



Lexaria Bioscience Corp.

**1,444,741 Shares of Common Stock  
Pre-Funded Warrants to Purchase 113,702 Shares of Common Stock**

We are offering 1,444,741 shares of our common stock, par value \$0.001 per share, and pre-funded warrants to purchase 113,702 shares of our common stock (and the shares of common stock underlying such pre-funded warrants) directly to certain institutional investors pursuant to this prospectus supplement and the accompanying prospectus. The offering price of the shares and pre-funded warrants is \$2.31 and \$2.3099, respectively.

The purchase price of each pre-funded warrant is equal to the price per share of common stock, minus \$0.0001, and the remaining exercise price of each pre-funded warrant will equal \$0.0001 per share. The pre-funded warrants are immediately exercisable and may be exercised at any time until all of the pre-funded warrants are exercised in full. This prospectus supplement also relates to the offering of shares of common stock issuable upon exercise of such pre-funded warrants.

In a concurrent private placement, we are also selling to the investors private placement warrants to purchase 1,558,443 shares of our common stock at an exercise price of \$2.185 per share. The private placement warrants and the shares of common stock issuable upon the exercise of such warrants are not being registered under the Securities Act of 1933, as amended, or the Securities Act, and are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to an exemption from the registration requirements of the Securities Act provided in Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D promulgated thereunder. The private placement warrants are exercisable upon issuance and will expire five years from the issuance date.

Our common stock and public warrants are listed on the Nasdaq Capital Market under the symbols "LEXX" and "LEXXW", respectively. The last reported sale prices of our common stock and public warrants on the Nasdaq Capital Market on February 13, 2024, were \$2.46 per share and \$1.20 per public warrant, respectively.

As of February 14, 2024, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$24,995,696 based on 10,144,592 shares of common stock held by non-affiliates on such date and based on the last reported sale price of our common stock on the Nasdaq Capital Market on February 13, 2024, (a date that will be within 60 days of the date of this prospectus supplement) of \$2.46 per share. In no event will we sell securities pursuant to a Registration Statement on Form S-3 in a public primary offering with value exceeding more than one-third of our public float in any 12-month calendar period so long as our public float remains below \$75 million and General Instruction I.B.6 of Registration Statement on Form S-3 continues to apply to us. As of the date of this prospectus supplement, we have sold approximately \$2,011,082 of securities pursuant to General Instruction I.B.6. of Registration Statement on Form S-3 during the prior 12-month calendar period that ends on, and includes, the date of this prospectus supplement (but excluding this offering).

**Investing in our securities involves a high degree of risk. Before buying any of our securities, you should carefully read "Risk Factors" on page S-6 of this prospectus supplement, on page 8 of the accompanying prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus supplement and the accompanying prospectus.**

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We have engaged H.C. Wainwright & Co, LLC (the “Placement Agent”) to act as our exclusive Placement Agent in connection with this offering to use its “reasonable best efforts” to place the securities offered by this prospectus supplement. We have agreed to pay the Placement Agent the fees set forth in the table below.

	<b>Per Share</b>	<b>Per Pre-funded Warrant</b>	<b>Total</b>
Public Offering Price	\$ 2.31	\$ 2.3099	\$ 3,599,992
Placement Agent Fees <sup>(1)</sup>	\$ 0.143	\$ 0.143	\$ 222,000
Proceeds, before expenses, to us	\$ 2.167	\$ 2.167	\$ 3,377,992

(1) Includes a cash fee of 7.0% of the aggregate gross proceeds in this offering provided that a reduced cash fee of 6.0% is payable on the gross proceeds received from a certain investor. In addition, we have agreed to reimburse certain expenses of the Placement Agent in connection with the offering and to issue to the placement agent unregistered warrants to purchase a number of shares of common stock equal to 3.5% of the aggregate number of shares of common stock and pre-funded warrants sold in this offering. See “Plan of Distribution” for additional disclosure regarding Placement Agent’s compensation.

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement and the accompanying prospectus are truthful or complete. Any representation to the contrary is a criminal offense.**

Delivery of the shares of common stock and pre-funded warrants being offered pursuant to this prospectus supplement and the accompanying prospectus is expected to be made on or about February 16, 2024, subject to customary closing conditions.

**H.C. Wainwright & Co.**

**The date of this prospectus supplement is February 14, 2024**

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## ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission (the “SEC”) using a “shelf” registration process and consists of two parts. The first part is this prospectus supplement, which describes the specific terms of this offering. The second part, the accompanying base prospectus, gives more general information, some of which may not apply to this offering. Generally, when we refer only to the “prospectus,” we are referring to both parts combined.

This prospectus supplement may add, update or change information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and accompanying prospectus. If information in this prospectus supplement is inconsistent with the accompanying base prospectus or with any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, you should rely on this prospectus supplement; provided, however, that if any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in the accompanying prospectus — the statement in the document having the later date modifies or supersedes the earlier statement. The information contained in this prospectus supplement or the accompanying prospectus, or incorporated by reference herein or therein, is accurate only as of the respective dates thereof, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or of any sale of common stock. This prospectus supplement, the accompanying prospectus and the documents incorporated into each by reference include important information about us, the securities being offered and other information you should know before investing in our securities. You should also read and consider information in the documents we have referred you to in the sections of this prospectus supplement entitled “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference.”

You should rely only on the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectuses we may provide to you in connection with this offering. Neither we nor the Placement Agent has authorized any other person to provide you with any information that is different. If anyone provides you with different or inconsistent information, you should not rely on it. We and the Placement Agent take no responsibility for and can provide no assurance as to the reliability of, any other information that others may give you. We are offering to sell, and seeking offers to buy, our securities only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the offering of securities covered hereby in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of securities covered hereby and the distribution of this prospectus supplement outside the United States. This prospectus supplement does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

This prospectus supplement contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the section entitled “Where You Can Find More Information.”

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus supplement or the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless otherwise expressly indicated or the context otherwise requires, we use the terms “Lexaria,” the “Company,” “we,” “us,” “our” or similar references to refer to Lexaria Bioscience Corp. and its subsidiaries.

We are not, and the Placement Agent is not, making an offer or sale of shares of our securities in any jurisdiction where such offer or sale is not permitted. We are not making any representation to you regarding the legality of an investment in our securities by you under applicable laws. You should consult with your own advisors as to legal, tax, business, financial and related aspects of an investment in our securities.

This prospectus supplement and the information incorporated herein by reference include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus supplement and the information incorporated herein by reference are the property of their respective owners.

## PROSPECTUS SUMMARY

*This summary highlights selected information appearing elsewhere in this prospectus supplement or incorporated by reference in this prospectus supplement and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus supplement, and the accompanying prospectus, including the risks of investing in our securities discussed under the heading “Risk Factors” contained herein and under similar headings in the accompanying base prospectus, and the documents incorporated by reference herein and therein, including in our Annual Report on Form 10-K for the fiscal year ending August 31, 2023 (the “2023 Form 10-K”). Prospective purchasers of our securities should also carefully read the information incorporated by reference in this prospectus supplement and the accompanying prospectus, including our consolidated financial statements, and the exhibits to the registration statement of which the accompanying prospectus is a part.*

### Overview

Lexaria 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.

### Patents

Our current patent portfolio includes patent family applications or grants pertaining to our method of improving bioavailability and palatability, and the use of DehydraTECH as a delivery platform for a wide variety of APIs including, but not limited to, fat soluble vitamins; anti-viral drugs; phosphodiesterase inhibitors; human hormones; regulated cannabinoids, and nicotine and its analogs.

We continue to pursue patent protection in many countries around the world as vigorously as we are able, since the successful granting of more of those applications could lead to material increases in shareholder value. The Company currently has a multitude of patent applications pending worldwide.

The Company has patents issued in the United States, Canada, Australia, Europe, India, Mexico, and Japan.

### Research & Development

Lexaria is advancing several R&D activities in both preclinical and clinical programs. Currently, our primary research program is the investigation of cannabidiol (CBD) for the reduction of hypertension leading up to an expected upcoming application under the FDA for an Investigational New Drug (“IND”). Other programs include nicotine for oral pouches and prospective nicotine replacement therapy, hormones, diabetes, dementia and others. From time to time the Company will engage in contract R&D for third parties who are interested in evaluating DehydraTECH in their products.

Due to our expanding portfolio coverage, we continually examine accelerated timetable options for testing, research, and development of each API. We continue to devote an increasing proportion of our resources and focus towards pharmaceutical applications.

#### *Investigational New Drug*

The FDA provided Lexaria with a positive written response on August 10, 2022, from our pre-IND meeting regarding DehydraTECH-CBD for the treatment of hypertension. The FDA confirmed that it has agreed with Lexaria’s proposal to pursue a 505(b)(2) new drug application (“NDA”) regulatory pathway for our program. We continue working toward our Phase 1(b) IND study filing that we are designating HYPER-H23-1, pursuant to which we have: (i) selected InClin, Inc. as our contract research organization (“CRO”) to perform the study; (ii) completed the initial manufacturing work associated with the study; and (iii) in collaboration with our CRO, commenced certain administrative tasks associated with the study. On January 29, 2024 Lexaria submitted its IND application with the FDA. To date Lexaria has received a request for additional information to which it has responded. The FDA has until February 28, 2024 to provide Lexaria with any substantial concerns that would prevent the clinical trial from commencing, otherwise, the application for HYPER-H23-1 will be effective.

*HYPER-H21-4*

The first results of our hypertension study HYPER-H21-4 were announced on October 27, 2022, with the primary safety and efficacy objectives being met. The study showed, among other things, a sustained drop in blood pressure in normally active hypertensive patients following multiple weeks of oral cannabidiol (“CBD”) therapy, using Lexaria’s patented DehydraTECH-CBD capsule formulation.

On December 21, 2022, further results were released from this multi-week human clinical hypertension study, indicating superior CBD blood absorption levels from our patented DehydraTECH-CBD™ relative to those of published, pharmaceutical-grade CBD industry.

On February 21, 2023, the Company announced additional findings demonstrating a potentially novel mechanism of action in reducing blood pressure. These latest results from study HYPER-H21-4 imply that the antihypertensive effects of DehydraTECH-CBD may be explained, at least in part, by its interaction with the sympatho-chromaffin system via catestatin modulation. This suggests a potentially unique mechanistic benefit upon cardiovascular regulation with DehydraTECH-CBD treatment that has not previously been demonstrated, to our knowledge, with testing of CBD for blood pressure reduction.

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 data sets which further strengthens and supports the case for DehydraTECH-CBD offering distinctive mechanistic benefits for the treatment of hypertension.

*EPIL-A21-1*

In March 2022, Lexaria initiated an 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.

On November 29, 2022, Lexaria announced findings from the study indicating its patented DehydraTECH-CBD has demonstrated performance enhancements compared to one of the world’s leading anti-seizure medications, Epidiolex®, generally at a lower DehydraTECH-CBD dose.

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.

*DEM-A22-1*

On November 8, 2022, commencement of animal study program DEM-A22-1 was announced. 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.

*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 has determined it is planning to undertake a human diabetes clinical study to investigate whether any of these improvements will be evidenced in humans. Subject to raising sufficient funding and 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.

*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!<sup>TM</sup> brand manufactured by Altria; or Zyn<sup>TM</sup> brand manufactured by Swedish Match<sup>TM</sup>. Predetermined questionnaires for subjective evaluation were 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.

*HOR-A22-1*

In May 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.

**Corporate Information**

Our principal executive offices are located at #100 - 740 McCurdy Road, Kelowna, British Columbia, Canada, V1X 2P7. Our telephone number is 1-250-765-6424. We maintain a website at [www.lexariabioscience.com](http://www.lexariabioscience.com). The information contained on our website is not, and should not be interpreted to be, a part of this prospectus. 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.sedar.com](http://www.sedar.com).

## The Offering

<b>Issuer</b>	Lexaria Bioscience Corp., a Nevada corporation
<b>Securities Offered</b>	<ul style="list-style-type: none"><li>· 1,444,741 shares of common stock;</li><li>· Pre-funded warrants to purchase 113,702 shares of common stock at an exercise price of \$0.0001 per share. Each pre-funded warrant will be exercisable immediately upon issuance and will not expire until exercised in full; and</li><li>· 113,702 shares of common stock issuable upon exercise of such pre-funded warrants.</li></ul>
<b>Offering price per security</b>	\$2.31 per share of common stock and \$2.3099 per pre-funded warrant
<b>Common stock outstanding immediately before this offering</b>	10,763,230 shares <sup>(1)</sup>
<b>Common stock outstanding immediately after this offering</b>	12,321,673 shares (assuming exercise in full of all pre-funded warrants) <sup>(1)</sup>
<b>Use of Proceeds</b>	We estimate that the net proceeds from this offering will be approximately \$3.2 million after deducting offering costs associated with this offering (assuming no exercise of the pre-funded warrants issued in connection with this offering). We intend to use the net proceeds from this offering for research and development studies and the patent and legal costs associated thereto, and for general working capital purposes.
<b>Risk Factors</b>	Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page S-6 of this prospectus supplement, on page 7 of the accompanying prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus supplement and the accompanying prospectus, for a discussion of certain factors that you should carefully consider before deciding to invest in our securities.
<b>Nasdaq Capital Market Trading Symbol for our Common Stock</b>	LEXX
<b>Concurrent Private Placement</b>	In a concurrent private placement, we are selling to the purchasers of securities in this offering warrants to purchase up to 1,558,443 shares of our common stock at an exercise price of \$2.185 per share. We will receive proceeds from such warrants solely to the extent they are exercised for cash. The warrants and the shares of our common stock issuable upon the exercise of the warrants are not being offered pursuant to this prospectus supplement and the accompanying prospectus. The private placement warrants are exercisable immediately upon issuance and will expire five years from the issuance date. See “Private Placement Transaction.”

(1) The number of shares of our common stock outstanding immediately before this offering and to be outstanding after this offering is based on 10,763,230 shares of common stock outstanding as of February 14, 2024, but excludes the following as of such date:

- 485,936 shares of common stock issuable upon exercise of stock options, with a weighted average exercise price of \$3.36 per share, under our Equity Incentive Plan (the “Incentive Plan”);
- 5,537,152 shares of common stock issuable upon exercise of 5,537,152 outstanding warrants, with a weighted average exercise price of \$4.02 per share;
- up to an aggregate of 1,558,443 shares of common stock issuable upon exercise of the warrants issued in the private placement concurrent with this offering at an exercise price of \$2.185 per share; and
- up to an aggregate of 54,546 shares of common stock issuable upon exercise of the warrants to be issued to the placement agent in connection with this offering at an exercise price of \$2.8875 per share.



## RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks and uncertainties described under the heading “Risk Factors” contained in this prospectus supplement and discussed under the section entitled “Risk Factors” contained in our 2023 Form 10-K, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus supplement in their entirety, together with other information in this prospectus supplement, the documents incorporated by reference, the accompanying prospectus and any free writing prospectuses before making an investment decision. The risks described in these documents are not the only ones we face, but those that we consider to be material. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. Past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our securities to decline, resulting in a loss of all or part of your investment. Please also carefully read the section below entitled “Special Note Regarding Forward-Looking Statements.”

### Risks Related to Our Company

#### *Unfavorable U.S. or global economic conditions could adversely affect our business, financial condition, or results of operations.*

Our results of operations could be adversely affected by general conditions in the global economy and financial markets, including any resurgence of the COVID-19 pandemic, recent geopolitical events, unfavorable changes related to interest rates and rising inflation. The most recent global financial crisis caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn, such as the most recent global financial crisis, could result in a variety of risks to our business, including weakened demand for our technology and our ability to raise additional capital when needed on favorable terms, if at all. A weak or declining economy could strain our suppliers, possibly resulting in supply disruption, or cause delays in payments for our services by third-party payors or our collaborators. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

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

We currently have limited committed sources of capital, limited liquidity and have generated only minimal revenue from our business. After this offering, we expect our cash and cash equivalents will be sufficient to fund our operations through calendar year 2024. Therefore, we 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.

### Risks Related to this Offering and Ownership of Our Securities

#### *Our stock price is volatile and there is a limited market for our shares.*

The stock markets generally have experienced, and will probably continue to experience, extreme price and volume fluctuations that have affected the market price of the shares of many small-cap companies. These fluctuations have often been unrelated to the operating results of such companies and in recent times have been exacerbated by investors’ concerns stemming from the COVID-19 pandemic, geopolitical issues and changes in macroeconomic conditions. Factors that may affect the volatility of our stock price include the following:

- anticipated or actual fluctuations in our quarterly or annual operating results;
- our success, or lack of success, in developing and marketing our products and services;
- terrorist attacks, natural disasters and the effects of climate change, regional and global conflicts, sanctions, laws and regulations that prohibit or limit operations in certain jurisdictions, public health crises (such as the COVID-19 pandemic) or other such events impacting countries where we have operations;
- changes in macroeconomic conditions, including inflationary pressures;
- changes in financial estimates by us or of securities or industry analysts;
- the issuance of new or updated research reports by securities or industry analysts
- the announcement of new products, services, or technological innovations by us or our competitors;
- the announcement of new customers, partners or suppliers;
- the ability to collect our outstanding accounts receivable;
- changes in our executive leadership;
- regulatory developments in our industry affecting us, our customers or our competitors;
- competition;
- actual or purported “short squeeze” trading activity; and
- the sale or attempted sale of a large amount of common stock, including sales of common stock following exercises of outstanding warrants.

***We are currently listed on the Nasdaq Capital Market. If we are unable to maintain listing of our securities on the Nasdaq Capital Market or any stock exchange, our stock price could be adversely affected and the liquidity of our stock and our ability to obtain financing could be impaired and it may be more difficult for our shareholders to sell their securities.***

Although our common stock is currently listed on the Nasdaq Capital Market, we may not be able to continue to meet the exchange's minimum listing requirements or those of any other national exchange. On June 22, 2023, we received a deficiency letter from the Nasdaq Listing Qualifications Department of the Nasdaq Stock Market LLC notifying us that, for the 30 consecutive business day period preceding the date of the letter, the closing bid price for our common stock was below the minimum \$1.00 per share required for continued listing on the Nasdaq Capital Market pursuant to Nasdaq Listing Rule 5550(a)(2). The Nasdaq deficiency letter only pertains to our stock price, and there are no other deficiencies related to our ongoing listing on the Nasdaq Capital Market. In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we were given 180 calendar days, or until December 19, 2023, to regain compliance with Rule 5550(a)(2).

On August 24, 2023, we received a letter from the Nasdaq Listing Qualifications Department of the Nasdaq Stock Market LLC confirming that the closing bid for the Company's common stock during the ten (10) consecutive business days from August 10, 2023 to August 23, 2023 had been at or greater than \$1.00 and that the \$1.00 minimum bid price requirement set forth in Nasdaq Listing Rule 5550(a)(2) for continued listing on the Nasdaq Capital Market had been regained.

The delisting of our common stock from the Nasdaq Capital Market may make it more difficult for us to raise capital on favorable terms in the future. Such a delisting would likely result in a reduction in some or all of the following may occur, each of which could have a material adverse effect on our shareholders and may impair your ability to sell or purchase our common stock when you wish to do so:

- the liquidity of our common stock;
- the market price of our common stock;
- our ability to obtain financing for the continuation of our operations;
- the number of investors that will consider investing in our common stock;
- the number of market makers in our common stock;
- the availability of information concerning the trading prices and volume of our common stock; and
- the number of broker-dealers willing to execute trades in shares of our common stock.

Further, if we were to be delisted from the Nasdaq Capital Market and we are unable to obtain listing on another national securities exchange, our common stock would cease to be recognized as covered securities and we would be subject to regulation in each state in which we offer our securities. Moreover, there is no assurance that any actions that we take to maintain our compliance with the minimum bid price requirement would stabilize the market price or improve the liquidity of our common stock, prevent our common stock from falling below the minimum bid price required for continued listing again, or prevent future non-compliance with Nasdaq Capital Market's listing requirements.

***There is no public market for the pre-funded warrants being offered in this offering or the private warrants being sold in a private offering concurrently with this offering.***

There is no established public trading market for the pre-funded warrants being offered in this offering or the private warrants being offered in a private placement concurrently with this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the pre-funded warrants or private warrants on any national securities exchange or other nationally recognized trading system, including the Nasdaq Capital Market. Without an active trading market, the liquidity of the pre-funded warrants and private warrants will be limited.

***The pre-funded warrants purchased in this offering and the private warrants being sold in a private offering concurrently with this offering do not entitle the holder to any rights as common stockholders until the holder exercises the pre-funded warrant or private warrants for shares of our common stock.***

Until you acquire shares of our common stock upon exercise of your pre-funded warrants purchased in this offering or the private warrants being offered in a private placement concurrently with this offering, such pre-funded warrants or private warrants will not provide you any rights as a common stockholder, except as set forth therein. Upon exercise of your pre-funded warrants purchased in this offering or the private warrants being offered in a private placement concurrently with this offering, you will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs on or after the exercise date.

***We will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.***

We intend to use the net proceeds from this offering for working capital and general corporate purposes. We have considerable discretion in the application of the net proceeds of this offering. You will not have the opportunity, as part of your investment decision, to assess whether such proceeds are being used in a manner agreeable to you. You must rely on our judgment regarding the application of the net proceeds of this offering, which may be used for corporate purposes that do not improve our profitability or increase the price of our shares of common stock. Such proceeds may also be placed in investments that do not produce income or that lose value. The failure to use such funds by us effectively could have a material adverse effect on our business, financial condition, operating results and cash flow.

***You will experience immediate and substantial dilution in the net tangible book value per share of our common stock sold in this offering and may experience additional dilution of your investment in the future.***

Since the price per share of our common stock and pre-funded warrants offered is substantially higher than the net tangible book value per share of our common stock, you will suffer immediate and substantial dilution in the net tangible book value of the common stock you purchase in this offering or the common stock underlying the pre-funded warrants you purchase in this offering. Based on an offering price of \$2.31 per share and \$2.3099 per pre-funded warrant, if you purchase shares of common stock or pre-funded warrants in this offering, you will suffer immediate and substantial dilution of \$1.81 per share with respect to the net tangible book value of our common stock as of November 30, 2023, assuming full exercise of the pre-funded warrants. Furthermore, if outstanding warrants are exercised, as applicable, you could experience further dilution. See the section titled "Dilution" below for a more detailed discussion of the dilution you will incur if you purchase securities in this offering. Further, because we may need to raise additional capital to fund our anticipated level of operations, we may in the future sell substantial amounts of common stock or securities convertible into or exchangeable for common stock. These future issuances of equity or equity-linked securities, together with the exercise or conversion of outstanding options, warrants, notes and/or any additional shares issued in connection with acquisitions, if any, will likely result in further dilution to investors.

***You may experience future dilution as a result of future equity offerings and other issuances of our common stock or other securities. In addition, this offering and future equity offerings and other issuances of our common stock or other securities may adversely affect our common stock price.***

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. We may not be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by the investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock or securities convertible into common stock in future transactions may be higher or lower than the price per share in this offering. You will incur dilution upon exercise of any outstanding stock options, warrants or upon the issuance of shares of common stock under our stock incentive programs. In addition, the sale of shares in this offering and any future sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, could adversely affect the price of our common stock. We cannot predict the effect, if any, that market sales of those shares of common stock or the availability of those shares for sale will have on the market price of our common stock.

***Future sales, or the perception of future sales, by us or our stockholders in the public market could cause the market price of our common stock to decline, and any issuance of additional common stock, or securities convertible into common stock, could dilute common stockholders. We may issue additional common stock, or securities convertible into common stock, pursuant to our shelf registration statement upon exercise of outstanding warrants, for additional financing purposes, in connection with strategic transactions such as acquisitions or collaboration agreements, or otherwise, any of which could result in dilution to existing stockholders.***

The sale of shares of our common stock in the public market, or the perception that such sales could occur, could harm the prevailing market price of shares of our common stock. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

Shares of our common stock held by certain other of our stockholders are eligible for resale, subject to volume, manner of sale and other limitations under Rule 144 under the Securities Act (“Rule 144”). By exercising their registration rights and selling a large number of shares, these stockholders could cause the prevailing market price of our common stock to decline.

As restrictions on resale end or if these stockholders exercise their registration rights, the market price of shares of our common stock could drop significantly if the holders of these shares sell them or are perceived by the market as intending to sell them. These factors could also make it more difficult for us to raise additional funds through future offerings of shares of our common stock or other securities.

In addition, the shares of our common stock reserved for future issuance under our equity incentive plans will become eligible for sale in the public market once those shares are issued, subject to provisions relating to various vesting agreements, lock-up agreements and, in some cases, limitations on volume and manner of sale applicable to affiliates under Rule 144, as applicable. We have filed registration statements on Form S-8 under the Securities Act to register shares of our common stock issuable pursuant to our equity incentive plan and may in the future file one or more additional registration statements on Form S-8 for the same or similar purposes. Any such Form S-8 registration statements will automatically become effective upon filing. Accordingly, shares registered under such registration statements will be available for sale in the open market.

***Substantial future sales of shares of our common stock could cause the market price of our common stock to decline.***

We expect that significant additional capital will be needed in the near future to continue our planned operations. Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that such sales may have on the prevailing market price of our shares.

We have financed our operations, and we expect to continue to finance our operations, acquisitions, if any, and the development of strategic relationships by issuing equity, warrants and/or convertible securities, which could significantly reduce the percentage ownership of our existing stockholders. Further, any additional financing that we secure may require the granting of rights, preferences or privileges senior to, or pari passu with, those of our common stock. Additionally, we may finance strategic alliances and/or acquisitions by issuing our equity or equity-linked securities, which may result in additional dilution. Any issuances by us of equity securities may be at or below the prevailing market price of our common stock and in any event may have a dilutive impact on your ownership interest, which could cause the market price of our common stock to decline. We may also raise additional funds through the incurrence of debt or the issuance or sale of other securities or instruments senior to our shares of common stock. The holders of any securities or instruments we may issue may have rights superior to the rights of our holders of our common stock. If we experience dilution from issuance of additional securities and we grant superior rights to new securities over common stockholders, it may negatively impact the trading price of our shares of common stock.

## **SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This prospectus supplement, and the information incorporated by reference in this prospectus supplement, contains certain forward-looking statements that involve substantial risks and uncertainties. All statements contained in this prospectus and any documents we incorporate by reference, other than statements of historical facts, are forward-looking statements including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

The words “anticipate”, “believe”, “estimate”, “expect”, “intend”, “may”, “plan”, “predict”, “project”, “target”, “potential”, “will”, “would”, “could”, “should”, “continue” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, among other things, statements about: 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.

These forward-looking statements are only predictions and we may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, so you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and operating results. We have included important factors in the cautionary statements included in this prospectus that could cause actual future results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this prospectus supplement with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements whether as a result of new information, future events or otherwise, except as required by applicable law.

### **USE OF PROCEEDS**

We estimate that the net combined proceeds from this offering will be approximately \$3.2 million, after deducting the Placement Agent fees and the estimated offering expenses payable by us. This estimate excludes the proceeds, if any, from the exercise of the private placement warrants sold in the concurrent private placement. If all of the pre-funded warrants sold in this offering and the private placement warrants sold in the concurrent private placement were exercised for cash, we would receive additional net proceeds of approximately 3.4 million, not accounting for offering and issuance costs. We cannot predict when or if these pre-funded warrants or private placement warrants will be exercised. It is possible that these pre-funded warrants and private placement warrants may never be exercised.

As of the date of this prospectus supplement, we cannot predict with certainty all the uses for the net proceeds to be received upon the completion of this offering. We intend to use the net proceeds of this offering for research and development studies and the patent and legal costs associated thereto, and for general working capital purposes. The timing and amount of our actual expenditures will be based on many factors; therefore, unless otherwise indicated in the prospectus supplement, our management will have broad discretion to allocate the net proceeds of our offerings. The specific allocations of the proceeds we receive from our sale of our securities will be described in the applicable prospectus supplement.

**CAPITALIZATION**

The following table sets forth our consolidated cash and cash equivalents and capitalization as of November 30, 2023, on an actual basis and as adjusted basis to reflect the sale of (i) 1,444,741 shares of common stock by us at the offering price of \$2.31 per share, and (ii) sale and exercise of pre-funded warrants to purchase 113,702 shares of our common stock at \$2.3099 per share.

You should read this table together with the section of this prospectus supplement entitled “Use of Proceeds” and with the financial statements and related notes and the other information that we incorporated by reference into this prospectus supplement and the accompanying prospectus, including our Annual Report on Form 10-K and Quarterly Reports on Form 10-Q that we file from time to time with the SEC.

	<b>As of November 30, 2023</b>	
	<b>Unaudited, Actual</b>	<b>Unaudited, As Adjusted</b>
Cash and cash equivalents	\$ 1,954,165	\$ 5,142,158
Total Current Liabilities	124,523	124,523
Stockholders' Equity:		
Common stock; 220,000,000 authorized; 10,311,641 issued and outstanding as of November 30, 2023	10,311	11,870
Additional paid-in capital	50,670,556	53,856,989
Accumulated deficit	(46,942,750 )	(46,942,750 )
Accumulated Other Comprehensive Income	4,372	4,372
Non-controlling Interest	(369,755 )	(369,755 )
Total Stockholders' Equity	<u>\$ 3,372,734</u>	<u>\$ 6,560,727</u>

The above discussion is based on 10,311,641 shares of our common stock outstanding as of November 30, 2023, and excludes, as of that date, the following:

- 485,936 shares of common stock issuable upon exercise of stock options, with a weighted average exercise price of \$3.36 per share, under our Incentive Plan;
- 5,537,152 shares of common stock issuable upon exercise of 5,537,152 outstanding warrants, with a weighted average exercise price of \$4.02 per share;
- up to an aggregate of 1,558,443 shares of common stock issuable upon exercise of the warrants issued in the private placement concurrent with this offering; and
- up to an aggregate of 54,546 shares of common stock issuable upon exercise of the warrants to be issued to the placement agent in connection with this offering at an exercise price of \$2.8875 per share

## DILUTION

If you invest in this offering, your ownership interest will be diluted to the extent of the difference between the offering price per share and/or pre-funded warrant and the as adjusted net tangible book value per share after giving effect to this offering. We calculate net tangible book value per share by dividing the net tangible book value, which is tangible assets less total liabilities, by the number of outstanding shares of our common stock. Dilution represents the difference between the amount per share paid by purchasers of shares in this offering (including shares of common stock issuable upon exercise of the pre-funded warrants) and the as adjusted net tangible book value per share of our common stock immediately after giving effect to this offering. Our net tangible book value as of November 30, 2023, was approximately **\$2,721,792**, or **\$0.26** per share of common stock.

After giving effect to the sale of the shares in this offering at the offering price of \$2.31 per share, and the full exercise of the pre-funded warrants, after deducting the estimated placement agent fees and estimated offering expenses payable by us, our as adjusted net tangible book value would have been \$5,909,785 or approximately \$0.50 per share of common stock, as of November 30, 2023. This represents an immediate increase in net tangible book value of approximately \$0.24 per share to existing stockholders and an immediate dilution of approximately \$1.81 per share to investors in this offering. The following table illustrates dilution after giving effect to the sale of (i) 1,444,741 shares of common stock by us at the offering price of \$2.31 per share, and (ii) the sale and full exercise of pre-funded warrants to purchase 113,702 shares of our common stock at \$2.3099 per share, less the Placement Agent fees and estimated offering expenses payable by us.

Offering price per share	\$	2.31
Net tangible book value per share as of November 30, 2023	\$	0.26
Increase in net tangible book value per share attributable to this offering	\$	0.24
As adjusted net tangible book value per share as of November 30, 2023 after giving effect to this offering	\$	0.50
Dilution in as adjusted net tangible book value per share to investors participating in this offering	\$	1.81

The above discussion is based on 10,311,641 shares of our common stock outstanding as of November 30, 2023, and excludes, as of that date, the following:

485,936 shares of common stock issuable upon exercise of stock options, with a weighted average exercise price of \$3.36 per share, under our Incentive Plan;

5,537,152 shares of common stock issuable upon exercise of 5,537,152 outstanding warrants, with a weighted average exercise price of \$4.02 per share;

- up to an aggregate of 1,558,443 shares of common stock issuable upon exercise of the warrants issued in the private placement concurrent with this offering; and
- up to an aggregate of 54,546 shares of common stock issuable upon exercise of the warrants to be issued to the placement agent in connection with this offering at an exercise price of \$2.8875 per share.

## DESCRIPTION OF SECURITIES THAT WE ARE OFFERING

We are offering 1,444,741 shares of our common stock, par value \$0.001 per share, and pre-funded warrants to purchase 113,702 shares of our common stock (and the shares of common stock underlying such pre-funded warrants) directly to certain institutional investors pursuant to this prospectus supplement and the accompanying prospectus. The offering price of the shares and pre-funded warrants is \$2.31 and \$2.3099, respectively.

### Description of our Common Stock

The material terms and provisions of our common stock are described under the caption “Description of Capital Stock” beginning on page 9 of the accompanying prospectus.

### Description of Pre-Funded Warrants

The following summary of certain terms and provisions of the pre-funded warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by the provisions of, the pre-funded warrant, the form of which will be filed as an exhibit to our Current Report on Form 8-K. You should carefully review the terms and provisions of the form of pre-funded warrant for a complete description of the terms and conditions of the pre-funded warrants.

The term “pre-funded” refers to the fact that the purchase price of our common stock in this offering includes almost the entire exercise price that will be paid under the pre-funded warrants, except for a nominal remaining exercise price of \$0.0001. The purpose of the pre-funded warrants is to enable the investors that may have restrictions on its ability to beneficially own more than 4.99% (or, upon election of the holder, 9.99%) of our outstanding common stock following the consummation of this offering the opportunity to invest capital into our Company without triggering their ownership restrictions, by receiving pre-funded warrants in lieu of our common stock which would result in such ownership of more than 4.99% (or 9.99%), and receive the ability to exercise their option to purchase the shares underlying the pre-funded warrants at such nominal price at a later date.

*Duration and Exercise Price.* The pre-funded warrants offered hereby will entitle the holder thereof to purchase up to an aggregate of 113,702 shares of our common stock at an initial exercise price of \$0.0001 per share, commencing on the date of issuance, and may be exercised at any time until the pre-funded warrants are exercised in full. In lieu of making the cash payment otherwise contemplated to be made to us upon the exercise of a pre-funded warrant in payment of the aggregate exercise price, the holder may, in its sole discretion, elect to exercise the pre-funded warrant through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of our common stock determined according to the formula set forth in the pre-funded warrant. If we do not issue the shares in a timely fashion, the pre-funded warrant contains certain damages provisions. No fractional common shares will be issued in connection with the exercise of a pre-funded warrant. The pre-funded warrants will be issued separately from the common stock and may be transferred separately immediately thereafter. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price.

*Exercise Limitation.* The holder will not have the right to exercise any portion of the pre-funded warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election of the holder, 9.99%) of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. However, the holder may increase or decrease such percentage, provided that any increase will not be effective until the 61st day after such election.

*Transferability.* Subject to applicable laws, the pre-funded warrants may be offered for sale, sold, transferred or assigned without our consent.

*Exchange Listing.* There is no established trading market for the pre-funded warrants and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the pre-funded warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the pre-funded warrants will be limited.

*Fundamental Transactions.* If a fundamental transaction occurs, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the pre-funded warrants with the same effect as if such successor entity had been named in the pre-funded warrant itself. If holders of our common stock are given a choice as to the securities, cash or property to be received in a fundamental transaction, then the holder shall be given the same choice as to the consideration it receives upon any exercise of the pre-funded warrant following such fundamental transaction.

*Rights as a Stockholder.* Except as otherwise provided in the pre-funded warrants or by virtue of such holder’s ownership of shares of our common stock, the holder of a pre-funded warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the pre-funded warrant.



## PRIVATE PLACEMENT TRANSACTION

Concurrently with the sale of shares of common stock and pre-funded warrants in this offering, we will issue and sell to the investors in this offering the private placement warrants to purchase up to an aggregate of 1,558,443 shares of common stock at an exercise price equal to \$2.185 per share.

The private placement warrants and the shares of common stock issuable upon the exercise of such warrants have not been registered under the Securities Act, are not being offered pursuant to this prospectus supplement and the accompanying prospectus, and are instead being offered pursuant to an exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. Accordingly, purchasers may only sell the private placement warrants and the shares of common stock issued upon exercise of the private placement warrants pursuant to an effective registration statement under the Securities Act covering the resale of those shares, an exemption under Rule 144 under the Securities Act or another applicable exemption under the Securities Act.

The following sets forth the material terms of the private placement warrants.

**Exercisability.** The private placement warrants are exercisable immediately upon issuance and will expire five years from the issuance date. The private placement warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the shares of common stock underlying the private placement warrants under the Securities Act is effective and available for the issuance of such shares, or an exemption from registration under the Securities Act is available for the issuance of such shares, by payment in full in immediately available funds for the number of shares of common stock purchased upon such exercise. If a registration statement registering the issuance of the shares of common stock underlying the private placement warrants under the Securities Act is not effective or available, the holder may, in its sole discretion, elect to exercise the private placement warrants through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the warrant.

**Exercise Limitation.** A holder will not have the right to exercise any portion of the private placement warrants if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election of the holder, 9.99%) of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the private placement warrants. However, any holder may increase or decrease such percentage, provided that any increase will not be effective until the 61st day after such election.

**Exercise Price Adjustment.** The exercise price of the private placement warrants is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

**Exchange Listing.** There is no established trading market for the private placement warrants and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the private placement warrants on any national securities exchange or other trading market.

**Fundamental Transactions.** If a fundamental transaction occurs, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the private placement warrants with the same effect as if such successor entity had been named in the warrant itself. If holders of our common stock are given a choice as to the securities, cash or property to be received in a fundamental transaction, then the holder shall be given the same choice as to the consideration it receives upon any exercise of the private placement warrants following such fundamental transaction. Additionally, as more fully described in the private placement warrants, in the event of certain fundamental transactions, the holders of those warrants will be entitled to receive consideration in an amount equal to the Black Scholes value of the remaining unexercised portion of the warrants on the date of consummation of such transaction.

**Rights as a Stockholder.** Except as otherwise provided in the private placement warrants or by virtue of such holder’s ownership of shares of our common stock, the holder of private placement warrants will not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the warrant.

**Resale/Registration Rights.** We are required within 30 days of the offering to file a registration statement on Form S-1 (or other appropriate form if the Company is not then S-1 eligible) providing for the resale of the shares of common stock issued and issuable upon the exercise of the private placement warrants. We are required to use commercially reasonable efforts to cause such registration to become effective within 60 days of the offering (or within 90 calendar days following the offering in case of “full review” of such registration statement by the SEC) and to keep such registration statement effective at all times until no investor owns any warrants or shares issuable upon exercise thereof.

#### PLAN OF DISTRIBUTION

We have engaged H.C. Wainwright & Co., LLC (the “Placement Agent” or “HCW”) to act as our exclusive placement agent, on a reasonable best-efforts basis, in connection with this offering pursuant to this prospectus supplement and accompanying prospectus. The terms of this offering are subject to market conditions and negotiations between us, the Placement Agent, and prospective investors. The engagement agreement between us and HCW dated February 12, 2024 (“Engagement Agreement”) does not give rise to any commitment by the Placement Agent to purchase any of the securities, and the Placement Agent will have no authority to bind us by virtue of the Engagement Agreement. The Placement Agent is not purchasing the securities offered by us in this offering and is not required to sell any specific number or dollar amount of securities but will assist us in this offering on a reasonable best-efforts basis. Further, the Placement Agent does not guarantee that it will be able to raise new capital in any prospective offering. The Placement Agent may engage sub-agents or selected dealers to assist with the offering.

We have entered into a securities purchase agreement directly with the investors in connection with this offering, and we will only sell to investors who have entered into the securities purchase agreement. We may not sell the entire amount of shares of our common stock and pre-funded warrants offered pursuant to this prospectus supplement.

We expect to deliver the shares of common stock and pre-funded warrants being offered pursuant to this prospectus supplement on or about February 16, 2024

#### Fees and Expenses

Pursuant to our Engagement Agreement, we have agreed to pay the Placement Agent fees set forth in the table below.

	Per Share	Per Pre-funded Warrant	Total
Public Offering Price	\$ 2.31	\$ 2.3099	\$ 3,599,992
Placement Agent Fees <sup>(1)</sup>	\$ 0.143	\$ 0.143	\$ 222,000
Proceeds, before expenses, to us <sup>(1)</sup>	\$ 2.167	\$ 2.167	\$ 3,377,992

(1) We have agreed to pay the Placement Agent a cash fee of 7% on the aggregate gross proceeds in this offering, provided that a reduced cash fee of 6.0% is payable on the gross proceeds received from a certain investor. We have agreed to reimburse the Placement Agent for (i) a non-accountable expense allowance of \$20,000, (ii) up to \$50,000 for fees and expenses of legal counsel and other out-of-pocket expenses and (iii) \$15,950 for clearing expenses.

The Placement Agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the shares sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the Placement Agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares by the Placement Agent acting as principal. Under these rules and regulations, the Placement Agent:

- may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

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This prospectus supplement and the accompanying prospectus may be made available in electronic format on websites or through other online services maintained by the Placement Agent or by an affiliate. Other than this prospectus supplement and the accompanying prospectus, the information on the Placement Agent's website and any information contained in any other website maintained by the Placement Agent is not part of this prospectus supplement and the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus form a part, has not been approved and/or endorsed by us or the Placement Agent, and should not be relied upon by investors.

The foregoing does not purport to be a complete statement of the terms and conditions of the Engagement Agreement and the SPA. Copies of the Engagement Agreement and the SPA with the purchasers will be included as exhibits to our Current Report on Form 8-K to be filed with the SEC and incorporated by reference into the registration statement of which this prospectus supplement and the accompanying prospectus form a part. See "Information Incorporated by Reference" and "Where You Can Find More Information."

### **Placement Agent Warrants**

In addition, we have agreed to issue to the Placement Agent, or its designees, at the closing of this offering, warrants to purchase 3.5% of the number of shares of our common stock and pre-funded warrants sold in this offering (or warrants to purchase up to 54,546 shares of our common stock), at an exercise price of \$2.8875 per share (representing 125% of the offering price per share and accompanying warrant).

The placement agent warrants will be exercisable immediately upon issuance and will expire five years from the commencement of sales in the offering.

Except as provided above, the placement agent warrants will have substantially the same terms as the warrants issued to the investors in the private placement offering.

### **Tail Fee**

We have also agreed to pay the placement agent, subject to certain exceptions, a tail fee equal to the cash and warrant compensation in this offering, if any investor, who was contacted or introduced to us by placement agent during the term of the engagement, provides us with capital in any public or private offering or other financing or capital raising transaction during the 6-month period following the termination or expiration of our Engagement Agreement.

### **Right of First Refusal**

If, from the date hereof until the 6-month anniversary following consummation of this offering, we or any of our subsidiaries (a) decides to finance or refinance any indebtedness, the Placement Agent (or any affiliate designated by the Placement Agent) shall have the right to act as sole book-runner, sole manager, sole placement agent or sole agent with respect to such financing or refinancing; or (b) decides to raise funds by means of a public offering (including at-the-market facility) or a private placement or any other capital-raising financing of equity, equity-linked or debt securities, the Placement Agent (or any affiliate designated by the Placement Agent) shall have the right to act as sole book-running manager, sole underwriter or sole placement agent for such financing.

### **Indemnification**

We have agreed to indemnify HCW against specified liabilities, including liabilities under the Securities Act, and to contribute to payments HCW may be required to make in respect thereof.

### **Lock-Up Agreements**

In addition, pursuant to certain "lock-up" agreements (each, a "Lock-Up Agreement") that were required to be entered into as a condition to the closing of the SPA, our officers and directors have agreed, for a period of 30 days from the closing date of this offering, not to engage in any of the following, whether directly or indirectly: offer to sell, sell, contract to sell, pledge, grant, lend, or otherwise transfer or dispose of our common stock or any securities convertible into or exercisable or exchangeable for common stock of the Company (the "Lock-Up Securities"); enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Lock-Up Securities; make any demand for or exercise any right or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any Lock-Up Securities; enter into any transaction, swap, hedge, or other arrangement relating to any Lock-Up Securities subject to customary exceptions; or publicly disclose the intention to do any of the foregoing.

From the date hereof until 60 days after the after the closing of this offering, subject to certain exceptions, we may not issue, enter into any agreement to issue or announce the issuance or proposed issuance of any shares of common stock or common stock equivalents, or file any registration statement or any amendment or supplement thereto. In addition, from the date of this prospectus supplement until 180 days after the after the closing of this offering we are prohibited from effecting or entering into an agreement to effect any issuance of common stock or common stock equivalents involving a variable rate transaction.

### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is Computershare Trust Company of Canada, Inc., 510 Burrard Street, 3rd Floor, Vancouver, BC V6C 3B9, Tel: 1-604-661-9400.

### **Listing**

Our common stock is traded on the Nasdaq Capital Market under the symbol "LEXX".

## LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon for us by Sichenzia Ross Ference Carmel LLP. Ellenoff Grossman & Schole LLP, New York, New York is acting as counsel to the Placement Agent in this offering.

## EXPERTS

The consolidated financial statements of the Company as of and for the year ended August 31, 2023, included in our Annual Report on Form 10-K for the year ended August 31, 2023, have been audited by MaloneBailey, LLP, independent registered public accounting firm, as stated in their report, and have been incorporated by reference herein in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

The consolidated financial statements of the Company for the year ended August 31, 2022, included in our Annual Report on Form 10-K for the year ended August 31, 2023, have been audited by Davidson & Company LLP, independent registered public accounting firm, as stated in their report, and have been incorporated by reference herein in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

## WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is <http://www.sec.gov>.

This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Other documents establishing the terms of the offered securities are or may be filed as exhibits to the registration statement. Statements in this prospectus supplement and the accompanying prospectus about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may obtain a copy of the registration statement through the SEC's website, as provided above.

We maintain a website at [www.lexariabioscience.com](http://www.lexariabioscience.com). None of the information contained on, or that may be accessed through, our website is a prospectus or constitutes part of, or is otherwise incorporated into, this prospectus supplement or the accompanying prospectus.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC's rules allow us to "incorporate by reference" information into this prospectus supplement, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus supplement, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in this prospectus supplement or a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or a subsequently filed document incorporated by reference modifies or replaces that statement.

This prospectus supplement and the accompanying prospectus incorporate by reference the documents set forth below that have previously been filed with the SEC:

- our Annual Report on [Form 10-K](#) for the year ended August 31, 2022, filed on November 28, 2022, as amended by [Amendment No. 1](#) to the Annual Report on Form 10-K for the year ended August 31, 2022, filed on December 6, 2022 and our Annual Report on [Form 10-K](#) for the year ended August 31, 2023, filed on November 20, 2023;
- our Quarterly Report on [Form 10-Q](#) for the period ended November 30, 2023 filed on January 12, 2024;
- our Current Reports on Form 8-K, filed on [October 3, 2023](#), [October 12, 2023](#), [October 16, 2023](#), [October 18, 2023](#), [November 3, 2023](#), [January 24, 2024](#) and [January 30, 2024](#);
- our [Form 8-A12B](#), filed on January 11, 2021; and
- our [Form 8-A12G](#), filed on July 14, 2006.

We also incorporate by reference all documents we file pursuant to Section 13(a), 13(c), 14 or 15 of the Exchange Act (other than any portions of filings that are furnished rather than filed pursuant to Items 2.02 and 7.01 of a Current Report on Form 8-K) after the date of the initial registration statement of which this prospectus is a part and prior to effectiveness of such registration statement. All documents we file in the future pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of the offering are also incorporated by reference and are an important part of this prospectus.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

We will furnish without charge to each person, including any beneficial owner, to whom a prospectus is delivered, upon written or oral request, a copy of any or all of the documents incorporated by reference into this prospectus supplement but not delivered with the prospectus supplement, including exhibits that are specifically incorporated by reference into such documents. You should direct any requests for documents to:

Lexaria Bioscience Corp.  
#100 – 740 McCurdy Road  
Kelowna, British Columbia V1X 2P7  
Canada  
Attn: Chief Executive Officer

PROSPECTUS



Lexaria Bioscience Corp.

**\$50,000,000**  
**Common Stock**  
**Warrants**  
**Rights**  
**Units**

From time to time, we may offer and sell up to \$50,000,000 in aggregate of the securities described in this prospectus separately or together in any combination, in one or more classes or series, in amounts, at prices and on terms that we will determine at the time of the offering.

This prospectus provides a general description of the securities we may offer. We may provide specific terms of securities to be offered in one or more supplements to this prospectus. We may also provide a specific plan of distribution for any securities to be offered in a prospectus supplement. Prospectus supplements may also add, update or change information in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement, together with any documents incorporated by reference herein, before you invest in our securities.

Our common stock and public warrants are listed on the Nasdaq Capital Market under the symbols "LEXX" and "LEXXW", respectively. The last reported sale prices of our common stock and public warrants on the Nasdaq Capital Market on January 27, 2022 were \$4.17 per share and \$1.26 per public warrant, respectively. The aggregate market value of our outstanding common stock held by non-affiliates is \$22,436,589.09 based on 5,950,998 shares of outstanding common stock, of which 570,521 shares are held by affiliates, and a per share price of \$4.17, which was the closing sale price of our common stock as quoted on the Nasdaq Capital Market on January 27, 2022. During the 12 calendar month period that ends on, and includes, the date of this prospectus, we have not offered and sold any of our securities pursuant to General Instruction I.B.6 of Form S-3.

**Investing in any of our securities involves a high degree of risk. Please read carefully the section entitled "Risk Factors" on page 8 of this prospectus, the "Risk Factors" section contained in the applicable prospectus supplement and the information included and incorporated by reference in this prospectus.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

**The date of this prospectus is February 4, 2022.**

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## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration or continuous offering process. Under this shelf registration process, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offerings up to a total aggregate offering price of \$50,000,000.

This prospectus provides a general description of the securities we may offer. We may provide specific terms of securities to be offered in one or more supplements to this prospectus. We may also provide a specific plan of distribution for any securities to be offered in a prospectus supplement. Prospectus supplements may also add, update or change information in this prospectus. If the information varies between this prospectus and the accompanying prospectus supplement, you should rely on the information in the accompanying prospectus supplement.

Before purchasing any securities, you should carefully read both this prospectus and any prospectus supplement, together with the additional information described under the heading “Information We Incorporate by Reference.” You should rely only on the information contained or incorporated by reference in this prospectus, any prospectus supplement and any free writing prospectus prepared by or on behalf of us or to which we have referred you. Neither we nor any underwriters have authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. You should assume that the information contained in this prospectus, any prospectus supplement or any free writing prospectus is accurate only as of the date on its respective cover, and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates. This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find More Information.”

This prospectus and any applicable prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate. We are not making offers to sell common stock or any other securities described in this prospectus in any jurisdiction in which an offer or solicitation is not authorized or in which we are not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation.

Unless otherwise expressly indicated or the context otherwise requires, we use the terms “Lexaria,” the “Company,” “we,” “us,” “our” or similar references to refer to Lexaria Bioscience Corp. and its subsidiaries.



## WHERE YOU CAN FIND MORE INFORMATION

We have filed our registration statement on Form S-3 with the SEC under the Securities Act of 1933, as amended, or the Securities Act. We also file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document that we file with the SEC, including the registration statement and the exhibits to the registration statement, at the SEC's Public Reference Room located at 100 F Street, N.E., Washington D.C. 20549. You may obtain further information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Our SEC filings are also available to the public at the SEC's web site at [www.sec.gov](http://www.sec.gov). These documents may also be accessed on our web site at [www.lexariabioscience.com](http://www.lexariabioscience.com). Information contained on our web site is not incorporated by reference into this prospectus and you should not consider information contained on our web site to be part of this prospectus.

This prospectus and any prospectus supplement are part of a registration statement filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us as indicated above. Other documents establishing the terms of the offered securities are filed as exhibits to the registration statement or will be filed through an amendment to our registration statement on Form S-3 or under cover of a Current Report on Form 8-K and incorporated into this prospectus by reference.

## INFORMATION WE INCORPORATE BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement. We incorporate by reference in this prospectus the following information (other than, in each case, documents or information deemed to have been furnished and not filed in accordance with SEC rules):

- our Annual Report on [Form 10-K](#) for the fiscal year ended August 31, 2021 filed with the SEC on November 29, 2021;
- our Quarterly Report on [Form 10-Q](#) for the fiscal quarter ended November 30, 2021 filed with the SEC on January 14, 2022;
- our Current Reports on Form 8-K filed with the SEC on [November 10, 2021](#), [December 16, 2021](#), and [January 4, 2022](#).
- our [Form 8-A12B](#), filed with the SEC on January 11, 2021; and
- our [Form 8-A12G](#), filed with the SEC on July 14, 2006.

We also incorporate by reference each of the documents that we file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, (i) after the date of this prospectus and prior to effectiveness of this registration statement on Form S-3 and (ii) on or after the date of this prospectus and prior to the termination of the offerings under this prospectus and any prospectus supplement. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements. We will not, however, incorporate by reference in this prospectus any documents or portions thereof that are not deemed "filed" with the SEC, including any information furnished pursuant to Item 2.02 or Item 7.01 of our Current Reports on Form 8-K after the date of this prospectus unless, and except to the extent, specified in such Current Reports.

We will provide to each person, including any beneficial owner, to whom a prospectus (or a notice of registration in lieu thereof) is delivered a copy of any of these filings (other than an exhibit to these filings, unless the exhibit is specifically incorporated by reference as an exhibit to this prospectus) at no cost, upon a request to us by writing or telephoning us at the following address and telephone number:

Lexaria Bioscience Corp.  
#100-740 McCurdy Road, Kelowna  
British Columbia, Canada V1X 2P7  
1-250-765-6424

#### **SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This prospectus, including the documents incorporated by reference herein, may contain or incorporate “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934. In this context, forward-looking statements mean statements related to future events, may address our expected future business and financial performance, and often contain words such as “expects”, “anticipates”, “intends”, “plans”, “believes”, “will”, “should”, “could”, “would” or “may” and other words of similar meaning. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. For us, particular risks and uncertainties that could cause our actual future results to differ materially from those expressed in our forward-looking statements include but are not limited to the following, which may be amplified by the novel coronavirus (COVID-19) pandemic: changes in the market acceptance of our products, increased levels of competition, changes in political, economic or regulatory conditions generally and in the markets in which we operate, our relationships with our key customers, our ability to retain and attract senior management and other key employees, our ability to quickly and effectively respond to new technological developments, our ability to protect our trade secrets or other proprietary rights, operate without infringing upon the proprietary rights of others and prevent others from infringing on our proprietary rights, and other risks and uncertainties discussed in this and our other filings with the SEC.

These factors may not constitute all factors that could cause actual results to differ from those discussed in any forward-looking statement. All written and oral forward-looking statements attributable to us, or persons acting on our behalf, are expressly qualified in their entirety by the cautionary statements disclosed under “Item 1A. Risk Factors,” in our Annual Report on Form 10-K for the year ended August 31, 2021, as such risk factors may be amended, supplemented or superseded from time to time by other reports we file with the SEC, including subsequent Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, and in any prospectus supplement. Accordingly, forward-looking statements should be not be relied upon as a predictor of actual results. Readers are urged to carefully review and consider the various disclosures made in this prospectus and in our other filings with the SEC that attempt to advise interested parties of the risks and factors that may affect our business. We do not undertake to update our forward-looking statements to reflect events or circumstances that may arise after the date of this prospectus, except as required by law.

**lexaria bioscience corp.**

We are a biotechnology company seeking to enhance the bioavailability of a broad variety of active pharmaceutical ingredients (“APIs”) with our DehydraTECH™ drug delivery technology. DehydraTECH combines lipophilic APIs with specific fatty acid and carrier compounds thereby improving the way APIs enter the bloodstream while increasing the effectiveness of fat-soluble active molecules allowing lowering overall dosing and promoting healthier oral ingestion methods. DehydraTECH can be used with a wide variety of APIs encompassing fat-soluble vitamins, non-steroidal anti-inflammatory drugs (“NSAIDs”) pain medications, hormones, phosphodiesterase inhibitors, antivirals, nicotine and its analogs, and all cannabinoids including tetrahydrocannabinol (“THC”) for a variety of potential therapeutic indications, including hypertension, SARS-CoV-2/COVID-19 and HIV/AIDS. Our technology applies to a host of different ingestible or topically administered product formats including foods, beverages, oral suspensions, tablets, capsules, creams, lotions, and skin patches.

We began filing patents for DehydraTECH in 2014 with two initial US provisional patent application filings by the original inventors Poppy’s Teas LLC, which we acquired by way of exclusive, worldwide license rights and controlling interest in the founding company. We have since increased the number of patent applications to approximately 60 with 23 patents granted worldwide to date. In addition to the US patent filings, we have also pursued international patent protection through filings under the Patent Cooperation Treaty, followed by national filings in over 40 jurisdictions of highest commercial potential thereunder. Our patent family includes intellectual property addressing the manufacturing, formulations, and processing methods used to combine the long chain fatty acids with active pharmaceutical ingredients.

Our patent applications developed from our Research and Development programs (“R&D”) currently include fat-soluble versions of vitamins, nicotine, cannabinoids, hormones, phosphodiesterase inhibitors, and antivirals. 2018 animal studies demonstrated a propensity for DehydraTECH technology to elevate the quantity of drug delivered across the blood-brain-barrier. This expanded our patent applications and opened possibilities for improved delivery of certain central nervous system-targeted drugs that require additional R&D.

In a human clinical study performed in 2018 and published in 2019 in a peer reviewed medical journal, *Advances in Therapy* titled “Examination of a New Delivery Approach for Oral Cannabidiol in Healthy Subjects: A Randomized, Double-Blinded, Placebo-Controlled Pharmacokinetics Study” available on the PubMed.gov website with the identification of PMID: 31512143, we demonstrated that our technology delivered higher volumes of cannabidiol into the human circulatory system and did so more quickly than a concentration-matched positive control. This same study also demonstrated a statistically significant reduction in human blood pressure from the DehydraTECH processed cannabidiol, versus no statistical reduction in human blood pressure from the positive control.

We operate a Health Canada-licensed laboratory in Canada to conduct basic research and formulation operations, and typically outsource virtually all analytical work to independent third-party laboratories located in Canada, the USA, and Europe. Such third-party evaluation provides independent confirmation of the effects of our technology and processes.

Our formulation and process-oriented operations are primarily conducted in its own laboratory and validated through third-party testing, in preparation for partnering with industry leaders for adoption into their consumer products and/or drugs. Other than for R&D purposes, we do not produce, manufacture, market or distribute drugs.

Although we have experimented with consumer product development in the past, those activities occupy a declining amount of our corporate time. We first began selling trial amounts of ViPova branded black tea fortified with hemp oil and utilizing our technology, in January 2015 and added additional flavours over time.

We also began offering our first coffee and hot chocolate also fortified with full spectrum hemp oil, and also under the ViPova brand. Beginning in January 2021 we discontinued sales of all consumer products, but our earlier offering of a variety of products helped us to develop final consumer product formulations and understand consumer needs.

Generating meaningful revenue from consumer product sales was challenging and we were unable to achieve widespread retail distribution. We continue to be open to the possibility of generating sales from international markets, in those locations where hemp oil fortified foods are permissible by law.

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ViPova branded products are owned by our wholly owned PoViva Corp. subsidiary. Lexaria Energy, TurboCBD and ChrgD<sup>+</sup> branded products are owned 100% by Lexaria Bioscience Corp.

Through our product development we have communicated to the industry the versatility of our technology in specific CPG formats and we believe this strategy has been successful in assisting us in technology licensing discussions with potential new clients. We believe the range of products available and under development are sufficient to prepare for revenue growth and potentially profitable long-term operations if we are able to generate sufficient business clientele demand.

Our business strategy contains an element that we believe will be more impactful to future corporate growth that involves the further development and out-licensing of our intellectual property of molecule delivery that enhances bioactivity or absorption. We have no plans to offer for sale any products containing THC in quantities higher than 0.3%. We have discontinued all direct business activities related to non-FDA-approved uses of THC, including our former business practice of licensing our technology to businesses that were legally state-licensed to offer THC products. We also plan to license our technology to other companies for the delivery of molecules other than THC or cannabinoids, such as nicotine which we have licensed to Altria Ventures Inc., an indirect wholly owned subsidiary of Altria Group, Inc. Our October 31, 2017, announcement of the USPTO Notice of Allowance for our first patent granted and the subsequent granted patents of our technology in the US and in many other countries around the world related to new molecule groups, along with our ongoing patent filing and grants, may enhance our ability to successfully pursue our licensing initiatives during fiscal 2022.

We continue to communicate the benefits of our technology to potential licensing partners; i.e. with higher absorption levels a manufacturer could perhaps infuse smaller amounts of active molecules into a product, potentially reducing their manufacturing input costs; to provide higher bioavailability with the dosing limits being imposed or contemplated in many jurisdictions; to infuse beverages while masking the flavor and smell of the active molecules; and to reduce delivery times to the bloodstream. We believe these to be meaningful competitive advantages that may lead to the potential to generate licensing revenue, and will pursue these opportunities within the cannabinoids, nicotine, and other bioactive molecular markets both within the USA and also internationally, in those locations where they are legal and regulated by government.

Subject to budgetary availability, we also plan to conduct additional in vitro and in vivo studies testing the absorption of many API's - CBD, PDE5 inhibitors, antiviral drugs, nicotine, and others- to substantiate the effectiveness of our technology. More than simply satisfying scientific curiosity, successful tests could lead to increased awareness and acceptance of our technology as a meaningful method by which to deliver some or all of the named molecules more effectively than their current delivery methods. Therefore, absorption tests could become an important element leading towards higher rates of acceptance of our technology licensing initiatives.

We will pursue technology licensing opportunities as a method of generating highly profitable revenue streams over long periods of time. In addition, while nine of our US patents and eight of our Australian patents have been granted to date, we now have received granted patents in the European Union, Japan, India and Mexico, and have multiple other applications filed in the US and around the world. It is not possible to forecast with certainty when, or if, our remaining patents pending will become granted patents. But if our remaining patent applications do become granted patents, our ability to generate meaningful license revenue from our intellectual property may increase from multiple jurisdictions outside of the US.

We will continue to pursue our remaining patents pending as vigorously as we are able, since the successful granting of more of those applications could lead to material increases in shareholder value. We are pursuing patent protection in more than 40 countries around the world.

## **RISK FACTORS**

Investing in our securities involves a high degree of risk. Before making an investment decision, you should carefully consider any risk factors set forth in the applicable prospectus supplement and the documents incorporated by reference in this prospectus, including the factors discussed under the heading “Risk Factors” in our most recent Annual Report on Form 10-K and each subsequently filed Quarterly Report on Form 10-Q and any risk factors set forth in our other filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange. See “Where You Can Find More Information” and “Information We Incorporate By Reference.” Each of the risks described in these documents could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a partial or complete loss of your investment. Additional risks and uncertainties not presently known to us, or that we currently deem immaterial, may also adversely affect our business. In addition, past financial performance may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods.

## **USE OF PROCEEDS**

We will retain broad discretion over the use of the net proceeds from the sale of the securities offered hereby. Unless otherwise specified in any prospectus supplement, we currently intend to use the net proceeds from the sale of our securities offered under this prospectus for working capital and general corporate purposes including, but not limited to, research and development studies and the patent and legal costs associated thereto, potential repurchase of certain of our issued shares and for general working capital purposes. Pending any specific application, we may initially invest funds in short-term marketable securities or apply them to the reduction of indebtedness.

## DESCRIPTION OF CAPITAL STOCK

The following information describes the common stock, par value \$0.001 per share, of the Company, as well as certain provisions of our articles of incorporation, as amended (the “Articles of Incorporation”) and our amended and restated bylaws (“Bylaws”). This description is only a summary. You should also refer to our Articles of Incorporation and Bylaws, which have been filed with the SEC as exhibits to the registration statement of which this prospectus forms a part.

### Authorized and Outstanding Capital Stock

Our authorized capital stock consists of 220,000,000 shares of common stock, par value \$0.001 per share. As of January 27, 2022, there were 5,950,998 shares of our common stock outstanding.

### Common Stock

We are authorized to issue up to a total of 220,000,000 shares of common stock, par value \$0.001 per share. Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of our stockholders. Holders of our common stock have no cumulative voting rights. Further, holders of our common stock have no pre-emptive or conversion rights or other subscription rights. Upon our liquidation, dissolution or winding-up, holders of our common stock are entitled to share in all assets remaining after payment of all liabilities. As well, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our Board out of our assets which are legally available. Such dividends, if any, are payable in cash, in property or in shares of capital stock.

Holders of shares of our common stock are required to cast at least 33.33% of the total votes entitled to be cast by the holders of all of our outstanding capital stock, present in person or by proxy, in order to constitute a quorum at any meeting. If a quorum is present, an action by stockholders entitled to vote on a matter is approved if the number of votes cast in favor of the action exceeds the number of votes cast in opposition to the action. The vote of 33.33% of our stock held by shareholders present in person or represented by proxy and entitled to vote at the Meeting will be sufficient to elect Directors or to approve a proposal.

Our common stock is traded on the Nasdaq Capital Market under the symbol “LEXX”. The transfer agent and registrar for our common stock is Computershare Trust Company of Canada.

### Anti-Takeover Provisions of Nevada State Law

Certain anti-takeover provisions of Nevada law could have the effect of delaying or preventing a third-party from acquiring us, even if the acquisition arguably could benefit our stockholders.

Nevada’s “combinations with interested stockholders” statutes, NRS 78.411 through 78.444, inclusive, prohibit specified types of business “combinations” between certain Nevada corporations and any person deemed to be an “interested stockholder” for two years after such person first becomes an “interested stockholder” unless the corporation’s board of directors approves the combination, or the transaction by which such person becomes an “interested stockholder”, in advance, or unless the combination is approved by the board of directors and sixty percent of the corporation’s voting power not beneficially owned by the interested stockholder, its affiliates and associates. Further, in the absence of prior approval certain restrictions may apply even after such two year period. However, these statutes do not apply to any combination of a corporation and an interested stockholder after the expiration of four years after the person first became an interested stockholder. For purposes of these statutes, an “interested stockholder” is any person who is (1) the beneficial owner, directly or indirectly, of ten percent or more of the voting power of the outstanding voting shares of the corporation, or (2) an affiliate or associate of the corporation and at any time within the two previous years was the beneficial owner, directly or indirectly, of ten percent or more of the voting power of the then outstanding shares of the corporation. The definition of the term “combination” is sufficiently broad to cover most significant transactions between a corporation and an “interested stockholder.” These statutes generally apply to Nevada corporations with 200 or more stockholders of record. However, a Nevada corporation may elect in its articles of incorporation not to be governed by these particular laws, but if such election is not made in the corporation’s original articles of incorporation, the amendment (1) must be approved by the affirmative vote of the holders of stock representing a majority of the outstanding voting power of the corporation not beneficially owned by interested stockholders or their affiliates and associates, and (2) is not effective until 18 months after the vote approving the amendment and does not apply to any combination with a person who first became an interested stockholder on or before the effective date of the amendment. We have made such an election in our original articles of incorporation.

Nevada's "acquisition of controlling interest" statutes, NRS 78.378 through 78.379, inclusive, contain provisions governing the acquisition of a controlling interest in certain Nevada corporations. These "control share" laws provide generally that any person that acquires a "controlling interest" in certain Nevada corporations may be denied voting rights, unless a majority of the disinterested stockholders of the corporation elects to restore such voting rights. Absent such provision in our bylaws, these laws would apply to us as of a particular date if we were to have 200 or more stockholders of record (at least 100 of whom have addresses in Nevada appearing on our stock ledger at all times during the 90 days immediately preceding that date) and do business in the State of Nevada directly or through an affiliated corporation, unless our articles of incorporation or bylaws in effect on the tenth day after the acquisition of a controlling interest provide otherwise. These laws provide that a person acquires a "controlling interest" whenever a person acquires shares of a subject corporation that, but for the application of these provisions of the NRS, would enable that person to exercise (1) one fifth or more, but less than one third, (2) one third or more, but less than a majority or (3) a majority or more, of all of the voting power of the corporation in the election of directors. Once an acquirer crosses one of these thresholds, shares which it acquired in the transaction taking it over the threshold and within the 90 days immediately preceding the date when the acquiring person acquired or offered to acquire a controlling interest become "control shares" to which the voting restrictions described above apply.

Nevada law also provides that directors may resist a change or potential change in control if the directors determine that the change is opposed to, or not in the best interests of, the corporation. The existence of the foregoing provisions and other potential anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our Company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

#### **Anti-Takeover Effects of Our Articles of Incorporation and Bylaws**

The following provisions of our Articles of Incorporation and Bylaws could have the effect of delaying or discouraging another party from acquiring control of us and could encourage persons seeking to acquire control of us to first negotiate with our Board:

- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the right of our Board to elect a director to fill a vacancy created by the expansion of the Board or the resignation, death or removal of a director, with our stockholders only allowed to fill such a vacancy if not filled by the Board;
- the ability of our Board to alter our Bylaws without obtaining shareholder approval; and
- the requirement that a special meeting of stockholders may be called only by either the President or the Secretary by resolution of the Board of Directors or at the request of stockholders owning a majority of the issued and outstanding capital stock of the Company entitled to vote, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors

## DESCRIPTION OF WARRANTS

### General

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which consist of warrants to purchase shares of common stock. Warrants may be offered independently or together with shares of common stock by any prospectus supplement and may be attached to or separate from those securities.

While the terms we have summarized below will generally apply to any future warrants we may offer under this prospectus, we will describe the particular terms of any warrants that we may offer in more detail in the applicable prospectus supplement. The specific terms of any warrants may differ from the description provided below as a result of negotiations with third parties in connection with the issuance of those warrants, as well as for other reasons. Because the terms of any warrants we offer under a prospectus supplement may differ from the terms we describe below, you should rely solely on information in the applicable prospectus supplement if that summary is different from the summary in this prospectus.

We will issue the warrants under a warrant agreement, which we will enter into with a warrant agent to be selected by us. We use the term “warrant agreement” to refer to any of these warrant agreements. We use the term “warrant agent” to refer to the warrant agent under any of these warrant agreements. The warrant agent will act solely as an agent of ours in connection with the warrants and will not act as an agent for the holders or beneficial owners of the warrants.

We will incorporate by reference into the registration statement of which this prospectus is a part the form of warrant agreement, including a form of warrant certificate, that describes the terms of the series of warrants we are offering before the issuance of the related series of warrants. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement applicable to a particular series of warrants. We urge you to read any applicable prospectus supplement related to the warrants that we sell under this prospectus, as well as the complete warrant agreement that contain the terms of the warrants and defines your rights as a warrant holder.

We will describe in the applicable prospectus supplement the terms relating to a series of warrants. If warrants for the purchase of shares of common stock are offered, the prospectus supplement will describe the following terms, to the extent applicable:

- the offering price and the aggregate number of warrants offered;
- the total number of shares that can be purchased if a holder of the warrants exercises them;
- the number of warrants being offered with each share of common stock;
- the date on and after which the holder of the warrants can transfer them separately from the related shares of common stock;
- the number of shares of common stock that can be purchased if a holder exercises the warrant and the price at which those shares may be purchased upon exercise, including, if applicable, any provisions for changes to or adjustments in the exercise price and in the securities or other property receivable upon exercise;
- the terms of any rights to redeem or call, or accelerate the expiration of, the warrants;
- the date on which the right to exercise the warrants begins and the date on which that right expires;
- federal income tax consequences of holding or exercising the warrants; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the warrants.

Warrants for the purchase of shares of common stock will be in registered form only.

A holder of warrant certificates may exchange them for new certificates of different denominations, present them for registration of transfer and exercise them at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement. Until any warrants to purchase shares of common stock are exercised, holders of the warrants will not have any rights of holders of the underlying shares of common stock, including any rights to receive dividends or to exercise any voting rights, except to the extent set forth under “Warrant Adjustments” below.



### **Exercise of Warrants**

Each holder of a warrant is entitled to purchase the number of shares of common stock, as the case may be, at the exercise price described in the applicable prospectus supplement. After the close of business on the day when the right to exercise terminates (or a later date if we extend the time for exercise), unexercised warrants will become void.

A holder of warrants may exercise them by following the general procedure outlined below:

- deliver to the warrant agent the payment required by the applicable prospectus supplement to purchase the underlying security;
- properly complete and sign the reverse side of the warrant certificate representing the warrants; and
- deliver the warrant certificate representing the warrants to the warrant agent within five business days of the warrant agent receiving payment of the exercise price.

If you comply with the procedures described above, your warrants will be considered to have been exercised when the warrant agent receives payment of the exercise price, subject to the transfer books for the securities issuable upon exercise of the warrant not being closed on such date. After you have completed those procedures and subject to the foregoing, we will, as soon as practicable, issue and deliver to you the shares of common stock that you purchased upon exercise. If you exercise fewer than all of the warrants represented by a warrant certificate, a new warrant certificate will be issued to you for the unexercised amount of warrants. Holders of warrants will be required to pay any tax or governmental charge that may be imposed in connection with transferring the underlying securities in connection with the exercise of the warrants.

### **Amendments and Supplements to the Warrant Agreements**

We may amend or supplement a warrant agreement without the consent of the holders of the applicable warrants to cure ambiguities in the warrant agreement, to cure or correct a defective provision in the warrant agreement, or to provide for other matters under the warrant agreement that we and the warrant agent deem necessary or desirable, so long as, in each case, such amendments or supplements do not materially adversely affect the interests of the holders of the warrants.

### **Warrant Adjustments**

Unless the applicable prospectus supplement states otherwise, the exercise price of, and the number of securities covered by, a warrant for shares of common stock will be adjusted proportionately if we subdivide or combine our common stock, as applicable. In addition, unless the prospectus supplement states otherwise, if we, without payment:

- pay any cash to all or substantially all holders of our common stock, other than a cash dividend paid out of our current or retained earnings;
- issue any evidence of our indebtedness or rights to subscribe for or purchase our indebtedness to all or substantially all holders of our common stock; or
- issue common stock or additional shares or other securities or property to all or substantially all holders of our common stock by way of spinoff, split-up, reclassification, combination of shares or similar corporate rearrangement;

then the holders of common stock warrants will be entitled to receive upon exercise of the warrants, in addition to the securities otherwise receivable upon exercise of the warrants and without paying any additional consideration, the amount of shares and other securities and property such holders would have been entitled to receive had they held the common stock issuable under the warrants on the dates on which holders of those securities received or became entitled to receive such additional shares and other securities and property.

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Except as stated above, the exercise price and number of securities covered by a warrant for shares of common stock, and the amounts of other securities or property to be received, if any, upon exercise of those warrants, will not be adjusted or provided for if we issue those securities or any securities convertible into or exchangeable for those securities, or securities carrying the right to purchase those securities or securities convertible into or exchangeable for those securities.

Holders of common stock warrants may have additional rights under the following circumstances:

- certain reclassifications, capital reorganizations or changes of the common stock;
- certain share exchanges, mergers, or similar transactions involving us that result in changes of the common stock; or
- certain sales or dispositions to another entity of all or substantially all of our property and assets.

If one of the above transactions occurs and holders of our common stock are entitled to receive shares, securities or other property with respect to or in exchange for their securities, the holders of the common stock warrants then-outstanding, as applicable, will be entitled to receive upon exercise of their warrants the kind and amount of shares and other securities or property that they would have received upon the applicable transaction if they had exercised their warrants immediately before the transaction.

#### **DESCRIPTION OF RIGHTS**

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the general features of the rights that we may offer under this prospectus. We may issue rights to our stockholders to purchase shares of our common stock and/or any of the other securities offered hereby. Each series of rights will be issued under a separate rights agreement to be entered into between us and a bank or trust company, as rights agent. When we issue rights, we will provide the specific terms of the rights and the applicable rights agreement in a prospectus supplement. Because the terms of any rights we offer under a prospectus supplement may differ from the terms we describe below, you should rely solely on information in the applicable prospectus supplement if that summary is different from the summary in this prospectus. We will incorporate by reference into the registration statement of which this prospectus is a part, the form of rights agreement that describes the terms of the series of rights we are offering before the issuance of the related series of rights. The applicable prospectus supplement relating to any rights will describe the terms of the offered rights, including, where applicable, the following:

- the date for determining the persons entitled to participate in the rights distribution;
- the exercise price for the rights;
- the aggregate number or amount of underlying securities purchasable upon exercise of the rights;
- the number of rights issued to each stockholder and the number of rights outstanding, if any;
- the extent to which the rights are transferable;
- the date on which the right to exercise the rights will commence and the date on which the right will expire;
- the extent to which the rights include an over-subscription privilege with respect to unsubscribed securities;
- anti-dilution provisions of the rights, if any; and
- any other terms of the rights, including terms, procedures and limitations relating to the distribution, exchange and exercise of the rights.

Holders may exercise rights as described in the applicable prospectus supplement. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the securities purchasable upon exercise of the rights. If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby underwriting arrangements, as described in the applicable prospectus supplement.

#### DESCRIPTION OF UNITS

We may issue units comprising two or more securities described in this prospectus in any combination. For example, we might issue units consisting of a combination of common stock and warrants to purchase common stock. The following description sets forth certain general terms and provisions of the units that we may offer pursuant to this prospectus. The particular terms of the units and the extent, if any, to which the general terms and provisions may apply to the units so offered will be described in the applicable prospectus supplement.

Each unit will be issued so that the holder of the unit also is the holder of each security included in the unit. Thus, the unit will have the rights and obligations of a holder of each included security. Units will be issued pursuant to the terms of a unit agreement, which may provide that the securities included in the unit may not be held or transferred separately at any time or at any time before a specified date. A copy of the forms of the unit agreement and the unit certificate relating to any particular issue of units will be filed with the SEC each time we issue units, and you should read those documents for provisions that may be important to you. For more information on how you can obtain copies of the forms of the unit agreement and the related unit certificate, see “Where You Can Find More Information.”

The prospectus supplement relating to any particular issuance of units will describe the terms of those units, including, to the extent applicable, the following:

- the designation and terms of the units and the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provision for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- whether the units will be issued in fully registered or global form.

## PLAN OF DISTRIBUTION

We may sell the securities from time to time, by a variety of methods, including the following:

- on any national securities exchange or quotation service on which our securities may be listed at the time of sale, including the Nasdaq Capital Market;
- in the over-the-counter market;
- in transactions otherwise than on such exchange or in the over-the-counter market, which may include privately negotiated transactions and sales directly to one or more purchasers;
- through ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- through purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- through underwriters, broker-dealers, agents, in privately negotiated transactions, or any combination of these methods;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any of these methods; or
- by any other method permitted pursuant to applicable law.

The securities may be distributed from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Offers to purchase the securities being offered by this prospectus may be solicited directly. Agents may also be designated to solicit offers to purchase the securities from time to time. Any agent involved in the offer or sale of our securities will be identified in a prospectus supplement.

If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If an underwriter is utilized in the sale of the securities being offered by this prospectus, an underwriting agreement will be executed with the underwriter at the time of sale and the name of any underwriter will be provided in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we, or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for which they may act as agent. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase securities as a principal, and may then resell the securities at varying prices to be determined by the dealer.

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Any compensation paid to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers will be provided in the applicable prospectus supplement. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc., or FINRA, the maximum amount of underwriting compensation, including underwriting discounts and commissions, to be paid in connection with any offering of securities pursuant to this prospectus may not exceed 8% of the aggregate principal amount of securities offered. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof and to reimburse those persons for certain expenses. The securities may or may not be listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

If indicated in the applicable prospectus supplement, underwriters or other persons acting as agents may be authorized to solicit offers by institutions or other suitable purchasers to purchase the securities at the public offering price set forth in the prospectus supplement, pursuant to delayed delivery contracts providing for payment and delivery on the date or dates stated in the prospectus supplement. These purchasers may include, among others, commercial and savings banks, insurance companies, pension funds, investment companies and educational and charitable institutions. Delayed delivery contracts will be subject to the condition that the purchase of the securities covered by the delayed delivery contracts will not at the time of delivery be prohibited under the laws of any jurisdiction in the United States to which the purchaser is subject. The underwriters and agents will not have any responsibility with respect to the validity or performance of these contracts.

We may engage in at-the-market offerings into an existing trading market in accordance with rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us, or borrowed from us or others to settle those sales or to close out any related open borrowings of common stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of our common stock. In addition, we may loan or pledge securities to a financial institution or other third party that in turn may sell the securities using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

## **LEGAL MATTERS**

Unless otherwise indicated in the applicable prospectus supplement, certain legal matters in connection with the offering and the validity of the securities offered by this prospectus, and any supplement thereto, will be passed upon by Sichenzia Ross Ference LLP.

## **EXPERTS**

The audited consolidated financial statements of the Company and its subsidiaries, as of and for the years ended August 31, 2021 and 2020 included in this prospectus have been so included in reliance upon the report of Davidson & Company LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.



**1,444,741 Shares of Common Stock  
Pre-Funded Warrants to Purchase 113,702 Shares of Common Stock**

**Lexaria Bioscience Corp.**

**Prospectus Supplement**

**H.C. Wainwright & Co.**

February 14, 2024

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