") application with the US Food and Drug Administration ("FDA").

The FDA provided us with a positive written response from our pre-IND meeting in July 2022 regarding DehydraTECH-CBD for the treatment of hypertension. The FDA confirmed that it had agreed with Lexaria's proposal to pursue a 505(b)(2) new drug application regulatory pathway for our program. We continue working toward our IND filing, however as announced in our news release of August 30, 2023, we have experienced some delays due to FDA compliance requirements of one of our ingredient suppliers which must be completed prior to our submission of our IND application.

During the year ended August 31, 2023, we also completed studies with estradiol and nicotine and reported improved drug delivery characteristics with both molecules after they were treated with DehydraTECH. In fiscal 2023, we also advanced R&D activities in the fields of diabetes and weight loss management pursuant to successfully completed animal study work with our DehydraTECH-CBD in these areas. It is now our intention to explore whether or not DehydraTECH has any benefits together with GLP-1 drugs in this regard.

The Company continues to engage in small R&D projects and B2B formulation for third parties who are evaluating our technology for use in their product.

We were granted a total of nine new patents during fiscal 2023 including our first ever patents in the country of Canada, making it one of our most successful years ever for the acquisition of new intellectual property.

Financial condition and operating performance

The data generated from our past and ongoing R&D programs continues to support confirmatory results and are contributing greatly to our understanding of the workings of DehydraTECH. These findings encourage the pursuit of lucrative commercial applications in the pharmaceutical sector. We continue to devote an increasing proportion of our resources toward pharmaceutical applications with the continuation of our programs directed at hypertension as we move toward FDA approved IND clinical studies.

During the year ended August 31, 2023, we completed seven studies investigating DehydraTECH infused CBD, nicotine and estradiol. These programs, having been funded by the capital infusion of Lexaria's 2021 financing of approximately \$15 million, supported our significant advancements in the fields of heart disease and hypertension, hormones, oral nicotine, and diabetes.

We consider the advancement of our applied R&D studies as a vital step towards our goal of establishing commercial relationships with industry partners who can utilize DehydraTECH within existing or new product lines. Conducting additional in vitro and in vivo studies which test the absorption of some, or all of the molecules named within our patents and patent applications, i.e. CBD, vitamins, PDE5 inhibitors, nicotine and antiviral drugs, further substantiate the effectiveness of DehydraTECH. Successful tests are expected to increase awareness and acceptance of DehydraTECH as a meaningful method used to deliver some or all of the named molecules more effectively than current delivery methods avail. Absorption tests are an important element leading towards higher rates of acceptance and the implementation of our technology licensing initiatives. Our R&D results serve to de-risk the potential API products that could conceivably develop into clinical trials and ultimately new drugs.

Our pursuit of opportunities within the cannabinoid, nicotine and other bioactive molecular markets in the US and internationally continue unabated. We believe there are meaningful competitive advantages in manufacturers adopting DehydraTECH in their products with its demonstrated higher absorption levels, its ability to infuse smaller quantities of active molecules in their products and the benefit of its predictable drug delivery times. Implementing our technology could lead to smaller dosing and decreased manufacturing costs while masking unwanted flavor and smell of the active molecules. We are anticipating these efforts will lead to increased licencing revenue through licensing partnerships. We are pursuing technology licensing opportunities as a method of generating profitable revenue streams over long periods of time. We have not yet, however, been able to secure a large client utilizing our technology in large quantities of products.

With thirty-seven patents granted to date of which thirteen are granted in the US, Lexaria believes that it has a robust patent portfolio but continues to seek additional protection for its intellectual property globally. The successful granting of additional patents could lead to material increases in shareholder value through the ability to generate meaningful license revenues from our increased intellectual property portfolio.

Lexaria expects its current cash reserves to meet our operational requirements for the twelve months following the release of this report. The Company is continuing to explore strategic corporate business partnerships for many of its specific drug investigations after sufficient data has been generated which, if successful, could generate any combination of up-front milestone and/or royalty payments to the Company.

Results of Operations for our Year Ended August 31, 2023

Our net loss from operations for the year ended August 31, 2023, was \$6,712,525 (2022 - \$7,383,653). The changes between these periods for the respective items are summarized as follows:

	<u>August 31</u> <u>2023</u>	<u>August 31</u> <u>2022</u>	<u>Change</u>
Revenues	\$ 226,208	\$ 255,397	\$ (29,189)
Cost of goods sold	(31,500)	(71,841)	40,341
Research and development	3,666,721	1,842,675	1,824,046
Consulting fees & salaries	1,300,965	2,244,664	(943,699)
Legal and professional	444,593	561,265	(116,672)
Other general and administrative	1,316,451	2,153,991	(837,540)
Other income (loss)	(178,503)	(764,614)	586,111
Net Loss	<u>\$ (6,712,525)</u>	<u>\$ (7,383,653)</u>	<u>\$ 671,128</u>

Revenue

Lexaria's business operations include technology licensing agreements where corporate licensees implement DehydraTECH under license within our contracted facilities under royalty agreements. This includes specific B2B pre-processed DehydraTECH CBD-powders manufactured at a Lexaria contracted GMP-certified food facility for clients to integrate into their final product formats. Fees are derived from a combination of manufacturing charges, royalties and trademark fees.

	Year Ended August 31,		
	2023	2022	Change
IP Licensing	\$ 146,800	\$ 54,560	\$ 92,240
B2B	44,167	113,438	(69,271)
Other	35,241	87,399	(52,158)
	<u>\$ 226,208</u>	<u>\$ 255,397</u>	<u>\$ (29,189)</u>

The primary source of revenues for the Company are derived from Lexaria Hemp where sales of B2B processing of intermediary CBD product saw a significant decrease of approximately 61% (2023 - \$44,167 vs 2022- \$113,438) in the year. During the year ended August 31, 2023, Other revenue included \$35,241 (2022- \$87,399) from R&D contracts for exploratory work the Company performed on behalf of third parties interested in our technology. Challenges in the US market for small companies has made it difficult to generate larger revenue streams, irrespective of the use of our technology, with many small companies struggling to exist. On the other hand, revenue generated by licensing our technology to others has grown substantially to reach \$146,800 in fiscal 2023 vs only \$54,560 in fiscal 2022.

In fiscal 2024 and assuming our existing clients remain in compliance with their contracts, the Company expects to see an increase in revenue through further technology licensing from DehydraTECH processed hemp-based CBD and other consumer products. One of our contracted clients is contractually required to make significantly larger quarterly payments to us during fiscal 2024 than during fiscal 2023. The anticipated expansion of our intellectual property portfolio and conducting supportive R&D may jointly contribute to strengthening revenue prospects as we continue to explore new applications for our technology.

Research and Development

Research and development ("R&D") costs are expensed as incurred and account for a significant portion of our operational expenses. With proceeds from our underwritten public offering in January of 2021, we were able to direct additional expenditures to the increased focus on studies pertaining to hypertension and anti-viral drugs. Our R&D expenditures for fiscal 2023, at \$3,666,721 were nearly double those of fiscal 2022 at \$1,842,675. This was in agreement with our internal plans. In large part, this was due to our ongoing expenditures in preparation for our hypertension-related prospective IND filing; and also because of R&D programs completed in the fields of a human oral nicotine study and animal based DehydraTECH-CBD seizure and diabetes studies. Each of these three areas of study produced positive results.

We will continue to invest in our R&D programs for the foreseeable future and we expect these expenses to continue to increase in 2024 compared to 2023, assuming successful corporate financing activities. Our R&D programs are focused on three core business segments: pharmaceutical applications, reduced-risk non-combusted nicotine and CBD from hemp. Of these three, we do not expect to make any significant expenditures during fiscal 2024 on non-combusted nicotine R&D.

Of significant note, Lexaria submitted our preliminary pre-meeting application for an Investigational New Drug ("IND") to the FDA with plans to develop a cannabidiol-based drug formulation, DehydraTECH-CBD for hypertension. We received a written response following our pre-IND meeting in August 2022 where the agency has agreed with the Company's plans to pursue a faster 505(b)(2) new drug application regulatory pathway for the program. The 505(b)(2) pathway permits a faster commercial approval than the traditional 505(b)(1) NDA pathway. The FDA has agreed with the Company's proposed clinical protocol for DehydraTECH-CBD, which, as currently designed, would target 120 patients with hypertension. The regulator has also decided that there was no need to conduct additional non-clinical studies before the start of the IND program. Lexaria has engaged its CRO and the start-up activities for this study have commenced. We expect to file our IND application as soon as possible after our third-party ingredient supplier has completed its FDA compliance requirements.

Preclinical and clinical development is inherently unpredictable as is regulatory approval and commercialization, therefore we are unable to estimate with any certainty the costs we will incur, and the timelines required in our continued development and commercialization efforts. We will require significant additional funding to complete any IND planned studies. Any successful development and completion of clinical trials as well as regulatory approval and commercialization are uncertain and may not result in approved products. Completion dates and completion costs can vary significantly for each future product candidate and are difficult to predict. Lexaria and our commercial partners will continue to explore multiple R&D programs directed toward further evaluation, development, and commercialization of our DehydraTECH technology.

General and Administrative

General and administrative expenses consist primarily of consulting fees, executive and employee salaries and stock-based compensation expense (non-cash). Also included are costs for advertising and marketing, investor relations, corporate facilities, insurance premiums, legal fees related to corporate matters, fees for auditing, and tax filings.

[Table of Contents](#)

Our general and administrative expenses saw an overall decrease of \$1,897,911 during the year ended August 31, 2023, as compared to a \$753,185 increase during the previous year. We decreased advertising and promotional expenditures by \$817,363, as we scaled back our efforts to bring the results of the Company's R&D programs to the attention of various industry sectors and to the scientific and investment communities. Stock-based compensation expense (non-cash) decreased from \$752,591 to \$170,382 (\$582,209), due to fewer options vesting during the year. These year-to-year decreases are a significant driver of the year-to-year overall decrease in consulting wages and salaries expense. Travel expenses were also down by \$34,678 due primarily to a decrease in participation in industry conferences.

Unrealized losses on marketable securities decreased by \$542,921 in the year. This is attributable to continuing decreases in the fair value of the Company's investment in Hill Inc. common shares. We remain confident that the loss may be temporary in nature as Hill Inc. continues to make inroads to the US hemp markets with DehydraTECH enabled products produced and sold by their licensees.

Our consulting fees and salaries decreased by \$943,699 in the year ended August 31, 2023, due primarily to a decrease of \$582,209 in stock-based (non-cash) compensation expense, the elimination of one management position and the renegotiation for reduced fees with our consultants. Legal and professional fees were \$116,672 lower in the year ended 2023 as compared to the previous year's expenses. No bad debts were recorded in the years ended 2023 and 2022.

The Company evaluated its patent portfolio and determined that certain pending applications had been abandoned or would not be pursued. As such, during the year ended August 31, 2023, the Company recognized an impairment loss of \$106,761 related to those abandoned applications.

Liquidity and Capital Resources

Since Lexaria's entrance into the bioscience sector, it has accumulated net losses of \$45.8 million of which approximately \$6.7 million and \$7.4 million were incurred, respectively, in the past two fiscal years. We expect to continue to incur significant operational expenses and net losses in the upcoming 12 months and beyond. Our net losses may fluctuate significantly from quarter to quarter and year to year, depending on the stage and complexity of our R&D studies and related expenditures, the receipt of additional payments related to the out-licencing of our technology, if any, and the receipt of payments under any current or future collaborations we may enter.

As the Company continues with our IND application process and progresses into the clinical development of our initial product candidate, the need for substantial capital resources increases. Our existing cash will not be sufficient to complete the full development, testing and commercialization of an FDA approved product candidate. Accordingly, we will be required to obtain significant further funding to achieve this business objective and/or delay or modify the program in accordance with the financial resources available.

On August 12, 2022, we entered into a sales agreement with Maxim Group LLC, ("Maxim"), pursuant to which we may offer and sell shares of our common stock with an aggregate offering price of up to \$5,925,000 under the At-The-Market ("ATM") Offering. The sales agreement provides that Maxim will be entitled to a sales commission equal to 3.0% of the gross sales price per share of all shares sold under the ATM Offering. During the fiscal year ended August 31, 2023, 34,652 shares were sold under the ATM for gross proceeds of \$114,456. Offering costs netted against proceeds amounted to \$125,122 and, as per the terms of the sales agreement, the ATM was terminated July 30, 2023.

On May 8, 2023, we entered into a placement agency agreement with Maxim, pursuant to which we agreed to sell 2,106,000 units at a price of \$0.95 per unit for aggregate gross and net proceeds of \$2,000,700 and \$1,600,397, respectively. Each unit was comprised of one share and one warrant, with each warrant being exercisable for a five-year period to purchase an additional share at a price of \$0.95. The securities were issued on May 11, 2023, and were registered pursuant to a Form S-1 registration statement filed under number 333-271096. Maxim was paid 7% of the gross proceeds and was also reimbursed \$70,000 for its expenses.

We may also offer securities in response to market conditions or other circumstances if we believe such a plan of financing is required to advance the Company's business plans. There is no certainty that future equity or debt financing will be available or that it will be at acceptable terms and the outcome of these matters is unpredictable. A lack of adequate funding may force us to reduce spending, curtail or suspend planned programs or possibly liquidate assets. Any of these actions could adversely and materially affect our business, cash flow, financial condition, results of operations, and potential prospects. The sale of additional equity may result in additional dilution to our stockholders. Entering into additional licencing agreements, collaborations, partnerships, alliances marketing, distribution, or licensing arrangements with third parties to increase our capital resources is also possible. If we do so we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favourable to us.

[Table of Contents](#)

The Company has evaluated whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern. As of August 31, 2023, the Company had cash on hand of approximately \$1.4 million to settle \$270,000 in current liabilities. The Company believes this is sufficient to fund our expected R&D and operating expenditures for twelve-months following the filing date of this report. We do not anticipate making any material capital expenditures in the fiscal 2024 as we believe our current facilities and equipment are sufficient for the forthcoming twelve months following the filing date of this report.

Working Capital	August 31, 2023	August 31, 2022
Current assets	\$ 2,199,772	\$ 6,977,516
Current liabilities	(267,735)	(194,036)
Net Working Capital	\$ 1,932,037	\$ 6,783,480

The Company's working capital balance decreased by approximately \$4.8 million due primarily to cash used in operating activities during the year ended August 31, 2023.

Cash Flows	August 31, 2023	August 31, 2022
Cash flows used in operating activities	\$ (5,881,237)	\$ (4,879,339)
Cash flows used in investing activities	(169,610)	(180,640)
Cash flows used in financing activities	1,589,731	(44,600)
Decrease in cash	\$ (4,461,116)	\$ (5,104,579)

Operating Activities

Net cash used in operating activities was approximately \$5.9 million for the year ended August 31, 2023, compared with \$4.9 million during the same period in 2022. The increase in net cash used in operating activities during the year ended August 31, 2023 relates primarily to a decrease in non-cash expenses related to common shares issued for services (\$1,200,000), stock-based compensation (\$582,209) and unrealized loss on marketable securities (\$542,921); partially offset by a decrease in our net loss (\$671,128) and a decrease in working capital (\$494,738).

Investing Activities

Net cash used in investing activities is attributable to increased spending on our intellectual property. During the fiscal year, nine additional patents were granted.

Financing Activities

Net cash provided by financing activities reflects net proceeds from the issuance of common shares. Net proceeds from the ATM and May 11, 2023 offerings totaled \$1,589,731.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in conformity with US GAAP. Preparing financial statements requires management to make estimates, judgements and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenue, and expenses. Actual results may differ from these estimates.

Information about critical judgments in applying the accounting policies that have the most significant effect on the amounts recognized in the consolidated financial statements is discussed below. Further details of the nature of these judgments, estimates and assumptions may be found in the relevant notes to the consolidated financial statements.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements that have or are reasonably likely to have a current or future material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

As a "Smaller Reporting Company", this Item and the related disclosure is not required.

Item 8. Financial Statements and Supplementary Data

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Directors of
Lexaria Bioscience Corp.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of Lexaria Bioscience Corp. (the “Company”), as of August 31, 2022, and the related consolidated statements of operations and comprehensive loss, changes in stockholders’ equity, and cash flows for the year ended August 31, 2022, and the related notes (collectively referred to as the “financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Lexaria Bioscience Corp. as of August 31, 2022, and the results of its operations and its cash flows for the year ended August 31, 2022 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatements of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

We have not identified any critical audit matters for the year ended August 31, 2022.

We served as the Company’s auditor from 2016 to 2022.

Vancouver, Canada

/s/ DAVIDSON & COMPANY LLP

Chartered Professional Accountants

November 25, 2022

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of
Lexaria Bioscience Corp.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Lexaria Bioscience Corp. and its subsidiaries (collectively, the “Company”) as of August 31, 2023, and the related consolidated statements of operations, stockholders’ equity, and cash flows for the year then ended, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of August 31, 2023, and the results of their operations and their cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Critical Audit Matters

Critical audit matters are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. We determined that there are no critical audit matters.

/s/ MaloneBailey, LLP

www.malonebailey.com

We have served as the Company’s auditor since 2022.

Houston, Texas

November 17, 2023

LEXARIA BIOSCIENCE CORP.
CONSOLIDATED BALANCE SHEETS
(Expressed in US Dollars)

	Year Ended August 31,	
	2023	2022
ASSETS		
Current		
Cash	\$ 1,352,102	\$ 5,813,218
Marketable securities	125,642	347,335
Accounts receivable	175,245	201,784
Inventory	-	38,418
Prepaid expenses and other current assets	546,783	576,761
Total Current Assets	2,199,772	6,977,516
Non-current assets, net		
Right of use assets	167,446	52,444
Intellectual property, net	462,625	488,462
Property & equipment, net	254,143	315,505
Total Non-current Assets	884,214	856,411
TOTAL ASSETS	\$ 3,083,986	\$ 7,833,927
LIABILITIES and STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable and accrued liabilities	\$ 239,941	\$ 151,449
Lease liability, current	27,794	42,587
Total Current Liabilities	267,735	194,036
Lease liabilities - non-current	136,173	7,401
TOTAL LIABILITIES	\$ 403,908	\$ 201,437
Stockholders' Equity		
Share Capital		
Authorized: 220,000,000 common voting shares with a par value of \$0.001 per share Common shares issued and outstanding: 8,091,650 and 5,950,998 at August 31, 2023 and August 31, 2022, respectively	\$ 8,091	\$ 5,951
Additional paid-in capital	48,799,454	47,041,481
Accumulated deficit	(45,763,427)	(39,098,528)
Equity attributable to shareholders of Lexaria	3,044,118	7,948,904
Non-controlling Interest	(364,040)	(316,414)
Total Stockholders' Equity	2,680,078	7,632,490
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 3,083,986	\$ 7,833,927

The accompanying notes are an integral part of these consolidated financial statements.

LEXARIA BIOSCIENCE CORP.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Expressed in US Dollars except share amounts)

	<u>Year Ended August 31,</u>	
	<u>2023</u>	<u>2022</u>
Revenue	\$ 226,208	\$ 255,397
Cost of goods sold	31,500	71,841
Gross profit	194,708	183,556
Operating expenses		
Research and development	3,666,721	1,842,675
General and administrative	3,062,009	4,959,920
Total operating expenses	<u>6,728,730</u>	<u>6,802,595</u>
Loss from operations	(6,534,022)	(6,619,039)
Other income (loss)		
Interest income	43,190	-
Unrealized loss on marketable securities	(221,693)	(764,614)
Total other income (loss)	(178,503)	(764,614)
Net loss for the year	\$ (6,712,525)	\$ (7,383,653)
Net loss attributable to:		
Common shareholders	\$ (6,664,899)	\$ (7,269,324)
Non-controlling interest	\$ (47,626)	\$ (114,329)
Basic and diluted loss per share	<u>\$ (1.01)</u>	<u>\$ (1.24)</u>
Weighted average number of common shares outstanding		
- Basic and diluted	<u>6,614,066</u>	<u>5,885,245</u>

The accompanying notes are an integral part of these consolidated financial statements.

LEXARIA BIOSCIENCE CORP.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Expressed in US Dollars)

	<u>Year Ended August 31,</u>	
	<u>2023</u>	<u>2022</u>
Cash flows used in operating activities		
Net loss	\$ (6,712,525)	\$ (7,383,653)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock based compensation	170,382	752,591
Depreciation and amortization	145,397	102,718
Impairment loss	106,761	-
Noncash lease expense	41,564	38,597
Unrealized loss on marketable securities	221,693	764,614
Shares issued for services	-	1,200,000
Lease accretion	2,227	5,195
Gain on forgiveness of loan	-	(7,926)
Change in operating assets and liabilities		
Accounts receivable	26,539	(137,491)
Inventory	43,069	(1,979)
Prepaid expenses and deposits	29,978	(257,508)
Accounts payable and accrued liabilities	88,492	50,726
Due to related parties	-	(5,223)
Operating lease liability	(44,814)	-
Net cash used in operating activities	\$ (5,881,237)	\$ (4,879,339)
Cash flows used in investing activities		
Intellectual property	(135,862)	(131,448)
Purchase of equipment	(33,748)	(49,192)
Net cash used in investing activities	\$ (169,610)	\$ (180,640)
Cash flows from/(used in) financing activities		
Proceeds from issuance of equity	1,589,731	-
Lease Payments	-	(44,600)
Net cash from/(used in) financing activities	\$ 1,589,731	\$ (44,600)
Net change in cash for the year	(4,461,116)	(5,104,579)
Cash at beginning of year	5,813,218	10,917,797
Cash at end of year	\$ 1,352,102	\$ 5,813,218
Supplemental information of cash flows:		
Income taxes paid in cash	\$ 8,214	\$ (4,782)
Marketable securities received on accounts receivable	\$ -	\$ 278,108
Remeasurement of operating lease right of use assets and liabilities	\$ 156,566	\$ -

The accompanying notes are an integral part of these consolidated financial statements.

LEXARIA BIOSCIENCE CORP.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
For the Years Ended August 31, 2023 and 2022
(Expressed in US Dollars)

	Common Stock		Additional Paid-in Capital	Deficit	Non- controlling Interest	Stockholders Equity
	Shares	Amount				
Balance August 31, 2021	5,726,699	\$ 5,727	\$ 45,089,114	\$ (31,829,204)	\$ (202,085)	\$ 13,063,552
Shares issued for services	224,299	224	1,199,776	-	-	1,200,000
Stock based compensation	-	-	752,591	-	-	752,591
Net loss	-	-	-	(7,269,324)	-	(7,269,324)
Non-controlling interest	-	-	-	-	(114,329)	(114,329)
Balance August 31, 2022	5,950,998	\$ 5,951	\$ 47,041,481	\$ (39,098,528)	\$ (316,414)	\$ 7,632,490
Shares sold for cash	2,140,652	2,140	1,587,591	-	-	1,589,731
Stock based compensation	-	-	170,382	-	-	170,382
Net loss	-	-	-	(6,664,899)	-	(6,664,899)
Non-controlling interest	-	-	-	-	(47,626)	(47,626)
Balance August 31, 2023	8,091,650	\$ 8,091	\$ 48,799,454	\$ (45,763,427)	\$ (364,040)	\$ 2,680,078

The accompanying notes are an integral part of these consolidated financial statements.

LEXARIA BIOSCIENCE CORP.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
August 31, 2023 and 2022

1. Nature of Business

Lexaria Bioscience Corp. (“Lexaria”, “we”, “our” or the “Company”) is a biotechnology company pursuing the enhancement of the bioavailability of a diverse and broad range of active pharmaceutical ingredients (“API”) using our proprietary DehydraTECH drug delivery technology.

Revenues are generated from licensing contracts for the Company’s patented DehydraTECH technology based on the terms of use and defined geographic and licencing arrangements. We derive income from our third party contracted manufacturing of B2B DehydraTECH enhanced products made to customer specifications that are sold online and in-store in the US and Canada. We also perform contract services in R&D for customer specific formulations that are used in comparison testing to customers’ existing products.

Liquidity and Going Concern

The Company’s consolidated financial statements included herein have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”) and in accordance with accounting principles generally accepted in the United States (“US GAAP”) applicable to a going concern which assumes the Company will have sufficient funds to meet its financial obligations for a period of least 12 months from the date of this report.

Since inception, the Company has incurred significant operating and net losses. The losses attributable to shareholders were \$6.7 million and \$7.34 million, for the years ended August 31, 2023 and 2022, respectively. As of August 31, 2023, we had an accumulated deficit of \$ 45.8 million. We expect to continue to incur significant operational expenses and net losses in the upcoming 12 months. Our net losses may fluctuate significantly from quarter to quarter and year to year, depending on the stage and complexity of our R&D studies and corporate expenditures, additional revenues received from the licensing of our technology, if any, and the receipt of payments under any current or future collaborations we may enter into. The recurring losses and negative cash flows from operations raise substantial doubt as to the Company’s ability to continue as a going concern.

During the year ended August 31, 2023, we raised \$114,456 from the sale of shares pursuant to our ATM offering and on May 11, 2023 we raised an additional \$2 million pursuant to a brokered registered offering. Net proceeds from these offerings totaled \$1,589,731, respectively. On October 3, 2023, the Company closed a registered direct offering resulting in net proceeds of approximately \$1.29 million. We may offer additional securities for sale during our fiscal year 2024 or thereafter in response to market conditions or other circumstances if we believe such a plan of financing is required to advance the Company’s business plans and is in the best interests of our stockholders.

Based on our existing working capital, management believes the Company has sufficient working capital to satisfy the Company’s estimated liquidity needs for the next 12 months. In making this assessment, the Company believes that this alleviates the substantial doubt in connection with the Company’s ability to continue as a going concern. However, there is no assurance that management’s plans will be successful. If the Company is unable to obtain funding, the Company would be forced to delay, reduce or eliminate some or all of its research and development programs, preclinical and clinical testing or commercialization efforts, which could adversely affect its business prospects.

2. Significant Accounting Policies

Basis of presentation and consolidation

These consolidated financial statements have been prepared in conformity with generally accepted accounting principles of the United States (“US GAAP”) and pursuant to the rules and regulations of the SEC. All amounts, unless otherwise stated, are in U.S. dollars.

These consolidated financial statements include the financial statements of the Company and its wholly owned subsidiaries: Lexaria Pharmaceutical Corp., Lexaria Hemp Corp., Lexaria CanPharm ULC, Lexaria Nutraceutical Corp., Poviva Corp., Lexaria CanPharm Holding Corp., and Kelowna Management Services Corp. The Company owns 83.3% of Lexaria Nicotine LLC and the remaining 16.7% is owned by Altria Ventures Inc. (an indirect wholly owned subsidiary of Altria Group, Inc.). All significant intercompany balances and transactions have been eliminated upon consolidation.

Cash and cash equivalents

Cash and cash equivalents include cash-on-hand and demand deposits with financial institutions and other short-term investments with maturities of less than three months when acquired and readily convertible to known cash amounts. The Company had no cash equivalents as of August 31, 2023 or August 31, 2022.

Marketable Securities

The Company's marketable securities consist of investments in common stock. Investments in equity securities are reported at fair value with changes in unrecognized gains or losses included in other income (loss) on the consolidated statements of operations.

Leases

The Company accounts for its leases under ASC 842, Leases ("ASC 842"). Under this guidance, arrangements meeting the definition of a lease are classified as operating or financing leases, and are recorded on the consolidated balance sheet as both a right of use asset and lease liability.

We determined the initial classification and measurement of our right-of-use assets and lease liabilities at the lease commencement date and thereafter if modified. The lease term includes any renewal options and termination options that we are reasonably certain to exercise. The present value of lease payments is determined by using the interest rate implicit in the lease, if that rate is readily determinable; otherwise, we use our incremental borrowing rate. The incremental borrowing rate is determined by using the rate of interest that we would pay to borrow on a collateralized basis an amount equal to the lease payments for a similar term and in a similar economic environment.

Operating lease expenses are recognized on a straight-line basis, unless the right-of-use asset has been impaired, over the reasonably certain lease term based on the total lease payments. They are included in operating expenses in the consolidated statements of operations.

For operating leases that reflect impairment, we will recognize the amortization of the right-of-use asset on a straight-line basis over the remaining lease term with rent expense still included in operating expenses in the consolidated statements of operations. For all leases, rent payments that are based on a fixed index or rate at the lease commencement date are included in the measurement of lease assets and lease liabilities at the lease commencement date.

We have elected the practical expedient to not separate lease and non-lease components. Our non-lease components are primarily related to property taxes and maintenance, which vary based on future outcomes, and thus differences to original estimates are recognized in rent expense when incurred.

Intellectual property

Capitalized intellectual property costs include those incurred with respect to both pending and granted patents filed in the United States. When patent applications are filed, the directly related capitalized costs are amortized on a straight-line basis over an estimated economic life of 20 years.

Equipment

Equipment is stated at cost less accumulated depreciation and impairment and depreciated using the straight-line method over the useful lives of the various asset classes. Laboratory and computer equipment and office furniture are depreciated over 3-10 years. Certain production equipment is depreciated by units of production method. Leasehold improvements are amortized over the term of the related leases, or the economic life of the improvements, whichever is shorter.

Impairment of long-lived assets

Long-lived assets, including equipment and intangible assets, namely the Company's patents, are assessed for potential impairment when there is evidence that events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment loss is recognized when the carrying amount of the long-lived asset is not recoverable and exceeds its fair value. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Any required impairment loss is measured as the amount by which the carrying amount of the long-lived asset exceeds its fair value and is recorded as a reduction in the carrying value of the related asset and a charge to the profit or loss. Intangible assets with indefinite lives are tested for impairment annually and in interim periods if certain events occur indicating that the carrying value of the intangible assets may be impaired.

Revenue recognition

Licensing revenue from intellectual property

Our revenues from licenses that grant the right to access our intellectual property, which we consider symbolic licenses of IP, are recognized over time following the transfer and use of our patented infusion technology DehydraTECH. Royalty revenues are recognized in the period in which our licensees sell the related products and recognize the related revenue.

Usage fees from intellectual property

We recognize usage fees from B2B clients in the period in which the counterparty completes the manufacturing which incorporates DehydraTECH enabled APIs into the related product. We generally recognize revenue when we have satisfied all contractual obligations and are reasonably assured of collecting the resulting receivable. Non-refundable minimum fees are recognized as revenue over the period to which they apply.

Product revenue

We generally recognize revenue when we have satisfied all contractual obligations and are reasonably assured of collecting the resulting receivable. We are often entitled to bill our customers and receive payment from our customers in advance of recognizing the revenue.

Cost of sales

Cost of sales includes all expenditures incurred in bringing the goods to the point of sale. This includes third-party manufacturing and handling costs, direct costs of the raw material, inbound freight charges, warehousing costs, and applicable overhead expenses.

Research and development

Research and development costs are expensed as incurred. These expenditures are comprised of both in-house research programs and through third-party contracts including consultants, academic and non-profit institutions, contract manufacturing, and other expenses.

Intellectual property expenses

Non-capitalizable costs associated with intellectual property-related matters are expensed as incurred and included in general and administrative expenses within the consolidated statements of operations.

Stock-based compensation

The Company accounts for its stock-based compensation awards whereby all stock-based grants are recognized as expenses in the consolidated statements of operations based on the fair value at grant date subject to vesting dates and amortized over the related vesting period. The grant date fair value of each option award is estimated using the Black-Scholes option-pricing model. The use of the Black-Scholes option-pricing model requires management to make assumptions with respect to the expected term of the option, the expected volatility of the common stock consistent with the expected life of the option, risk-free interest rates and expected dividend yields of the common stock.

Foreign currency translation

The Company maintains its accounting records in US dollars. At the transaction date, each asset, liability, revenue, and expense that was acquired or incurred in a foreign currency is translated into US dollars by using the exchange rate in effect at that date; at the year end, monetary assets and liabilities are translated at the exchange rate in effect at that date. The resulting foreign exchange gains and losses are included within the consolidated statements of operations.

Loss per share

The calculation of loss per share uses the weighted average number of shares outstanding during the year. Diluted net income per share includes the effect, if any, from the potential exercise or conversion of securities, such as restricted stock and stock options, which would result in the issuance of incremental shares of common stock. Diluted loss per share is equivalent to basic loss per share if the potential exercise of the equity-based financial instruments is anti-dilutive.

Income taxes

The Company recognizes deferred tax liabilities and assets for the expected future tax consequences of events that have been recognized in the Company's financial statements or tax returns using the liability method. Under this method, deferred tax liabilities and assets are determined based on the temporary differences between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect in the year in which the differences are expected to reverse.

Financial instruments

When measuring fair value, the Company seeks to maximize the use of observable inputs and minimize the use of unobservable inputs. This establishes a fair value hierarchy based on the level of independent objective evidence surrounding the inputs used to measure fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Inputs are prioritized into three levels used to measure fair value:

- Level 1 - Quoted prices in active markets for identical assets or liabilities;
- Level 2 - Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable; and
- Level 3 - Unobservable inputs that are supported by little or no market activity, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

The Company's financial instruments consist primarily of cash, marketable securities, accounts receivable and payable, accrued liabilities and loan payable. The carrying amounts of instruments approximate their fair values due to their short maturities or quoted market prices.

The Company's headquarters and operations are located in Canada which results in exposure to market risks from fluctuations in foreign currency rates. The foreign currency exchange risk is the financial risk to the Company's operations that arise from fluctuations in foreign exchange rates and the degree of volatility of these rates. Currently, the Company does not use derivative instruments to reduce its exposure to foreign currency risk as the impact of rate changes for USD/CAD dollars is not expected to be material.

Credit risk and customer concentration

The Company places its cash with a high credit quality financial institution. Periodically, the Company may carry cash balances at such financial institution in excess of the federally insured limit of \$250,000. The Company has not experienced losses on these accounts and management believes, based upon the quality of the financial institution, that the credit risk with regard to these deposits is not significant.

In the year ended August 31, 2023, four customers accounted for 95% (2022 – one customer was accounted for 100%) of consolidated revenues. At fiscal year-end 2023, we had \$24,635 (2022 - \$37,248) in license fees receivable. The Company did not incur any bad debt expense in fiscal 2022 or 2023.

As of August 31, 2023, the Company had \$102,051 (2022 - \$84,162) in sales tax receivable. The Company considers its credit risk to be low for such receivables.

Commitments and contingencies

The Company policy is to record accruals for any such loss contingencies when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. In the event that estimates or assumptions prove to differ from actual results, adjustments are made in subsequent periods to reflect more current information. The Company, from time to time, may be subject to legal claims and proceedings related to matters arising in the ordinary course of business. Management has no knowledge of any such claim against the Company with, at minimum, a reasonable possibility that a material loss may be incurred.

Reclassifications

Certain amounts in the prior period have been reclassified to conform with current period presentation.

3. Recent Accounting Guidance

Pronouncements Issued but Not Yet Adopted

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. This Accounting Standards Update represents a significant change in the accounting for credit losses model by requiring immediate recognition of management's estimates of current expected credit losses (CECL). Under the prior model, losses were recognized only as they were incurred. The Company has determined that it has met the criteria of a smaller reporting company ("SRC") as of November 15, 2019. As such, ASU 2019-10, *Financial Instruments—Credit Losses, Derivatives and Hedging, and Leases: Effective Dates* amended the effective date for the Company to be for reporting periods beginning after December 15, 2022. The Company will adopt ASU 2016-13 effective September 1, 2023.

4. Estimates and Judgments

The preparation of financial statements in conformity with US GAAP requires us to make certain estimates, judgments and assumptions that affect the reported amount of assets and liabilities, the disclosure of contingent liabilities at the date of the financial statements and the reported amount of revenue and expenses during the fiscal period. Some of the Company's accounting policies require us to make subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain. These accounting policies involve critical accounting estimates because they are particularly dependent on estimates and assumptions made by management about matters that are highly uncertain at the time the accounting estimates are made. Although we have used our best estimates based on facts and circumstances available to us at the time, different estimates reasonably could have been used. Changes in the accounting estimates used by the Company are reasonably likely to occur from time to time, which may have a material effect on the presentation of financial condition and results of operations.

Management reviews our estimates, judgments, and assumptions periodically and reflects the effects of any revisions in the period in which they are deemed to be necessary. We believe that these estimates are reasonable. However, actual results could differ from these estimates.

Significant accounting estimates and assumptions are used for, but not limited to:

The Valuation of Deferred Tax Assets

Judgment is required in determining whether deferred tax assets are recognized on the balance sheet. The recognition of deferred tax assets requires management to assess the likelihood that the Company will generate taxable income in future periods to utilize the deferred tax assets. Due to the Company's history of losses, valuation allowances are established when necessary to reduce deferred tax assets to the amount more likely than not to be realized.

Value of Stock Options and Warrants

The Company provides compensation benefits to its employees, officers, directors, and consultants, through a stock option plan. The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model. Expected volatility assumptions used in the model are based on the historical volatility of the Company's share price. The Company uses historical data to estimate the period of option exercises for use in the valuation model. The risk-free interest rate for the expected term of the option is based on the yields of government bonds. Changes in these assumptions, especially the share price volatility and the expected life determination could have a material impact on the Company's profit and loss for the years presented. All estimates used in the model are based on historical data, which may not be representative of future results.

Disposals of Assets - Value of Note Receivable

The Asset Purchase Agreement for the sale of assets to Hill Inc. Beverages included C\$2 million note (the "Note") receivable as partial payment of the agreement. The Note does not contain a fixed repayment schedule nor a maturity date. The repayment of the Note is based on the purchaser repaying the outstanding value of the Note and interest from the future revenues generated from an untested market with no existing revenue streams. Therefore, with any repayment being highly doubtful, management determined at that time and as of August 31, 2023 and 2022 that the value of the note to be notional and recorded the note at a zero value for accounting purposes. During fiscal 2023, we received interest income on the note totaling \$43,190 (2022 - \$29,060). Hill Inc. continues to operate and make ongoing interest payments to us in relation to this Note.

Impairment of Long-Lived Assets

The Company evaluated its patent portfolio and determined that certain pending applications had been abandoned or would not be pursued. As such, during the year ended August 31, 2023, the Company recognized an impairment loss of \$106,761 related to those abandoned applications.

5. Marketable Securities

The components of Marketable Securities were as follows:

	<u>Cost Basis</u>	<u>Unrealized Gains</u>	<u>Unrealized Losses</u>	<u>Fair Value</u>
August 31, 2021	\$ 1,037,025	\$ 16,243	\$ (219,427)	\$ 833,841
Common stock	278,107	118,196	(882,809)	(486,506)
August 31, 2022	\$ 1,315,132	\$ 134,439	\$ (1,102,236)	\$ 347,335
Common stock	-	1,856	(223,549)	(221,693)
August 31, 2023	\$ 1,315,132	\$ 136,295	\$ (1,325,785)	\$ 125,642

Marketable securities represented the common shares of Hill Inc. held by Lexaria, which are carried at fair value using Level 1 inputs. Unrealized losses from common stock are due to market price movements. In management's opinion based on the evaluation of available information at the year ended August 31, 2023, unrealized losses represent temporary impairments.

6. Accounts and Other Receivables

Accounts receivable at August 31, 2023 and August 31, 2022 consist of the following:

	August 31, 2023	August 31, 2022
Trade and deposits	\$ 48,559	\$ 80,374
Territory license fees	24,635	37,248
Sales tax	102,051	84,162
	<u>\$ 175,245</u>	<u>\$ 201,784</u>

7. Inventory

Inventory of raw materials on August 31, 2023, and August 31, 2022, consist of the following:

	August 31, 2023	August 31, 2022
Raw materials	\$ -	\$ 38,418
	<u>\$ -</u>	<u>\$ 38,418</u>

In the year ended August 31, 2023, raw materials inventory valued at \$38,418 was expensed to R&D.

8. Prepaid Expenses and Other Current Assets

Prepaid expenses consist of the following at August 31, 2023 and August 31, 2022:

	August 31, 2023	August 31, 2022
Advertising & conferences	\$ 40,342	\$ 359,863
Legal & accounting fees	36,795	25,000
License, filing fees, dues	15,668	15,000
Office & insurance	97,167	80,863
Consulting	331,811	-
Capital financing	25,000	96,035
	<u>\$ 546,783</u>	<u>\$ 576,761</u>

9. Intellectual Property, net

The following is a list of capitalized US patents held by the Company.

Issued Patent #	Patent Certificate Grant Date	Patent Family
US 9,474,725 B1	10/25/2016	#1 Food and Beverage Compositions Infused With Lipophilic Active Agents and Methods of Use Thereof
US 9,839,612 B2	12/12/2017	
US 9,972,680 B2	05/15/2018	
US 9,974,739 B2	05/22/2018	
US 10,084,044 B2	09/25/2018	
US 10,103,225 B2	10/16/2018	
US 10,381,440	08/13/2019	
US 10,374,036	08/06/2019	
US 10,756,180	08/25/2020	
US 11,311,559	04/26/2022	#18 Compositions and Methods for Enhanced Delivery of Antiviral Agents
US 11,700,875	07/18/2023	#20 Compositions and Methods for Sublingual Delivery of Nicotine
US 11,666,544	06/06/2023	#21 Compositions and Methods for Treating Hypertension
US 11,666,543	06/06/2023	

[Table of Contents](#)

A continuity schedule for capitalized patents is presented below:

	August 31, 2023	August 31, 2022
Balance – beginning	\$ 488,462	\$ 364,623
Addition	135,862	131,448
Impairment	(106,761)	-
Amortization	(54,938)	(7,609)
Balance – ending	\$ 462,625	\$ 488,462

At August 31, 2023 the Company has capitalized a total of \$462,625 of patents. Included in the capitalized costs is \$457,445 of costs associated with patents and licenses that have been filed. Also included in the capitalized costs is \$5,180 of costs associated with provisional patents and pending applications which have not yet been filed.

The Company evaluated its patent portfolio and determined that certain pending applications had been abandoned or would not be pursued. As such, during the year ended August 31, 2023, the Company recognized an impairment loss of \$106,761 (2022 - \$Nil) related to those abandoned applications. The Company recognized \$4,938 of amortization expense related to patents and licenses in the year ended August 31, 2023 (2022 - \$7,609).

10. Property & Equipment, net

Property and equipment, net consists of:

<u>August 31, 2023</u>	<u>Cost</u>	<u>Period Amortization</u>	<u>Additions</u>	<u>Accumulated Amortization</u>	<u>Net Balance</u>
Leasehold improvements	\$ 259,981	\$ (54,037)	\$ -	\$ (248,723)	\$ 11,258
Computers	70,781	(4,732)	-	(66,156)	\$ 4,625
Furniture fixtures equipment	31,126	(6,417)	-	(29,257)	\$ 1,869
Lab equipment	333,675	(29,986)	33,748	(131,032)	\$ 236,391
	\$ 695,563	\$ (95,172)	\$ 33,748	\$ (475,168)	\$ 254,143

<u>August 31, 2022</u>	<u>Cost</u>	<u>Period Amortization</u>	<u>Additions</u>	<u>Accumulated Amortization</u>	<u>Net Balance</u>
Leasehold improvements	\$ 259,981	\$ (54,037)	\$ -	\$ (194,685)	\$ 65,296
Computers	63,964	(9,874)	6,817	(61,424)	9,357
Furniture fixtures equipment	31,126	(6,417)	-	(22,837)	8,289
Lab equipment	291,235	(31,572)	42,375	(101,047)	232,563
	\$ 646,306	\$ (101,900)	\$ 49,192	\$ (379,993)	\$ 315,505

During the year ended August 31, 2023, amortization of \$4,651 (2022 - \$3,655) was included in cost of goods sold.

11. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities consist of the following as of August 31, 2023 and August 31, 2022:

	<u>August 31,</u> <u>2023</u>	<u>August 31,</u> <u>2022</u>
Accounts Payable		
Trade payables	\$ 225,038	\$ 57,150
Sales tax payable	14,903	31,303
Accrued Liabilities		
Trade payables	-	62,996
	<u>\$ 239,941</u>	<u>\$ 151,449</u>

12. Revenues

Revenues for the years ended August 31, 2023 and 2022 consist of the following:

	<u>Year Ended August 31,</u>	
	<u>2023</u>	<u>2022</u>
IP Licensing	\$ 146,800	\$ 54,560
B2B	44,167	113,438
Other	35,241	87,399
	<u>\$ 226,208</u>	<u>\$ 255,397</u>

The Company recognized B2B product revenues of \$44,167 (2022 - \$113,438) that relate to sales of our intermediate products for use by two B2B customers in their products. Licensing revenue consists of IP licensing fees for transfer of the DehydraTECH technology in line with definitive agreements and includes royalty fees. The Company recognized \$146,800 (2022 - \$54,560) in licensing revenue during the year.

13. Income Taxes

The following table reconciles the income tax benefit at the U.S. Federal statutory rate to income tax benefit at the Company's effective tax rates as at August 31, 2023 and 2022:

	<u>August 31</u> <u>2023</u>	<u>August 31</u> <u>2022</u>
	\$	\$
Loss before taxes	(6,712,525)	(7,383,653)
Expected income tax recovery	(1,427,529)	(1,619,854)
Non-deductible items	(831)	(280,155)
Change in estimates	4,271	(44,867)
Effect of changes in foreign and long-term tax rates	-	23,625
Change in valuation allowance	1,432,305	1,921,251
Total income taxes	<u>8,216</u>	<u>-</u>

[Table of Contents](#)

Deferred taxes reflect the tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes. Deferred tax assets at August 31, 2023 and 2022 are comprised of the following:

	August 31	August 31
	2023	2022
	\$	\$
Non-capital losses	8,637,353	7,747,485
Marketable securities	(14,051)	118,175
Stock based compensation	650,778	-
R&D	371,326	-
PPE and intangibles	(64,569)	-
Total deferred tax assets	9,580,837	7,865,660
Valuation Allowance	(9,580,837)	(7,865,660)
Net Deferred tax assets	-	-

The Company has net operating loss carry-forwards of approximately \$40 million which may be carried forward to apply against future year income tax for U.S. tax purposes.

14. Common Shares and Warrants

Fiscal 2023 Activity

During the year ended August 31, 2023, the Company completed the following issuances of common shares and warrants:

1. 34,652 shares were sold pursuant to an at-the-market offering (“ATM”) for gross proceeds of \$14,456. Offering costs netted against proceeds amounted to \$125,122 ; and
2. 2,106,000 units were sold at a price of \$0.95 per unit, with each unit consisting of one common share and one warrant exercisable to purchase an additional common share at \$0.95 per share, for net proceeds of \$1,600,397. The 2,106,000 warrants are exercisable for a period of five (5) years.

[Table of Contents](#)

No warrants have been exercised and 7,500 warrants expired during the year ended August 31, 2023.

Presented below is a continuity schedule for warrants:

	Number of Warrants	Weighted Average Exercise Price \$
Balance, Aug 31, 2021	2,447,275	8.00
Cancelled/expired	(25,292)	4.57
Balance, Aug 31, 2022	2,421,983	8.04
Cancelled/expired	(7,500)	24.00
Issued	2,106,000	0.95
Balance, August 31, 2023	4,520,483	4.71

Presented below is a summary of warrants outstanding as of August 31, 2023:

Number of Warrants	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (years)
60,798	\$ 36.00	1.21-1.25
317,190	\$ 10.50	1.68-1.70
116,667	\$ 9.00	0.62-1.54
200,000	\$ 7.00	0.62
1,719,828	\$ 6.58	2.38
2,106,000	\$ 0.95	4.70
4,520,483	\$ 4.71	3.28

Fiscal 2022 Activity

During the year ended August 31, 2022, the Company issued 224,299 restricted shares valued at \$1,200,000 for payment of contracted services. We did not issue any warrants, no warrants were exercised, and 25,292 warrants expired.

15. Stock Options

The Company established an Equity Incentive Plan whereby our Board, pursuant to shareholder approved amendments, may grant up to 809,165 stock options to directors, officers, employees, and consultants with such number being increased to up to 10% of the issued share capital at the end of each calendar year, at the discretion of the board, pursuant to an evergreen formula. While these amendments have been approved by the Company's shareholders, the Company has not filed an S-8 Registration Statement to register these additional securities, accordingly, until such S-8 Registration Statement is filed with the SEC, the Company may only issue up to 510,433 shares under the current registered Equity Incentive Plan.

Stock options may be exercised for a maximum period of up to ten (10) years but to date all currently issued options must be exercised, as determined by our Board, by no later than five years from the date of grant. The exercise price of an option is equal to or greater than the closing market price of the Company's common shares on the day preceding the date of grant. Vesting terms are set by our Board. The estimated fair value of each stock option award is estimated on the date of grant using the Black-Scholes option pricing model.

Fiscal 2023 Activity

The Company granted the following stock options during the year ended August 31, 2023:

Options	Weighted Average Exercise Price	Contractual Life (years)
41,200	\$ 1.96	5
5,000	\$ 2.73	5
3,400	\$ 3.04	5
20,000	\$ 0.87	5
69,600	\$ 1.75	(Avg. Contractual Life) 5

Fiscal 2022 Activity

The Company granted the following stock options during the year ending August 31, 2022:

	Quantity	Exercise Price \$	Contractual Life (years)
	81,800	6.23	5
	36,700	3.39	5
	103,500	2.91	5
August 31, 2022	222,000	Average 4.21	5

During the year ended August 31, 2023, 267,969 previously granted options with exercise prices ranging from \$9.60 to \$4.80 were repriced to \$3.00 following shareholder approval obtained at the Company's annual shareholder meeting held on May 9, 2023.

A continuity schedule for stock options is presented below:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Balance August 31, 2021	206,170	\$ 8.90		
Cancelled/expired	(3,334)	9.60		
Granted	222,000	4.21		
Balance August 31, 2022	424,836	6.45		
Cancelled/expired	(47,500)	2.98		
Granted	69,600	1.75		
Balance August 31, 2023 (Outstanding)	446,936	\$ 3.32	3.25	\$ 3,600
Balance August 31, 2023 (Exercisable)	435,186	\$ 3.32	3.25	\$ 3,600

The intrinsic value of stock option awards that vested during the fiscal year represents the value of the Company's closing stock price on the last trading day of the fiscal year in excess of the exercise price multiplied by the number of vested options.

The fair value of options awarded during the fiscal years ended August 31, 2023 and August 31, 2022 totaled \$9,057 and \$680,511, respectively.

The fair value of options granted was estimated as of the date of the grant by using the Black-Scholes option pricing model with the following assumptions:

	August 31 2023	August 31 2022
Expected volatility	93%-105%	98% – 119%
Risk-free interest rate	3.30%-4.69%	0.78% – 3.30%
Expected life	2.5 – 5 years	5 years
Dividend yield	0%	0%
Estimated fair value per option	0.33 – 2.32	\$2.25 – \$5.10

[Table of Contents](#)

Stock-based compensation expense for the fiscal years ended August 31, 2023 and August 31, 2022 totalled \$170,382 and \$752,591, respectively. Of the current fiscal year expense, \$89,057 relates to current year option awards, \$25,194 relates to the repricing of 267,969 options disclosed above, and \$56,131 relates to the vesting of options awarded in previous fiscal years.

16. Commitments, Significant Contracts and Contingencies

Right of Use Assets - Operating Lease

Corporate offices and R&D lab space is leased in Kelowna, British Columbia, Canada which lease was renewed during fiscal 2023 until November 15, 2028. In addition to minimum lease payments, the lease requires us to pay property taxes and operating costs which are subject to annual adjustments.

	August 31, 2023	August 31, 2022
Right of use assets - operating leases	\$ 52,444	\$ 91,041
Amortization	(41,564)	(38,597)
Extension-related remeasurement	156,566	
Total lease assets	<u>\$ 167,446</u>	<u>\$ 52,444</u>
Liabilities:		
Lease payments	\$ 49,988	\$ 89,393
Interest accretion	(44,814)	(44,600)
Extension-related remeasurement	2,227	5,195
Total lease liabilities	<u>\$ 163,967</u>	<u>\$ 49,988</u>
Operating lease cost	\$ 167,446	\$ 52,444
Operating cash flows for lease	\$ 44,814	\$ 44,599
Remaining lease term	5.17 Years	1.17 Years
Discount rate	<u>7.25%</u>	<u>7.25%</u>

Pursuant to the terms of the Company's lease agreements in effect at August 31, 2023, the following table summarizes the Company's maturities of operating lease liabilities:

2024	35,840
2025	37,094
2026	37,345
2027	38,642
2028	38,901
2029	6,483
Thereafter	-
Total lease payments	<u>194,305</u>
Less: imputed interest	<u>(30,338)</u>
Present value of operating lease liabilities	163,967
Less: current obligations under leases	<u>(27,794)</u>
Non-Current Portion	<u>136,173</u>

17. Segment Information

The Company's operations involve the development and usage, including licensing, of DehydraTECH. Lexaria is centrally managed and its chief operating decision makers, being the President and the CEO, use the consolidated and other financial information supplemented by revenue information by category of business-to-business product production and technology licensing to make operational decisions and to assess the performance of the Company. The Company has identified four reportable segments: Intellectual Property Licensing, B2B Production, Research and Development and Corporate. Licensing revenues are concentrated on three licensees.

Year Ended August 31, 2023	IP Licensing	B2B Product	R&D	Corporate	Consolidated Total
Revenue	\$ 146,800	\$ 44,167	\$ 35,241	\$ -	\$ 226,208
Cost of goods sold	-	(31,500)	-	-	(31,500)
Operating expenses	(70,677)	(282,709)	(3,666,721)	(2,708,623)	(6,728,730)
Other income/(expense)	-	-	-	(178,503)	(178,503)
Segment loss	\$ 76,123	\$ (270,042)	\$ (3,631,480)	\$ (2,887,126)	\$ (6,712,525)
Total assets	\$ 103,336	\$ 65,573	\$ 187,532	\$ 2,729,545	\$ 3,083,986

Year Ended August 31, 2022	IP Licensing	B2B Product	R&D	Corporate	Consolidated Total
Revenue	\$ 54,560	\$ 113,438	\$ 54,800	\$ 32,599	\$ 255,397
Cost of goods sold	-	(71,841)	-	-	(71,841)
Operating expenses	(307,809)	(731,427)	(1,842,675)	(4,685,298)	(7,567,209)
Segment loss	\$ (253,249)	\$ (689,830)	\$ (1,787,875)	\$ (4,652,699)	\$ (7,383,653)
Total assets	\$ 161,307	\$ 205,956	\$ 247,345	\$ 7,219,319	\$ 7,833,927

Capital Asset by Region	Cost US	Addition US	Net Balance US	Cost Canada	Addition Canada	Net Balance Canada	Total Net Balance
Year Ended August 31, 2023							
Leasehold Improvements	\$ -	\$ -	\$ -	\$ 259,981	\$ -	\$ 11,258	\$ 11,258
Computers	-	-	-	70,781	-	4,625	4,625
Furniture & Fixtures	-	-	-	31,126	-	1,869	1,869
Lab Equipment	140,490	33,748	122,855	193,185	-	113,536	236,391
	\$ 140,490	\$ 33,748	\$ 122,855	\$ 555,073	\$ -	\$ 131,288	\$ 254,143

Capital Asset by Region	Cost US	Addition US	Net Balance US	Cost Canada	Addition Canada	Net Balance Canada	Total Net Balance
Year Ended August 31, 2022							
Leasehold Improvements	\$ -	\$ -	\$ -	\$ 259,981	\$ -	\$ 65,296	\$ 65,296
Computers	-	-	-	63,964	6,817	9,357	9,357
Furniture & Fixtures	-	-	-	31,126	-	8,288	8,288
Lab Equipment	98,050	42,375	100,031	193,185	-	132,533	232,564
	\$ 98,050	\$ 42,375	\$ 100,031	\$ 548,256	\$ 6,817	\$ 215,474	\$ 315,505

18. Subsequent Events

On October 3, 2023, the Company entered into a securities purchase agreement with a single healthcare-focused institutional investor to purchase 889,272 shares of common stock and 729,058 pre-funded warrants in a registered direct offering. In a concurrent private placement, the Company also agreed to issue and sell to the investor warrants to purchase up to 1,618,330 shares of common stock. The combined effective offering price for each share of common stock (or pre-funded warrant in lieu thereof) and accompanying warrant was \$0.97 (to note the pre-funded warrants were issued at a price of \$0.9699 and have an exercise price of \$0.0001). The warrants will become exercisable six months from issuance, expire five and a half years from the issuance date, and have an exercise price of \$0.97 per share.

The net proceeds to the Company from the registered direct offering and concurrent private placement totaled \$1.29 million, after deducting placement agent fees and other estimated offering expenses payable by the Company.

To date all of the pre-funded warrants have been exercised, resulting in an issuance by the Company of an aggregate 729,058 common shares for gross proceeds of approx. \$73. The shares issued pursuant to the pre-funded warrant exercises were registered pursuant to an S-3 registration statement (333-262402).

Subsequent to the fiscal year end, the Company issued an aggregate 566,661 common shares pursuant to the exercise of warrants that were issued under our May 11, 2023 financing, at an exercise price of \$0.95 per share for gross proceeds of \$538,328 of which \$29,569 is currently held in Lexaria's trust account with the warrant agent. The shares issued pursuant to the warrant exercise were registered pursuant to an S-1 registration statement (333-271096).

Subsequent to the fiscal year end, the Company issued an aggregate 85,000 options for the issuance of 85,000 shares at an exercise price of \$1.15 and exercisable for a five-year term expiring October 27, 2028. The options were issued pursuant to the Company's registered equity incentive plan.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

During the year ended August 31, 2022, our principal accountants indicated that they declined to stand for re-election after the completion of the current audit of our fiscal year 2022. During the two previous years there had been no adverse opinions, disclaimer of opinion or qualification or modification as to uncertainty, audit scope or accounting principles. The decision to change accountants was recommended by the Company's Audit Committee and approved by our Board. There were no disagreements related to accounting principles or practices, financial statement disclosure, internal controls or auditing scope or procedure during the two fiscal years and their respective interim periods.

Item 9A. Controls and Procedures

Management's Report on Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized, and reported within the time periods specified in the SECs rules and forms. This information is accumulated and communicated to our management, including our Chief Executive Officer (also our Principal Executive Officer and currently our acting Principal Financial and Accounting Officer) and our outsourced Chief Financial Officer to allow for timely decisions regarding required disclosure.

As of August 31, 2023, the end of our fiscal year covered by this report, we carried out an evaluation under the supervision and with the participation of our CEO and outsourced CFO of the effectiveness of the design and operation of our disclosure controls and procedures. Based on the foregoing, our CEO and outsourced CFO concluded that our disclosure controls and procedures were effective as of the end of the period covered by this annual report.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Estimates and judgments by management are required to assess the expected benefits and related costs of control procedures. The objectives of internal control include providing management with reasonable, but not absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition, and that transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States. Management has assessed the effectiveness of our internal control over financial reporting as of August 31, 2023. In making this assessment, management used the criteria set forth in the report entitled "*Internal Control — Integrated Framework*" published by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Management has concluded that as of August 31, 2023, our internal control over financial reporting is effective in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with US GAAP. Our management reviewed the results of their assessment with our Board.

Inherent Limitations on Effectiveness of Controls

Internal control over financial reporting has inherent limitations which include but are not limited to the use of independent professionals for advice and guidance, interpretation of existing and/or changing rules and principles, segregation of management duties, scale of organization, and personnel factors. It is a process which involves human diligence and compliance and may be subject to lapses in judgment and breakdowns resulting from human failures. It can be circumvented by collusion or improper management override. Internal control over financial reporting may not prevent or detect misstatements on a timely basis. These inherent limitations are known features of the financial reporting process and it is possible to design into the process safeguards to reduce, though not eliminate, these risks. Systems determined to be effective can provide only reasonable assurances with respect to financial statement preparation and presentation. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Changes in Internal Control over Financial Reporting

The fundamental controls and control processes remained consistent with prior years during the year ended August 31, 2023. In April 2021, the former CFO, Mr. Allan Spissinger, was replaced by the former controller, Mr. Greg Downey, which required some of our controls and controls processes to be temporarily revised and updated based on personnel changes within the Company. In June 2023, Mr. Downey was replaced with an outsourced CFO, and Chris Bunka accepted the role of Principal Financial Officer. However, this change has not resulted in any changes in our internal controls over financial reporting that occurred during the year ended August 31, 2023, that have materially or are reasonably likely to materially affect our internal controls over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

All directors of our Company hold office until the next annual meeting of the security holders or until their successors have been elected and qualified. The officers of our Company are appointed by our Board and hold office until their death, resignation, or removal from office. Our directors and executive officers are as follows:

Name	Position Held with our Company	Age	Date First Elected Or Appointed	Date of Resignation
Christopher Bunka	Chairman, Chief Executive Officer, and Director	62	Oct. 26, 2006 Feb. 14, 2007	-
John Docherty	President and Director	53	Apr. 15, 2015 Apr. 29, 2016	-
Gregory Downey	Chief Financial Officer	63	Apr. 15, 2021	June 6, 2023
Nicholas Baxter	Director	69	Jul. 8, 2011	-
Ted McKechnie	Director	76	Sept. 16, 2015	-
Dr. Catherine C. Turkel	Director	63	Sept. 2, 2022	-
Al Reese, Jr.	Director	74	Jan 14, 2021	-

Business Experience

The following is a brief account of the business and education experience of each current director and executive officer during the past five years, indicating each person's principal occupation during the period.

Mr. Christopher Bunka – Chairman, Chief Executive Officer and Director

Mr. Bunka has been Chairman of the Board and CEO since 2006 and was primarily responsible for the corporate pivot from older business activities to bioscience. Mr. Bunka is a serial entrepreneur and has been involved in several private and public companies since the late 1980's. He was well known for more than a decade as a part-time business commentator in print and radio, as well as an author. He has extensive experience in the capital markets, corporate governance, project acquisition and corporate finance. He is a named inventor on several of Lexaria's pending patents.

Since 1988, Mr. Bunka has been the CEO of CAB Financial Services Ltd., a private holding company located in Kelowna, BC, Canada. He is a venture capitalist and corporate consultant.

Mr. John Docherty – President and Director

Mr. Docherty was appointed President of Lexaria effective April 15, 2015. Prior to Lexaria Mr. Docherty was former President and Chief Operating Officer of Helix BioPharma Corp. (TSX: HBP), where he led the company's pharmaceutical development programs for its plant and recombinantly derived therapeutic protein product candidates.

Mr. Docherty is a senior operations and management executive with over 20 years' experience in the pharmaceutical and biopharmaceutical sectors. He has worked with large multinational companies and emerging, private and publicly held start-ups. At Helix, Mr. Docherty was instrumental in the areas of investor/stakeholder relations, capital raising, capital markets development, strategic partnering, regulatory authority interactions and media relations. He also served as a management member of its board of directors. Previously, Mr. Docherty was President and a board member of PharmaDerm Laboratories Ltd., a Canadian drug delivery company that developed unique microencapsulation formulation technologies for use with a range of active compounds.

Mr. Docherty also held positions with companies such as Astra Pharma Inc., Nu-Pharm Inc. and PricewaterhouseCoopers' former global pharmaceutical industry consulting practice. He is a named inventor on issued and pending patents and he has a M.Sc. in pharmacology and a B.Sc. in Toxicology from the University of Toronto. He has served as a director of Lexaria since April 29, 2016.

Mr. Gregory Downey – Former Chief Financial Officer

Mr. Downey joined the Company as Controller in January 2019 and was then appointed Chief Financial Officer in April 2021 which position he resigned from in June 2023. Mr. Downey brought over 35 years of diverse financial experience in the mining, oil and gas, manufacturing, construction, and in the public sector as well as providing business advisory and financial accounting services to several mid-sized organizations. Mr. Downey had a wide range of executive corporate experience having acted as the Chief Financial Officer and director of public companies. Mr. Downey obtained his Certified Management Accountant (CMA) designation in 1992 and is a member of the Chartered Professional Accountants (CPA) of British Columbia.

Mr. Nicholas Baxter - Director

Mr. Baxter was appointed as a member of the board of directors of Lexaria Corp. in 2009. Mr. Baxter received a Bachelor of Science (Honours) from the University of Liverpool in 1975 and has worked on oil & gas projects in many areas of the world. Since the 1980's, he has worked with companies in the public markets both in the U.K. and in Canada. Mr. Baxter brings extensive real-world experience as a board member.

Mr. Ted McKechnie – Director

Mr. McKechnie is a well-recognized thought leader in the Canadian food industry. In the past, Mr. McKechnie was president of Maple Leaf Foods, an owner and senior executive at Humpty Dumpty Snack Foods and a senior leader at Pepsi Co. After a distinguished career as an executive and marketer specializing in food manufacturing, he now focuses on moving the Canadian food sector into the future. Aside from being the chairman of Food Starter's board, Mr. McKechnie is also the Chairman/CEO of The Davies Group and William Davies Consulting Inc. He is also a chairman of the board for Advanced Technology For Food Manufacturing, and serves on the Board Of Governors for St Jerome's University. Mr. McKechnie was awarded Philip Morris Chairman's Award for "recognition of extraordinary contributions having a significant and lasting impact on the Corporation".

Mr. Al Reese Jr. - Director

Mr. Reese has over 50 years' experience in public and private businesses including as CFO of a formerly Nasdaq-listed energy company where he arranged finance transactions totalling over \$10 billion dollars during his 20-year tenure. Mr. Reese was a Director and Chairman of the Audit Committee of a community bank in Texas for ten years until such time as it was acquired by a larger banking group in 2018. He currently serves as an Independent Director and Chairman of the Audit Committee for a privately held insurance company headquartered in The Woodlands, Texas. He has directed over 50 acquisitions and financings from as small as a few hundred thousand dollars to multibillion dollar transactions in both the domestic and international arenas. Mr. Reese is also President and Chairman of a family charitable 501(c)-3 foundation and Interim Chairman of a charitable 501(c)-3 entity that focus on Bible literacy.

Mr. Reese is a Certified Public Accountant (1974) and received his Bachelor of Business Administration degree from Texas A&M University in 1971, and his MBA from University of Houston in 1977. He has extensive experience at a senior level in financial services, finance transactions, investor relations, and more.

Dr. Catherine C. Turkel – Director

Dr. Turkel, PharmD, PhD has more than 20 years' experience as an executive in start-up and mid-size pharma/biotech companies. She was Founder and CEO of Nezee Therapeutics, and served as President and R&D head at Novus Therapeutics (renamed Eledon Pharmaceuticals – Nasdaq: ELDN). She currently acts as an independent Board Director at Object Pharma (private) and Prostate Cancer Research (nonprofit; member of the Translational Scientific Advisory Committee) and is a Dean Advisor at Chapman University School of Pharmacy.

Dr. Turkel has formulated registration & commercial strategic plans and has led global development programs for pharmaceutical and biologic treatments from phase 1 through phase 4 related to Neurosciences, Pain, Cardiovascular, Psychiatry, Rare Diseases, Ophthalmology, Aesthetics, Urology and Otolaryngology therapeutic areas. Dr. Turkel designed and led Allergan's (now AbbVie -NYSE: ABBV) pioneering BOTOX® Chronic Migraine registration program, generating revenue of more than a billion dollars.

Family Relationships

There are no family relationships among any of our officers or directors.

Involvement in Certain Legal Proceedings

None of our directors, executive officers, promoters, or control persons has been involved in any of the following events during the past five years:

- 1) A petition under the Federal bankruptcy laws or any state insolvency law was filed by or against, or a receiver, fiscal agent or similar officer was appointed by a court for the business or property of such person, or any partnership in which he was a general partner at or within two years before the time of such filing, or any corporation or business association of which he was an executive officer at or within two years before the time of such filing.
- 2) A conviction in a criminal proceeding or is a named subject of a pending criminal proceeding (excluding traffic violations and other minor offenses).
- 3) The subject of any order, judgment, or decree, not subsequently reversed, suspended, or vacated, of any court of competent jurisdiction, permanently or temporarily enjoining him from, or otherwise limiting, the following activities:
 - i. Acting as a futures commission merchant, introducing broker, commodity trading advisor, commodity pool operator, floor broker, leverage transaction merchant, any other person regulated by the Commodity Futures Trading Commission, or an associated person of any of the foregoing, or as an investment adviser, underwriter, broker or dealer in securities, or as an affiliated person, director or employee of any investment company, bank, savings and loan association or insurance company, or engaging in or continuing any conduct or practice in connection with such activity, or
 - ii. Engaging in any type of business practice; or
 - iii. Engaging in any activity in connection with the purchase or sale of any security or commodity or in connection with any violation of Federal or State securities laws or Federal commodities laws.
- 4) The subject of any order, judgment, or decree, not subsequently reversed, suspended, or vacated, of any Federal or State authority barring, suspending or otherwise limiting for more than 60 days the right of such person to engage in any activity described in paragraph (f)(3)(i) of this section, or to be associated with persons engaged in any such activity.
- 5) Found by a court of competent jurisdiction in a civil action or by the SEC to have violated any Federal or State securities law, and the judgment in such civil action or finding by the SEC has not been subsequently reversed, suspended, or vacated.
- 6) Found by a court of competent jurisdiction in a civil action or by the Commodity Futures Trading Commission to have violated any Federal commodities law, and the judgment in such civil action or finding by the Commodity Futures Trading Commission has not been subsequently reversed, suspended, or vacated.
- 7) The subject of, or a party to, any Federal or State judicial or administrative order, judgment, decree, or finding, not subsequently reversed, suspended, or vacated, relating to an alleged violation of:
 - i. Any Federal or State securities or commodities law or regulation; or
 - ii. Any law or regulation respecting financial institutions or insurance companies including, but not limited to, a temporary or permanent injunction, order of disgorgement or restitution, civil money penalty or temporary or permanent cease-and-desist order, or removal or prohibition order; or
 - iii. Any law or regulation prohibiting mail or wire fraud or fraud in connection with any business entity.
- 8) The subject of, or a party to, any sanction or order, not subsequently reversed, suspended or vacated, of any self-regulatory organization (as defined in Section 3(a)(26) of the Exchange Act (15 U.S.C. 78c(a)(26))), any registered entity (as defined in Section 1(a)(29) of the Commodity Exchange Act (7 U.S.C. 1(a)(29))), or any equivalent exchange, association, entity or organization that has disciplinary authority over its members or persons associated with a member.

Delinquent Section 16(a) Reports

Section 16(a) of the Securities Exchange Act of 1934 requires our executive officers and directors and persons who own more than 10% of our common stock to file with the Securities and Exchange Commission initial statements of beneficial ownership, reports of changes in ownership and annual reports concerning their ownership of our common stock and other equity securities, on Forms 3, 4 and 5 respectively. Executive officers, directors and greater than 10% shareholders are required by the SEC regulations to furnish us with copies of all Section 16(a) reports that they file.

Based solely on our review of the copies of such forms received by us, or written representations from certain reporting persons, we believe that during fiscal year ended August 31, 2023, all filing requirements applicable to our officers, directors, and beneficial owners of greater than 10% percent were complied with.

Code of Ethics

We adopted a Code of Ethics applicable to our senior financial officers and certain other finance executives, which is a “code of ethics” as defined by applicable rules of the SEC. Our Code of Ethics is attached as an exhibit to our Form SB-2 filed on September 20, 2007. If we make any amendments to our Code of Ethics other than technical, administrative, or other non-substantive amendments, or grant any waivers, including implicit waivers, from a provision of our Code of Ethics to our Chief Executive Officer, Chief Financial Officer, or certain other finance executives, we will disclose the nature of the amendment or waiver, its effective date and to whom it applies in a Current Report on Form 8-K filed with the SEC.

Board and Committee Meetings

Our Board held nine formal meetings and several informal meetings during the year ended August 31, 2023. All proceedings of the board of directors taken at a formal meeting were evidenced by way of minutes taken at such meetings. All other matters approved by our Board outside of any formal meeting were evidenced by resolutions consented to by all the directors. Such resolutions consented to in writing by the directors entitled to vote on that resolution at a meeting of the directors are, according to the Nevada General Corporate Law and our Bylaws, as valid and effective as if they had been passed at a meeting of the directors duly called and held.

Nomination Process

As of August 31, 2023, the Company had an active Governance and Nominating Committee. If stakeholders wish to recommend candidates for our Board, they may do so by sending communications to the Governance and Nominating Committee at the address on the cover of this annual report.

Audit and Finance Committee and Audit Committee Financial Expert

The audit and finance committee are governed by the audit and finance committee charter as adopted on December 8, 2020. The committee is composed of Mr. Al Reese, Jr., Mr. Ted McKechnie, and Mr. Nicholas Baxter and the members held four formal meetings during the year ended August 31, 2023. Mr. Reese, a CPA, qualifies as an “audit committee financial expert” as defined in Item 407(d)(5)(ii) of Regulation S-K, and is “independent” as the term is used in Item 7(d)(3)(iv) of Schedule 14A under the Securities Exchange Act of 1934, as amended. Prior to Mr. Reese’s appointment in January 2021, Mr. Bunka acted as a member of the audit and finance committee and was not “independent” pursuant to Nasdaq independence standards as he is actively involved in the daily management of the Company as CEO. A copy of the Audit & Finance Committee charter can be downloaded from the Company’s website under our Investors/Governance/Governance Documents tab.

Our management is responsible for preparing our financial statements and our independent registered public accounting firm is responsible for auditing those financial statements. Our audit and finance committee consults with management and our independent registered public accounting firm and may initiate inquiries into various aspects of our financial affairs. They are responsible for retaining, evaluating and for the engagement of our independent registered public accounting firm and for the approval of professional services provided by them. However, it is not the duty of our audit and finance committee to determine that our financial statements are complete and accurate and in accordance with generally accepted accounting principles.

Compensation Committee

Our Compensation Committee was created on July 2, 2020, the members of which are Mr. Baxter, Dr. Turkel and Mr. McKechnie, with all directors being “independent” pursuant to Nasdaq independence standards. The Compensation Committee operates under a written charter and its purpose is to review, consider, research, and recommend compensation for the Company’s executive management, taking into consideration milestones achieved, the compensation issued by companies of similar size and the overall financial health of the Company. The committee is also responsible for reviewing and approving employment and benefits agreements and any executive compensation information incorporated into the Company’s periodic reports. The Compensation Committee held five formal meetings during the fiscal year. A copy of the compensation committee charter can be downloaded from the Company’s website under our Investors/Governance/Governance Documents tab.

Governance and Nominating Committee

The Governance and Nominating Committee operate pursuant to a charter created on December 8, 2020. The current members of the committee are Mr. Reese Jr. and Dr. Turkel, both being independent directors of the Company. The committee’s purpose is to assist our Board in fulfilling its responsibilities by: (i) being satisfied that corporate governance guidelines are adopted, applied and disclosed including director qualification standards, responsibilities and access to management and independent advisors, director compensation, orientation and continuing education, and annual performance evaluation of the board; (ii) identifying individuals qualified to become new board members and recommending to the board the nominees for each annual meeting of shareholders of the Corporation; and (iii) such other matters delegated to the committee by the board. The Governance and Nominating Committee held two formal meetings during the fiscal year. A copy of the Governance & Nominating Committee charter can be downloaded from the Company’s website under our Investors/Governance/Governance Documents tab.

Our Board plays a critical role in guiding the strategic direction and overseeing the management of our business. We seek to attract and retain highly qualified directors who have sufficient time to engage in the activities of our Board and to understand and enhance their knowledge of our industry and business plans. In evaluating the suitability of individual candidates, the Governance and Nominating Committee and our Board may take into account many factors, including: relevant education, experience and expertise; knowledge of the Company and the issues it faces; whether the candidate will strengthen the board and remedy any perceived deficiencies in the specific criteria; moral and ethical character; diversity of expertise and experience in substantive matters pertaining to our business relative to other board members; diversity of background and perspective, including, but not limited to, with respect to age, gender, race, place of residence and specialized experience; and any other relevant qualifications, attributes or skills. The core competencies of directors should address accounting or finance experience, market familiarity, business or management experience, industry knowledge, customer-base experience or perspective, crisis response, leadership, and/or strategic planning.

Our Board and Governance and Nominating Committee evaluate each individual in the context of the board as a whole, with the objective of assembling a group that can best perpetuate the success of the business and represent stockholder interests through the exercise of sound judgment using its diversity of experience in these various areas.

Item 11. Executive Compensation

The particulars of the compensation paid to the following persons:

- our principal executive officer;
- each of our two most highly compensated executive officers who were serving as executive officers at the end of the years ended August 31, 2023, and August 31, 2022, and;
- up to two additional individuals for whom disclosure would have been provided under (b) but for the fact that the individual was not serving as our executive officer at the end of the years ended August 31, 2023, and August 31, 2022,

collectively referred to as the named executive officers of our Company, are set out in the following summary compensation table. There is no disclosure provided for any named executive officer, other than our principal executive officers, whose total compensation did not exceed \$100,000 for the respective fiscal year:

SUMMARY COMPENSATION TABLE

Name and Principal Position	Year	Salary \$	Bonus \$	Stock Awards \$	Option Awards ⁽⁵⁾ \$	Non-Equity Incentive Plan Compensation \$	Non-Qualified Deferred Compensation Earnings \$	All Other Compensation \$	Total \$
Christopher Bunka ⁽¹⁾ Chairman, Chief Executive Officer & Director	2023	-	10,487	-	-	-	-	280,706	291,193
	2022	-	50,401	-	143,968	-	-	289,505	483,874
John Docherty ⁽²⁾ President & Director	2023	257,399	33,066	-	-	-	-	-	290,465
	2022	218,315	44,542	-	143,968	-	-	32,887	439,712
Greg Downey ⁽³⁾ Former Chief Financial Officer	2023	172,889	11,022	-	-	-	-	-	183,911
	2022	117,284	9,131	-	116,036	-	-	-	242,451
Allan Spissinger ⁽⁴⁾ former Chief Financial Officer	2023	-	-	-	-	-	-	-	-
	2022	-	-	-	-	-	-	4,122	4,122

- (1) Mr. Bunka was appointed as Chairman, President, Chief Executive Officer, and director on October 26, 2006. We pay Mr. Bunka a consulting fee through CAB Financial Services Ltd., where he is also the Chief Executive Officer.
- (2) Mr. Docherty became President on April 15, 2015, and a director on April 29, 2016. We pay Mr. Docherty as an employee effective January 1, 2022, and previously through consulting fees paid to his wholly owned company Docherty Management Ltd.
- (3) Mr. Downey was Chief Financial Officer from April 15, 2021 to June 6, 2023 and was considered an employee of the Company.
- (4) Mr. Spissinger was replaced as CFO effective April 15, 2021 and remained with the company until the end of his contract on May 31, 2021. We paid Mr. Spissinger a consulting fee through his wholly owned company M&E Services Ltd.
- (5) The fair value of the stock options awarded was estimated using the Black-Scholes option pricing model.

Consulting and Employment Agreements

Other than as set out in this annual report on Form 10-K we have not entered into any employment or consulting agreements with any of our current officers or directors.

Mr. Chris Bunka, CEO

The Company secured a 3-year term renewable management contract with Mr. Bunka effective January 1, 2022, with a base compensation of C\$29,706 per month with an annual increase of 1.25 times the annual Canadian inflation rate. A performance bonus of up to 50% of 12 times the monthly fee may be payable upon the completion of certain performance criteria as determined by our Board. Participation in the Company's stock option plan is also included.

The contract entitles Mr. Bunka to compensation of 2% of the consideration of the total value of any subsidiary sold and upon a change of control is entitled to 26 times the monthly fee, excluding certain circumstances. The termination clause requires 15 months written notice plus one additional months' written notice for each completed year of service for terminating the contract without cause. Payment may be made in lieu of and if so, the Company would be liable for a termination payment of 15 times the monthly fee plus one additional month's payment for each completed year of service of up to a maximum payment of 24 times the monthly fee.

Mr. John Docherty, President

The Company entered into a 3-year term renewable executive employment agreement with Mr. John Docherty for a management contract for C\$310,001 per year, effective January 1, 2022, with an annual increase of 1.25 times the annual Canadian inflation rate. A performance bonus equal to 50% of the annual compensation may be payable upon the completion of certain performance criteria as determined by our Board. Participation in the Company's stock option plan is also included. An annual professional development allowance of C\$15,000 is also available to Mr. Docherty.

The contract for the services includes entitlement to compensation of 2% of the consideration received by the Company from the sale of any subsidiary, excluding certain circumstances. Upon the occurrence of a change of control, Mr. Docherty will be entitled to a lump payment of 21 months pay subject to certain exemptions. The contract specifies that 60 days written notice for termination by Mr. Docherty and termination without cause by the Company would result in 12 months pay in lieu of notice plus one additional month's written notice or payment in lieu, for each completed year of service up to a maximum payment of 24 months.

Mr. Greg Downey, CFO

On April 15, 2021, the Company entered into an employment contract with Mr. Downey with annual compensation of C\$144,000 with a 10% annual increase. A performance bonus equal to 50% of the annual compensation may be payable upon the completion of certain performance criteria. Mr. Downey is entitled to participate in the Company's stock option plan and an annual professional development allowance of C\$5,000 per year.

Pursuant to the termination provisions of Mr. Downey's employment contract, the Company paid Mr. Downey four months of salary in lieu of notice, two additional months salary as a retiring allowance and accrued vacation entitlement.

Grants of Plan-Based Awards Table

During the year ended August 31, 2023, Lexaria did not issue any plan-based awards to our named executive officers.

Outstanding Equity Awards at Fiscal Year End

The particulars of unexercised options, stock that has not vested and equity incentive plan awards for our named executive officers are set out in the following table:

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END									
Executive Officer	OPTION AWARDS					STOCK AWARDS			
	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price\$	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested \$	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (#)
Christopher Bunka	26,000	-	-	\$3.00	04/23/2026	-	-	-	-
	23,334	-	-	\$3.00	06/08/2026	-	-	-	-
	15,000	-	-	\$3.00	09/01/2026	-	-	-	-
	30,000	-	-	\$2.91	08/29/2027	-	-	-	-
John Docherty	13,334	-	-	\$3.00	04/23/2025	-	-	-	-
	18,000	-	-	\$3.00	04/23/2026	-	-	-	-
	18,334	-	-	\$3.00	06/08/2026	-	-	-	-
	15,000	-	-	\$3.00	09/01/2026	-	-	-	-
	30,000	-	-	\$2.91	08/29/2027	-	-	-	-
Greg Downey ⁽¹⁾	12,000	4,000	-	\$3.00	04/24/2026	-	-	-	-
	5,000	-	-	\$3.00	04/25/2026	-	-	-	-
	8,000	-	-	\$3.00	06/08/2026	-	-	-	-
	10,000	-	-	\$3.00	09/01/2026	-	-	-	-
	11,000	-	-	\$2.91	08/29/2027	-	-	-	-

(1) The options held by Mr. Downey expired on September 6, 2023.

Option Exercises

No options were exercised by any named executive officer during the year ended August 31, 2023.

Compensation of Directors

As of August 31, 2023, four of our directors are compensated for their services. In their capacity as independent directors each receives \$30,000 per year paid quarterly in advance. Directors are also paid nominal amounts for their services on the Audit and Finance, Compensation, and the Governance and Nominating Committees and for acting as chair of such committees.

Four independent directors were granted an aggregate of 64,600 stock options with a calculated fair value of \$88,936 and is included in consulting expense during the fiscal year 2023.

Pension, Retirement or Similar Benefit Plans

There are no arrangements or plans in which we provide pension, retirement or similar benefits for directors or executive officers. We have no material bonus or profit-sharing plans pursuant to which cash or non-cash compensation is or may be paid to our directors or executive officers, except that stock options may be granted at the discretion of our Board or a committee thereof.

Indebtedness of Directors, Senior Officers, Executive Officers, and Other Management

None of our directors or executive officers or any associate or affiliate of our company during the last two fiscal years is or has been indebted to our Company by way of guarantee, support agreement, letter of credit or other similar agreement or understanding currently outstanding.

Compensation Committee Interlocks and Insider Participation

No member of the Compensation Committee is, or was during fiscal 2023, an officer or employee of the Company or any of its subsidiaries or was formerly an officer of the Company or any of its subsidiaries. No member of the Compensation Committee is, or was during fiscal 2023, an executive officer of another company whose board of directors has a comparable committee on which one of the Company's executive officers serves.

Board Diversity

The Company and its management are highly supportive of the recent initiatives taken by the Securities and Exchange Commission and the Nasdaq Group to encourage diversity within the board of directors of reporting companies. Lexaria annually reviews its board composition and evaluates areas of expertise that would provide additional benefits to the Company and its shareholders.

During fiscal 2023, the board appointed Dr. Catherine C. Turkel as an additional independent director. This appointment aligns with the Company’s transition towards pharmaceutical applications and desire to build on its scientific expertise in this industry sector. In addition, Dr. Turkel’s appointment enriches the board with her diverse perspective and results in the Company being in compliance with Nasdaq’s board diversity rules.

Compensation Committee Report

Our Compensation Committee has reviewed and discussed the Executive Compensation for the year ended August 31, 2023, with management. Based on the reviews and discussions our Compensation Committee recommended to our Board that the Executive Compensation discussed above be included in this annual report on Form 10-K.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The following table sets forth certain information with respect to the beneficial ownership of our common shares by each shareholder known by us to be the beneficial owner of more than 5% of our common shares, as well as by each of our directors and executive officers as a group, as of August 31, 2023. Each person has sole voting and investment power with respect to the shares of common stock, except as otherwise indicated. Beneficial ownership consists of a direct interest in the shares of common stock, except as otherwise indicated.

Name, Address & Position of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percentage of Class ⁽¹⁾
Directors and Executive Officers as a Group	909,307	10.85%
Executive Officers and Directors Individually		
Christopher Bunka CEO, Chairman & Director	628,956 ⁽²⁾	7.68%
John Docherty President and Director	148,743 ⁽³⁾	1.82%
Nicholas Baxter* Independent Director	46,000 ⁽⁴⁾	0.56%
Ted McKechnie* Independent Director	48,191 ⁽⁵⁾	0.59%
Albert Reese Jr.* Independent Director	25,917 ⁽⁶⁾	0.32%
Catherine C. Turkel* Independent Director	11,500 ⁽⁷⁾	0.14%
5% Owners		
Don Jackler	568,382 ⁽⁸⁾	6.94%

* denotes a holding of less than 1%

Notes:

- (1) Percentage of ownership is based on 8,091,650 common shares issued and outstanding as of the Record Date on a diluted basis. Except as otherwise indicated, we believe that the beneficial owners of the common stock listed above, based on information furnished by such owners, have sole investment and voting power with respect to such common shares.
- (2) Includes 254,412 shares held in the name of C.A.B. Financial Services and 273,543 shares held directly by Christopher Bunka. Includes 94,334 options held in the name of Christopher Bunka of which 64,334 are exercisable at \$3.00 and 30,000 are exercisable at \$2.91 and 6,667 warrants held in the name of C.A.B. Financial Services all of which are exercisable at \$10.50.
- (3) Includes 54,075 shares held in the name of Docherty Management Ltd. and 64,668 options exercisable at \$3.00 and 30,000 options exercisable at \$2.91 held in the name of John Docherty.
- (4) Includes 3,400 options exercisable at \$3.39, 8,400 options exercisable at \$3.00, 18,200 options exercisable at \$1.96 and 5,000 options exercisable at \$0.87.
- (5) Includes 3,400 options exercisable at \$3.39, 8,400 options exercisable at \$3.00, 18,200 options exercisable at \$1.96 and 5,000 options exercisable at \$0.87.
- (6) Includes 3,400 options exercisable at \$3.39, 3,400 options exercisable at \$3.00, 3,200 options exercisable at \$1.96 and 5,000 options exercisable at \$0.87.
- (7) Includes 3,400 options exercisable at \$3.04, 1,600 options exercisable at \$1.96 and 5,000 options exercisable at \$0.87.
- (8) Includes 100,000 warrants which are exercisable at \$7.00.

Under Rule 13d-3, a beneficial owner of a security includes any person who, directly or indirectly, through any contract, arrangement, understanding, relationship, or otherwise has or shares: (i) voting power, which includes the power to vote, or to direct the voting of shares; and (ii) investment power, which includes the power to dispose or direct the disposition of shares. Certain shares may be deemed to be beneficially owned by more than one person (if, for example, persons share the power to vote or the power to dispose of the shares). In addition, shares are deemed to be beneficially owned by a person if the person has the right to acquire the shares (for example, upon exercise of an option) within 60 days of the date as of which the information is provided. In computing the percentage ownership of any person, the amount of shares outstanding is deemed to include the number of shares beneficially owned by such person (and only such person) by reason of these acquisition rights. As a result, the percentage of outstanding shares of any person as shown in the table above does not necessarily reflect the person’s actual ownership or voting power with respect to the number of shares of common stock actually outstanding on August 31, 2023. As of November xx, 2023, there were 10,240,516 shares of our common stock issued and outstanding.

Changes in Control

We are unaware of any contract or other arrangement which may at a subsequent date result in a change in control of our Company.

Item 13. Certain Relationships and Related Transactions, and Director Independence

No director, executive officer, shareholder holding at least 5% of shares of our common stock, or any family member thereof, had any material interest, direct or indirect, in any transaction, or proposed transaction since the year ended August 31, 2023, in which the amount involved in the transaction exceeded or exceeds the lesser of \$120,000 or one percent of the average of our total assets at the year end for the last three completed fiscal years.

Director Independence

Lexaria directors are Mr. Christopher Bunka, Mr. John Docherty, Mr. Nicholas Baxter, Mr. Ted McKechnie, Mr. Al Reese Jr. and Dr. Catherine Turkel. We have determined that Messrs. Baxter, McKechnie and Reese and Dr. Turkel are “independent directors” as defined in Nasdaq Marketplace Rule 4200(a)(15).

Our audit and finance committee consists of our Messrs. Baxter, McKechnie, and Reese, the latter qualifying as an “audit committee financial expert” as defined in Item 407(d)(5)(ii) of Regulation S-K.

From inception to present date, we believe that the members of our audit committee and our Board have been and are collectively capable of analyzing and evaluating our financial statements and understanding internal controls and procedures for financial reporting.

Our Compensation Committee consists of the following independent directors: Messrs. McKechnie and Baxter and Dr. Turkel. During fiscal year ended August 31, 2023, the Compensation Committee held five meetings to determine bonus compensation payable to the named executive officers in connection with the successful completion of certain performance milestones.

Our appointed Governance and Nominating Committee consists of the following independent directors: Mr. Reese Jr. and Dr. Turkel. To date one formal meeting has been held by this committee.

Item 14. Principal Accounting Fees and Services

The aggregate fees billed for the most recently completed fiscal year ended August 31, 2023, and for fiscal year ended August 31, 2022 for professional services rendered by the principal accountants were as follows:

Principal Accounting Fees	Year Ended	
	August 31, 2023	August 31, 2022
	\$	\$
Audit	95,900	86,975
Audit Related	32,960	25,521
Tax	10,150	
Total	139,010	112,496

Audit fees consist of fees billed for professional services rendered for the audits of our financial statements on Form 10-K and the reviews of our interim financial statements included in quarterly reports filed on Form 10-Q.

Audit related fees consist of fees billed for assurance and related services by the Company’s principal accountant that are reasonably related to the performance of the audit or review of the Company’s financial statements, which are not included in the Audit Fees described above.

Tax fees were billed for professional services including assistance with tax compliance, preparation of tax returns, and tax consultation.

Pre-Approval Policy

Our Audit and Finance committee pre-approve all services provided by our independent auditors according to the Audit and Finance Committee’s Charter as set out in Exhibit “A” in the Company’s Schedule 14A Definitive Proxy Statement filed with the SEC on April 13, 2022. All of the above audit services and fees were reviewed and approved by the committee.

PART IV

Item 15. Exhibits, Financial Statement Schedules

a) Financial Statements

- 1) Report of Independent Registered Public Accounting Firm (PCAOB ID206)
- 2) Financial statements for our Company are listed under Item 8 of this document.
- 3) All financial statement schedules are omitted because they are not applicable, not material or the required information is shown in the financial statements or notes thereto.

b) Exhibits

Exhibit Number	Description
(3)	Articles of Incorporation and Bylaws
3.1	Amended and Restated Articles of Incorporation (Filed on Form 8-K January 14, 2021 Exh. 3.1)
3.2	Second Amended and Restated Bylaws (incorporated by reference as Exhibit 3.2 to our Current Report on Form 8-K filed January 14, 2021)
(4)	Instruments Defining the Rights of Security Holders, including Indentures
4.1	Equity Incentive Plan (Filed on Form S-8 July 30, 2021)
4.2	Form of Warrant (Incorporated by reference to Exhibit 4.5 to the Registration Statement on Form S-1 filed with the SEC on April 28, 2023)
(10)	Material Contracts
10.1	Executive Employment Agreement dated Dec. 31, 2021 with John Docherty (filed on Form 10-Q January 14, 2022 Exh 10.1)
10.2	Management Services Agreement dated Dec. 31, 2021 with C.A.B. Financial Services Ltd. (Chris Bunka) (filed on Form 10-Q January 14, 2022 Exh 10.2)
10.3	Media Buys Agreement with SRAX (incorporated by reference as Exhibit 10.1 to our Current Report on Form 8-K filed December 16, 2021)
10.4	Redacted Intellectual Property License Agreement dated May 20, 2022 between Lexaria Hemp Corp. and Premier Wellness Science Co., Ltd. (filed on Form 10-Q July 14, 2022 Exh 10.3)
10.5	Equity Distribution Agreement with Maxim Group LLC (incorporated by reference as Exhibit 1.1 to our Current Report on Form 8-K filed August 12, 2022)
10.6	Form of Securities Purchase Agreement (Incorporated by reference to Exhibit 10.8 to the Registration Statement on Form S-1 filed with the SEC on April 28, 2023)
10.7	Placement Agency Agreement (filed on Form 8-K May 10, 2023 Exh. 10.2)
10.8	Form of Warrant Agency Agreement (Incorporated by reference to Exhibit 10.9 to the Registration Statement on Form S-1 filed with the SEC on April 28, 2023)
10.9	Redacted Work Order for Start-Up Activities with InClin, Inc. (filed on Form 10-Q July 14, 2023 Exh. 10.3)
(21)	Subsidiaries
21.1	List of Subsidiaries of the Registrant (Filed on Form 10-K November 29, 2021 Exh 21.1)
(23)	Consents of Experts and Counsel
23.1	Consent of MaloneBailey LLP, Chartered Professional Accountants
23.2	Consent of Davidson & Company LLP, Chartered Professional Accountants
(31)	Rule 13(a) - 14 (a)/15(d) - 14(a)
31.1	Section 302 Certifications under Sarbanes-Oxley Act of 2002 of Principal Executive Officer
31.2	Section 302 Certifications under Sarbanes-Oxley Act of 2002 of Principal Financial Officer and Principal Accounting Officer
(32)	Section 1350 Certifications
32.1	Section 906 Certification under Sarbanes Oxley Act of 2002 of Principal Executive Officer
32.2	Section 906 Certification under Sarbanes Oxley Act of 2002 of Principal Financial Officer and Principal Accounting Officer
(101)**	Interactive Data Files
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

** Furnished herewith. Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files on Exhibit 101 hereto are deemed not filed or part of any registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, are deemed not filed for purposes of Section 18 of the Securities and Exchange Act of 1934, and otherwise are not subject to liability under those sections.

SIGNATURES

In accordance with Section 13 or 15(d) of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

LEXARIA BIOSCIENCE CORP.

By: /s/ John Docherty
John Docherty
President and Director
(Principal Executive Officer)
Date: November 20, 2023

In accordance with the Exchange Act, this Report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ John Docherty
John Docherty
President and Director
(Principal Executive Officer)
Date: November 20, 2023

By: /s/ Christopher Bunka
Christopher Bunka
Chief Executive Officer, Chairman and Director
(Principal Financial Officer)
Date: November 20, 2023

By: /s/ Ted McKechnie
Ted McKechnie
Director
Date: November 20, 2023

By: /s/ Nicholas Baxter
Nicholas Baxter
Director
Date: November 20, 2023

By: /s/ Albert Reese Jr.
Albert Reese Jr.
Director
Date: November 20, 2023

By: /s/ Dr. Catherine C. Turkel
Dr. Catherine C. Turkel
Director
Date: November 20, 2023

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements on Forms S-3 (File Nos. 333-238915, 333-250326 and 333-262402), Form S-8 (File No. 333-258308) and Forms S-1 (File Nos. 333-271096 and 333-252031) of our report dated November 17, 2023 with respect to the audited consolidated financial statements of Lexaria Bioscience, Inc. (the "Company") appearing in this Annual Report on Form 10-K of the Company for the year ended August 31, 2023.

/s/ MaloneBailey, LLP
www.malonebailey.com
Houston, Texas
November 17, 2023

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Forms S-3 (File Nos. 333-238915, 333-250326 and 333-262402), Form S-8 (File No. 333-258308) and Forms S-1 (File Nos. 333-271096 and 333-252031) of Lexaria Bioscience Corp. of our report dated November 25, 2022, relating to the consolidated financial statements of Lexaria Bioscience Corp., for the years ended August 31, 2023 and 2022 which appears in the annual report on Form 10-K of Lexaria Bioscience Corp. dated November 20, 2023.

Vancouver, Canada

/s/ DAVIDSON & COMPANY LLP

November 17, 2023

Chartered Professional Accountants

**CERTIFICATION PURSUANT TO
18 U.S.C. ss 1350, AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, John Docherty, certify that:

1. I have reviewed this Annual Report on Form 10-K of Lexaria Bioscience Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's first fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 20, 2023

/s/ John Docherty

John Docherty
President and Director
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. ss 1350, AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Christopher Bunka, certify that:

1. I have reviewed this Annual Report on Form 10-K of Lexaria Bioscience Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's first fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 20, 2023

/s/ Christopher Bunka

Christopher Bunka
Chief Executive Officer and Director
(Principal Financial Officer and Principal Accounting
Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, John Docherty, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) the Annual Report on Form 10-K of Lexaria Bioscience Corp. for the year ended August 31, 2023 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Lexaria Bioscience Corp.

Dated: November 20, 2023

/s/ John Docherty

John Docherty
President and Director
(Principal Executive Officer)
Lexaria Bioscience Corp.

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Lexaria Bioscience Corp. and will be retained by Lexaria Bioscience Corp. and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Christopher Bunka, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) the Annual Report on Form 10-K of Lexaria Bioscience Corp. for the year ended August 31, 2023 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Lexaria Bioscience Corp.

Dated: November 20, 2023

/s/ Christopher Bunka
Christopher Bunka
Chief Executive Officer and Director
(Principal Financial Officer and Principal Accounting Officer)
Lexaria Bioscience Corp.

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Lexaria Bioscience Corp. and will be retained by Lexaria Bioscience Corp. and furnished to the Securities and Exchange Commission or its staff upon request.