Zacks Small-Cap Research
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Lexaria Bioscience Corp. (LEXX: NASDAQ)

LEXX: 3Q:23 Financial Results & Corporate Updates

Our valuation methodology employs a DCF model and a 15% discount rate. The model applies a weighted average 13% probability of ultimate approval and commercialization of products employing DehydraTECH. The model includes contributions from the United States and Rest of World.

Current Price (8/25/2023)	$1.08
Valuation	**$12.00**

OUTLOOK

Lexaria is a biotechnology company seeking to enhance the bioavailability of multiple drug agents using DehydraTECH (DHT), its technology using oral and topical delivery. It combines lipophilic APIs with specific fatty acid and carrier compounds followed by dehydration.

DHT offers several attractive features: substantial improvement in bioabsorption in terms of time to measurable plasma levels & AUC, brain permeation, taste masking & side effect reduction. As DHT does not employ a covalent bond, DHT is not a new molecular entity and can rely on previously conducted safety and efficacy data to obtain regulatory approval.

Lexaria receives revenues from licensing & product sales which can in part fund R&D operations. R&D activities are pursuing both preclinical and clinical programs. The lead program is investigating CBD for the reduction of hypertension with four clinical trials conducted. Other DHT candidates include antivirals, nicotine, PDE5 inhibitors, NSAIDS, hormones, colchicine & others.

We forecast penetration into global markets for hypertension, nicotine delivery and antiviral product categories.

SUMMARY DATA

52-Week High	**3.60**
52-Week Low	**0.65**
One-Year Return (%)	**-64.1**
Beta	**1.1**
Average Daily Volume (sh)	**91,250**
Shares Outstanding (mil)	**8.09**
Market Capitalization ($mil)	**8.7**
Short Interest Ratio (days)	**3.0**
Institutional Ownership (%)	**8.4**
Insider Ownership (%)	**13.6**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2023 Estimate	**N/A**
P/E using 2024 Estimate	**N/A**
Zacks Rank	**N/A**

Risk Level	**Above Average**
Type of Stock	**Small-Growth**
Industry	**Drugs**

ZACKS ESTIMATES

Revenue

(In millions of USD)

	Q1 (Nov)	Q2 (Feb)	Q3 (May)	Q4 (Aug)	Year (Aug)
2022	$0.0 A	$0.0 A	$0.1 A	$0.1 A	$0.3 A
2023	$0.1 A	$0.0 A	$0.1 A	$0.2 E	$0.4 E
2024					$1.0 E
2025					$1.2 E

Earnings per Share

	Q1 (Nov)	Q2 (Feb)	Q3 (May)	Q4 (Aug)	Year (Aug)
2022	-$0.35 A	-$0.24 A	-$0.41 A	-$0.24 A	-$1.24 A
2023	-$0.30 A	-$0.22 A	-$0.37 A	-$0.17 E	-$1.03 E
2024					-$0.66 E
2025					-$0.55 E

WHAT'S NEW

Lexaria Bioscience Corporation (NASDAQ: LEXX) has published a number of updates over the previous two months including the incorporation of a new subsidiary for consumer packaged goods (CPG) products, announcement of a new study in weight loss and diabetes control and initial data from the nicotine study. The company also reported its third quarter, fiscal year 2023 financial results.

3Q:23 Results

Lexaria filed its third quarter fiscal year 2022 Form 10-Q on July 14, 2023. The company reported 3Q:23 revenues of $93,000, and total operating expense of $2.5 million resulting in net loss of ($2.4) million or ($0.37) per basic and diluted common share.

For the third quarter ending May 31, 2023 and versus the same prior year period in 2022:

- Revenue totaled $93,000, down 7% from $100,000 on a decrease in Product revenues. These amounts were offset by an increase in intellectual property licensing and other sales;
- Gross profit declined to $80 from $81 while the product gross margin was up
- Research and development expenses totaled $1.6 million, up 118% from $752,000 tied to the multiple DehydraTECH investigational research programs underway, including analysis and execution of the hypertension, nicotine and diabetes studies;
- General and administrative expenses totaled $823,000, down by almost half from $1.2 million due primarily to a decrease in consulting fees, salary and stock-based compensation. Legal fees, advertising and promotion, and investor relations spending were also lower. This was partially offset by an increase in office expenses;
- Net loss was ($2.4) million, or ($0.37) per share, compared to net loss of ($2.4) million or ($0.41) per share.

As of May 31, 2023, cash and marketable securities totaled $3.4 million - a sequential ($0.1) million decline from the end of 2Q:23. Cash burn for the first nine months of FY:23 was approximately ($4.4) million.

CPG Product Subsidiary

Lexaria incorporated a new wholly-owned subsidiary called Lexaria Nutraceutical Corp. in order to optimize its DehydraTECH strategy that serves a number of markets that fall under different regulatory regimes worldwide. The strategy also enables Lexaria to more efficiently participate in M&A activity. The subsidiary, which is referred to as LEXX Nutra for short, has received a perpetual license to create consumer packaged goods and intermediate ingredients for any molecule save those associated with nicotine or cannabis. The subsidiary is also prevented from using the license to produce a pharmaceutical product. The parent also made modifications to other subsidiaries' arrangements, amending the exclusive licensing rights of Lexaria Pharmaceutical Corp. to only pertain to the manufacture or licensing of pharmaceutical products, excluding nicotine.

Nicotine Updates

Lexaria announced receipt of Independent Review Board (IRB) approval for its human nicotine study designated NIC-H22-1 last November. The 36-subject study was designed to be a randomized, double-blind, cross over study in cigarette smokers. The pharmacokinetic (PK) evaluation dosed each individual three times over a period of several weeks using an oral nicotine pouch. The pouch contained either DHT nicotine, or competing brands on! or ZYN.

Dosing for the trial began in December 2022, and evaluated subjects with questionnaires and eight blood samples taken over the evaluation period to measure nicotine delivery to the bloodstream. Other biomarkers including blood pressure and heart rate were also taken. The goal of the study is to show whether or not DHT is able to provide better oral-tissue absorption and reduced negative experiences vs. the other participants in the study. Support for NIC-H22-1 was provided by previous animal model work demonstrating faster peak delivery of nicotine using DHT.

In May, Lexaria reported that dosing of the 36 patients was completed and in early August provided another update summarizing topline results. Results from the study demonstrated a statistically significant difference between Tmax

for the DehydraTECH nicotine pouch and both comparable arms. Time to Tmax of 15.37 minutes was 2.3 minutes faster than what was produced in the on! arm and 3.1 minutes faster than the time measured in the ZYM arm. In percentage terms, this represented a 15% and 20% faster response to achieve maximum blood saturation levels.

Exhibit I – Time to Tmax[1]

Nicotine Product	p-value	Tmax (minutes)
DehydraTech		15.37
on!	0.004	17.67
ZYN	0.000	18.48

Lexaria cited a pharmacokinetic (PK) study that quantified the time required for Tmax to be reached with a combustible cigarette at 8 minutes. Relative to this benchmark, the company put together a comparison of other nicotine delivery methods including the data generated from the NIC-H22-1 study. Of the eight comparable vehicles, DehydraTECH oral pouch was the fastest to Tmax relative to combustible cigarettes.

Exhibit II – Time to Tmax for Various Nicotine Delivery Mechanisms[2]

Nicotine Product	Tmax (minutes)	Percent Time Delay
Combustible cigarette	8.00	baseline
on! oral pouch	17.67	121%
Nasal spray	up to 18	up to 125%
ZYN oral pouch	18.48	131%
Subcutaneous injection	25.00	213%
Gum	30.00	275%
Lozenge	60.00	650%
Oral solution	66.00	725%
DehydraTech oral pouch	**15.37**	**92%**

Another component of the study examined qualitative aspects of the DehydraTECH nicotine pouch that were determined with a patient survey. Six different categories were reported, examining both the desirable and undesirable attributes of nicotine consumption.

- Euphoria and Head Rush: The highest percentage of users reporting that they felt euphoric at all time points were the Lexaria users; and the highest percentage of users reporting they felt a head rush at the 5 and 30-minute marks were also Lexaria users;
- Tolerability: The highest endorsement score for users reporting "I tolerated this product well" were the Lexaria users, with statistical significance demonstrated at the second dosing visit in particular (p=0.007);
- Pleasure: The highest percentage of users reporting that they considered the experience "pleasurable" at the 30-minute mark were the Lexaria users, while the on! users reported the lowest percentage as "pleasurable" at this point;
- Mouth and Throat-burn: Lexaria scored best for percent enjoyment of the nicotine induced burning sensation in the mouth and throat. The highest percentage of severe mouth and throat-burn events were reported by users of the on! pouch;
- Nausea: The highest frequency of moderate and severe nausea effects was reported by users of the ZYN and on! pouches respectively; with the lowest frequency reported by users of the Lexaria pouch;
- Hiccups: Moderate to severe hiccups were only reported by users of the on! and ZYN products.

We anticipate that partner work with large global tobacco companies will expand now that data from the study are available. Lexaria plans to share summary data to identify interest from these potential collaborators.

[1] Compiled by Zacks' analyst using company provided data.
[2] Compiled by Zacks' analyst using data included in Lexaria press release and sourced from Nicotine Chemistry, Metabolism, Kinetics and Biomarkers.

Recent Publications

Lexaria has published eight research papers since late 2019 predominantly focused on cannabidiol (CBD) and its effect on blood pressure. A full list and summary of the articles are included in a June 22nd press release with the most recent highlight of the group a publication in the International Journal of Molecular Sciences. Its title is Differences in Plasma Cannabidiol Concentrations in Women and Men: A Randomized, Placebo-Controlled, Crossover Study.

Findings and conclusions from the Journal of Molecular Sciences article revolve around the concentration of CBD in a subject's plasma and the bioavailability of the drug. It examined the potential therapeutic benefits of CBD in a triple-blind, placebo-controlled, crossover study in which 62 hypertensive volunteers were randomly assigned to receive DehydraTECH CBD formulation or a placebo. Concentration of CBD was found to be higher in women and correlated with proportion of adipose tissue. The difference between the sexes was attributed to higher levels of fat tissue in women compared with men and women having significantly higher fat percentages. Men's higher metabolism also contributed to their more rapid clearance of the metabolite and lower levels of CBD according to the study.

Other findings include the absence of a statistically significant difference in CBD and CBD metabolites in subjects taking other hypertensive medication such as angiotensin-converting enzyme (ACE) inhibitors, calcium blockers or thiazide diuretics. This provides a pilar of support for the use of CBD in the control of hypertension using multiple mechanisms of action that complement each other.

Hypertension Study Details

Lexaria has launched four human hypertension studies that are evaluating the use of DHT-CBD in reducing blood pressure. The first human study enrolled 24 subjects and examined diastolic pressure over a three-hour period and found that the pressure was lower in those administered DHT-CBD. The second study was conducted in 16 volunteers and confirmed that DHT can reduce arterial stiffness. The fourth study began in early April 2022, enrolled 66 subjects and has now reported several data sets to investors.

Exhibit III – Summary of DehydraTECH CBD Studies for Hypertension[3]

Study	Type	Report Date	Detail	Location	Dose
HYPER-A21-1	Animal	May-21	Absorption rate, speed & tolerability	USA	
HYPER-A21-2	Animal	May-21	Absorption rate, speed & tolerability	USA	
HYPER-H21-1	Human	Jul-21	24 subject BP & heart rate analysis, PK	Europe	1x300 mg/day
HYPER-H21-2	Human	Sep-21	16 subject BP & heart rate analysis, other	Europe	3x150 mg/day
HYPER-H21-3	Human	Apr-22	16 subject stress test, acute pulmonary HTN	Europe	1x300 mg/day
HYPER-H21-4	Human	Oct-22	66 subject RCT w/ placebo control	Europe	3/150 mg/day

Hypertension Study HYPER-H21-4

HYPER-H21-4 began enrolling in April 2022. The 60-subject study, later increased to 66, was designed as a randomized, double blinded, placebo-controlled, cross-over study with elevated, mild or moderate hypertension. The primary endpoint was 24-hour ambulatory blood pressure. Secondary endpoints include vascular health including arterial stiffness and autonomic balance, electrocardiogram analysis, brain structure and function through MRI testing, blood biomarkers, renal and hepatic analysis, sleep quality, geriatric depression scale, perceived stress and Beck anxiety inventory. These endpoints have been the subject of several articles that have been and will be published.

Dosing began ahead of schedule and was announced as complete on July 27th. Maximum dose levels used in the study reached 5 mg/kg/day, which matches the lowest daily starting dose of CBD used in children for the approved treatment of Dravet syndrome.[4] No serious adverse events were reported during the study and DHT-CBD was well tolerated. Data from the study will be used to support an Investigational New Drug (IND) application with the FDA.

Reduction in Pro-Inflammatory Biomarkers

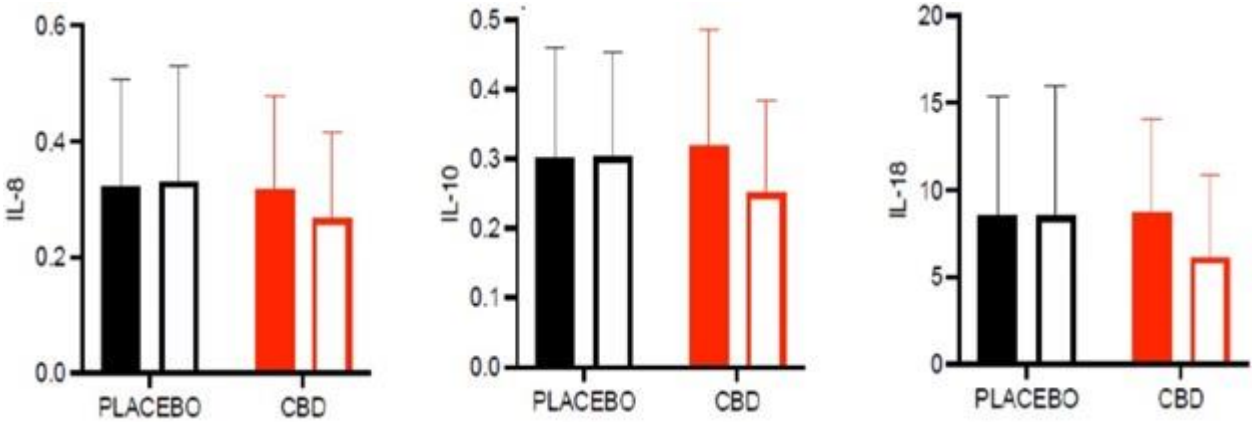
A publication based on the data in HYPER-H21-4 identified the upregulation of several pro-inflammatory biomarkers linked to cardiovascular diseases. This includes interleukin (IL)-8, IL-10 and IL-18. IL-8 is a cytokine known for its chemotactic properties and is involved in attracting immune cells to the site of inflammation or infection. IL-8 also

[3] Source: Company press releases and Zacks analyst compilation

[4] Dose is recommended to start at 2.5 mg/kg twice per day which is doubled after one week and increased to 20 mg/kg/day inappropriate circumstances. Source: Epidiolex FDA Label

has pro-inflammatory effects. If prolonged, excessive IL-8 can cause various inflammatory conditions or diseases such as rheumatoid arthritis and cancer. IL-10 is a cytokine that is anti-inflammatory in nature. It suppresses the production of other inflammatory cytokines, promotes the differentiation of regulatory T cells and protects tissue from damage. IL-18, similar to IL-8, is another pro-inflammatory cytokine produced by a variety of immune cells to initiate a response against infection and inflammation. The cytokine induces the production of other inflammatory cytokines and antimicrobial peptides and activates natural killer cells.

Exhibit IV – Blood Plasma Levels (pg/ml) of Pro-Inflammatory Biomarkers[5]



Selecting A CRO

A contract research organization (CRO) was selected to run the Phase Ib study entitled: A Phase 1b Randomized, Double-Blind, Placebo-Controlled Study of the Safety, Pharmacokinetics, and Pharmacodynamics of DehydraTECH-CBD in Subjects with Stage 1 or Stage 2 Hypertension. The CRO, InClin, Inc. is a California-based provider of consulting, project management, biostatistics and other services related to managing early, mid and late-stage clinical trials. InClin has experience in a broad range of indications including cardiovascular and vascular diseases.

Chemistry, Manufacturing and Controls

Further progress was reported in a May 11th press release. Batch manufacturing of the DehydraTECH-processed cannabidiol and placebo materials is complete. A current good manufacturing practices (cGMP) manufacturer was retained to produce the materials. Next steps include filling the capsules and analytical release and stability testing to obtain quality control data necessary for the investigational new drug (IND) application.

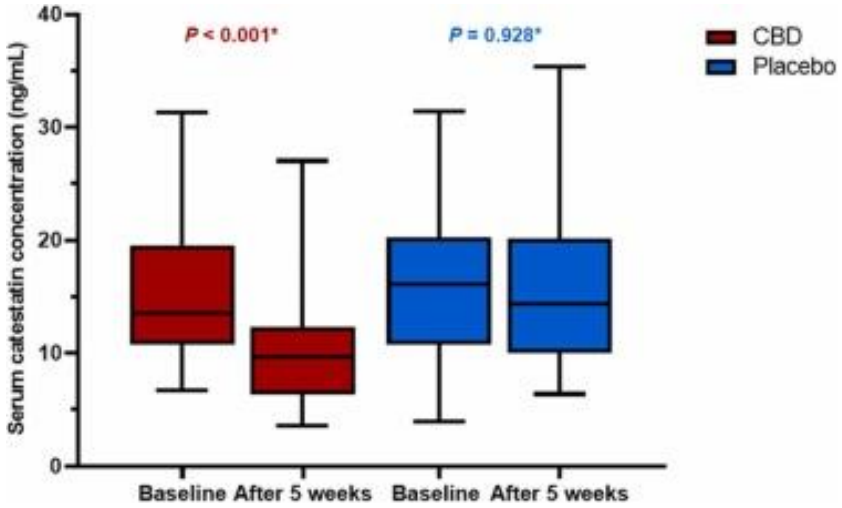
Other milestones for the hypertension program include IND submission and additional preparations for the clinical trial. If the IND is cleared by the FDA, we then expect the start of a Phase Ib study in the late third or early fourth quarter. Trial design has not yet been shared with investors; however, we expect details will emerge after IND finalization.

Novel Mechanism

Lexaria's February update on its hypertension program identified a potential novel mechanism of action. The press release highlighted the FDA's desire to review anti-hypertensive medicines that offer complementary mechanisms. Based on observations from the HYPER-H21-4 hypertension study using DHT-CBD, CBD may stimulate the production of catestatin via its interaction with the sympatho-chromaffin system which can favorably affect hypertension and may represent a novel mechanism of action for treating hypertension.

[5] Lexaria Biosciences Press Release May 23, 2023.

Exhibit V – Serum Catestatin Levels at Baseline & Five Weeks[6]



Hypertension Backdrop

Hypertension grabbed the spotlight in early 2023 with AstraZeneca's (NASDAQ: AZN) bid for the recently IPOed CinCor Pharma (NASDAQ: CINC). CinCor recently provided top-line data from its Phase II study that evaluated baxdrostat in hypertension patients. Baxdrostat is a selective aldosterone synthase inhibitor shown to lower aldosterone levels without affecting cortisol. The primary endpoint of the study was not met; however, there were large reductions in systolic blood pressure. AstraZeneca saw enough promise in the data to support further trials in hypertension and chronic kidney disease. Merger and acquisition activity in the space accentuate the unmet need for effective control of hypertension and provides a healthy backdrop for further work by Lexaria in this area.

Lexaria is waiting for data from its *HYPER-H21-4* study from its service providers so that it can prepare its investigational new drug (IND) application. We anticipate this to be completed in the next months followed by an IND submission. If there are no questions from the FDA, the study is allowed to proceed 30 days after IND submission.

Patents

New patents were issued with details provided in two announcements made in April and June that highlighted several grants around the globe. In July, a nicotine patent was issued related to sublingual delivery using DehydraTECH.

2023 Issued Patents:

- Canada
  - Food and Beverage Compositions Infused with Lipophilic Active Agents and Methods of Use Thereof
  - Compositions Infused with Nicotine Compounds and Methods of Use Thereof
- US
  - Pharmaceutical Compositions and Methods for Treating Hypertension
  - Compositions and Methods for Treating Hypertension
  - Compositions and Methods For Sublingual Delivery of Nicotine
    - Patent #11,700,875
    - Progressing through other jurisdictions outside of the US
- Japan
  - Stable Ready-to-Drink Beverage Compositions Comprising Lipophilic Active Agents
- Australia
  - Compositions and Methods for Enhanced Delivery of Antiviral Agents.

[6] Source: Lexaria Press Release - Lexaria Discovers Potential Novel Mechanism From Hypertension Study HYPER-H21-4. February 21, 2023.

Over the last several months, multiple jurisdictions have issued new patents to Lexaria including Japan (1), Australia (1), Canada (2) and the US (2). The US patents protect the use of DehydraTECH enhanced cannabidiol for use in pharmaceutical compositions and methods for treating hypertension and DehydraTECH enhanced cannabidiol for use in general compositions and methods for treating hypertension.

Capital Raise

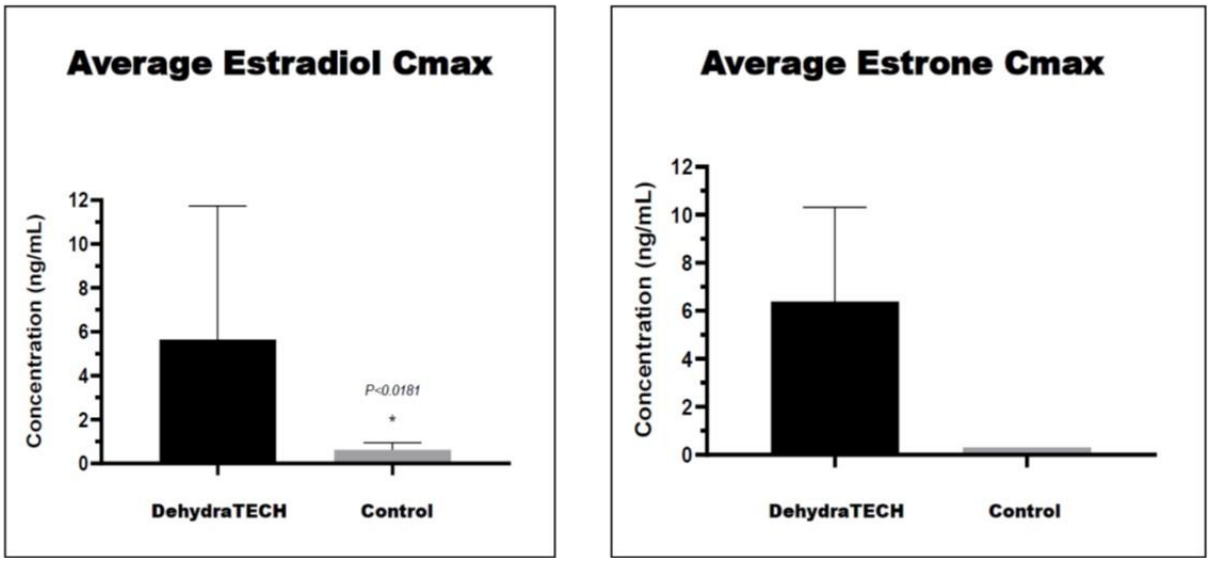
On May 8th, Lexaria announced a $2.0 million capital raise in a public offering which was closed on May 11th. 2,106,000 units were sold at $0.95 per unit. The units consist of one share of stock and a warrant with an exercise price of $0.95 per share offering a five-year life.

Estradiol Hormone Study

Animal study HOR-A22-1 has ended demonstrating successful delivery of estradiol and its metabolite estrone using DehydraTECH. Results presented in the May 18th press release produced an average peak concentration of estradiol and estrone of 9x and 20x compared with control. Area under the curve (AUC) levels for estradiol and estrone were 15x and 125x greater than control levels. Estradiol is used to treat endometriosis, premature ovarian failure and breast cancer among other conditions. Oral estradiol is also used in women's birth control products. Estrone is important for bone health, reproductive system development, heart health and skin health.

There are many side effects associated with the use of estradiol including breast tenderness, headache, weight gain and vaginal bleeding. This accentuates the need for delivering the minimal effective level of the hormone. The impressive bioavailability of DehydraTECH estradiol compared to control supports further work in this discipline. Furthermore, bioavailability for estradiol formulations is low, calling for new methods to improve delivery.[7]

Exhibit VI – Estradiol and Estrone Cmax in Blood Plasma After DehydraTECH Estradiol/Placebo Administration[8]



DehydraTECH and Diabetes

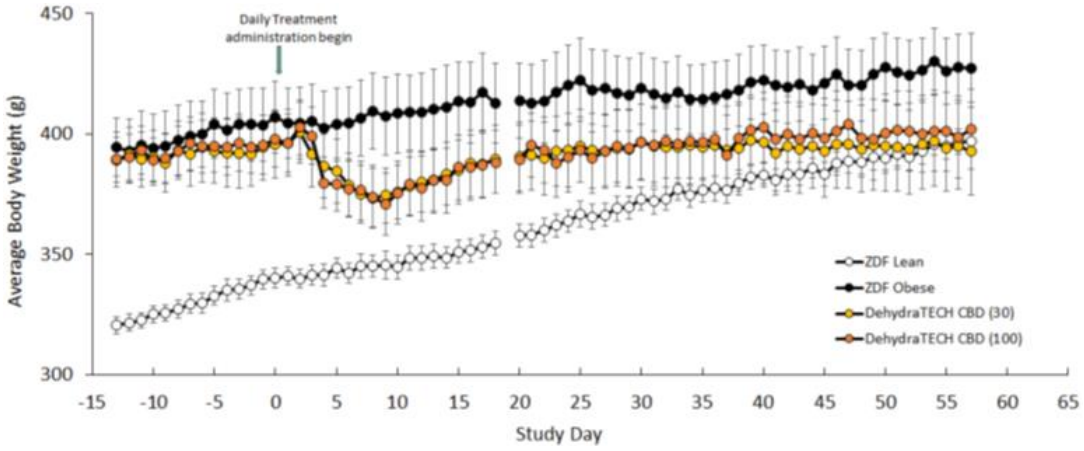
In its ongoing effort to expand into new therapeutic areas, Lexaria launched an animal study in diabetes in November 2022 designated DIAB-A22-1. It has evaluated the DehydraTECH-processed cannabidiol (CBD) molecule and how it impacts diabetes-related biomarkers in rats. The associated press release highlighted the relationship between heart disease, hypertension and diabetes and the prevalence of diabetes, as the seventh most common cause of death. Impetus for the study has come from other work cited in the press release supporting CBD efficacy in reducing the incidence of diabetes.

A dose ranging study was conducted over 56 days that evaluated 32 male Zucker rats. 24 of the rats were obese and eight lean. The two groups were compared with respect to weight gain, blood glucose, cholesterol and triglyceride levels between those administered DHT-CBD and those which were not. Blood was drawn six times over the course of the study. It was conducted in Canada with initial data provided in an early March 2023 press release.

[7] Kuhl, H. Pharmacology of estrogens and progestogens: influence of different routes of administration. Climacteric, 2005.
[8] Lexaria Press Release May 18, 2023.

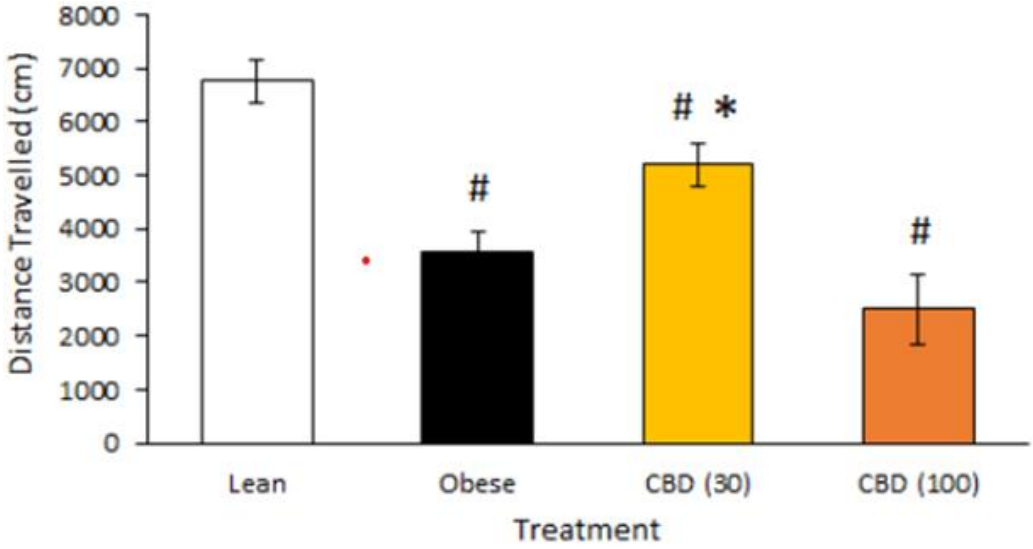
Results from the study generated multiple outcomes including weight loss in obese diabetic-conditioned animals, improved triglyceride and variable cholesterol levels. These biomarkers are all associated with diabetes and improvements can be associated with better outcomes for diabetic patients. Weight loss was observed four days after initial dosing of DehydraTECH-CBD. Maximum weight loss was achieved nine days after dosing began and was maintained for the 8-week duration of the study. The weight loss averaged 7% of body weight for both of the doses used in the study (30 mg/Kg and 100 mg/Kg). Only the DehydraTECH-CBD-dosed animals weighed less at the end of the study than at the beginning, whereas the weight of the untreated obese animals trended upwards throughout. Food and water intake for all groups was similar, supporting the hypothesis that weight loss is, at least in part, attributable to enhanced metabolic function.

Exhibit VII – Body Weight Trends for DehydraTECH CBD Subjects[9]



Activity levels were also measured in the animal subjects. An open field test[10] was used to measure distance and by extension, activity. Lean rats travel the greatest distance, followed by obese rats administered the 30 mg/Kg dose. Untreated obese rats travelled the next longest distance and obese rats administered a 100 mg/Kg dose produced the least distance. Relative distances for each of the groups are shown in the following exhibit.

Exhibit VIII – Distance Traveled for DehydraTECH CBD Subjects[11]

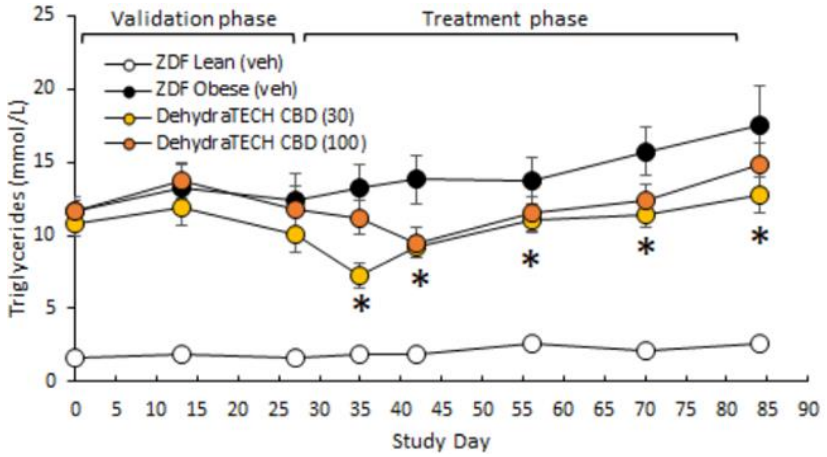


Study investigators hypothesize that the higher 100 mg/Kg dose may produce sedative effects, triggering hypolocomotion and the lesser distance for the higher dosed animals. This effect has been observed in other studies, including a rat study published in Psychopharmacology.[12]

[9] Source: Lexaria Press Release - Lexaria's DehydraTECH-CBD Diabetes Study Demonstrates Weight Loss, Improved Triglyceride and Cholesterol Levels. March 2, 2023.
[10] The open field test is a commonly used method to measure behaviors in animal models, including anxiety and movement.
[11] Source: Lexaria Press Release - Lexaria's DehydraTECH-CBD Diabetes Study Demonstrates Weight Loss, Improved Triglyceride and Cholesterol Levels. March 2, 2023.

Triglyceride and cholesterol levels responded to DehydraTECH CBD in test subjects. The effect was more pronounced for triglycerides and for the lower 30 mg/Kg dose. For the 30 mg/Kg dose, DehydraTECH CBD was more than 25% lower than the untreated obese animals.

Exhibit IX – Triglyceride Levels[13]

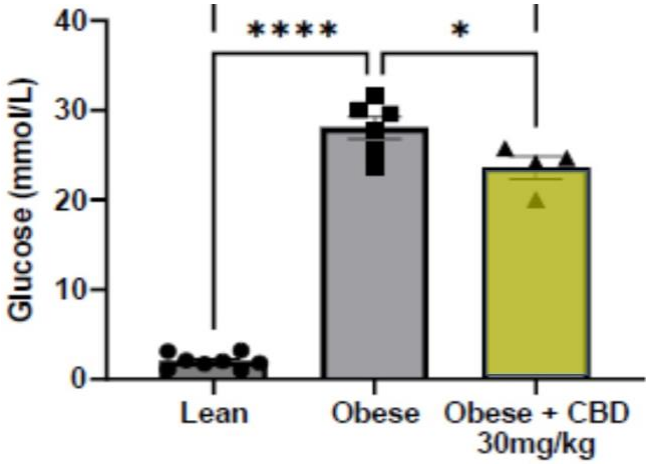


Cholesterol readings were less remarkable than those for triglycerides. However, the lower dose cohort outperformed the higher dose cohort for total cholesterol, low density lipoprotein (LDL) and high-density lipoprotein (HDL) cholesterol.

Lexaria's first foray in to diabetes with DehydraTECH CBD provided some notable insights into the mechanism of action for the candidate. Weight loss was the primary benefit identified in the diabetic rats as well as increased mobility and reduced triglycerides relative to obese models. The study used two doses in the preclinical evaluation which showed better efficacy at the lower 30 mg/Kg dose. Next steps for this program may include further investigation potentially with other drugs that help control glucose levels directly.

In a follow up analysis of the diabetes trial DIAB-A22-1, Lexaria examined the concentration of glucose in the animal models using a more sensitive assay detection system than that initially used. The details of this analysis were provided in a June 16th press release comparing glucose levels in animals that were lean, obese and obese and administered 30 mg/kg of CBD.

Exhibit X – Glucose Levels in Animal Models[14]



Lexaria discovered that blood glucose levels were statistically significantly lowered by 19.9 ± 7% in the obese diabetic-conditioned animals treated with the DehydraTECH-CBD 30 mg/Kg dose (yellow bar above) (*p<0.05) com-

[12] Monti, J.M. Hypnoticlike effects of cannabidiol in the rat. Psychopharmacology. December 1977.
[13] Source: Lexaria Press Release - Lexaria's DehydraTECH-CBD Diabetes Study Demonstrates Weight Loss, Improved Triglyceride and Cholesterol Levels. March 2, 2023.
[14] Lexaria Press Release June 16, 2023

pared to the obese vehicle control animals. Based on Lexaria's assessment, this appears to be a new discovery of a property not generally known to be associated with generic CBD treatment.

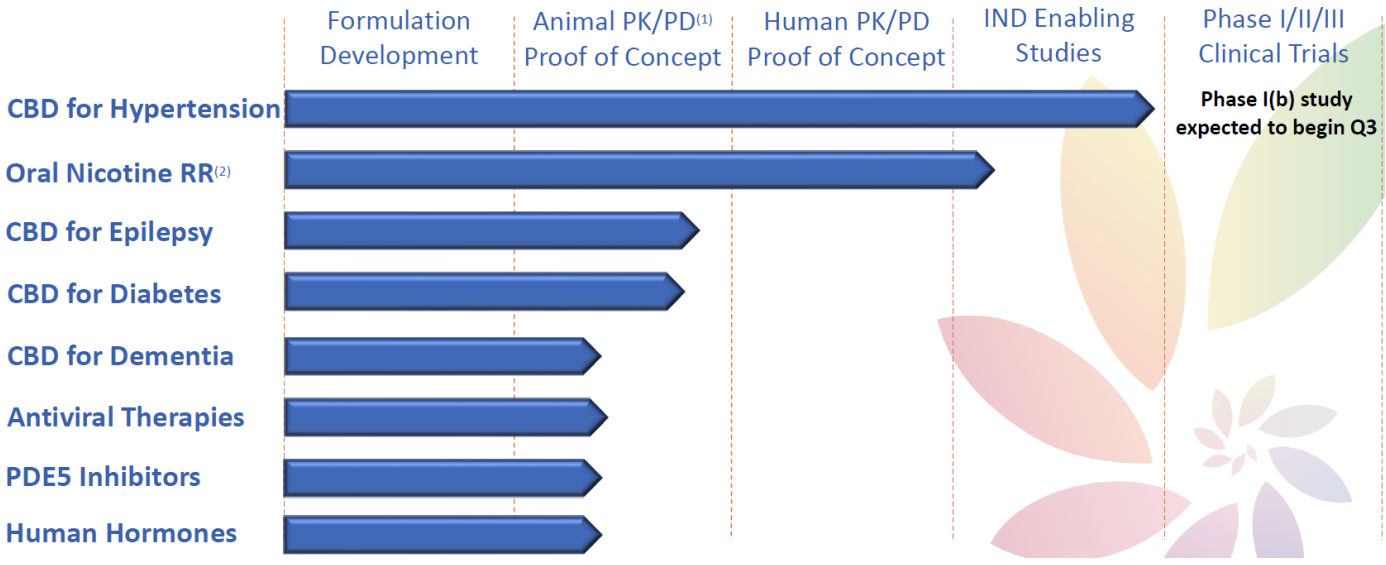
The strength of the data in the animal study has led Lexaria to pursue a human trial in diabetes using DehydraTECH CBD to see if any of the improvements observed in animals is exhibited in humans. Details of the effort are included in an August 2nd press release. Study design development is underway, and when complete will be submitted to an independent review board for approval. The study will take place at the same hospital in Europe that conducted the human hypertension studies with DehydraTECH. Study design is targeted to be complete by the first half of September followed by submission to the medical ethics boards for clearance.

Milestones (Calendar Quarters Used)

- Dosing completion in multiple studies – 1H:23
  - Dementia (DEM-A22-1)
  - Diabetes (DIAB-A22-1)
  - Nicotine (NIC-H21-1)
- Readouts from ongoing studies – 2023
- Outcomes for DIAB-A22-1 (diabetes) – March 2023
- CRO Selected for Phase Ib hypertension study – April 2023
- Nicotine study dosing completed – May 2023
- cGMP complete for Phase Ib hypertension study – May 2023
- Close of $2 million capital raise – May 2023
- New CFO Mike Shankman appointed – June 2023
- IND submission for DHT-CBD Phase Ib – 2H:23
- EPIL-A21-1 (seizures) final results – 3Q:23
- DEM-A21-1 (diabetes & dementia) study results – 4Q:23
- NIC-H22-1 (nicotine comparison with on! & ZYN) final results – 4Q:23
- DHT-CBD Phase Ib hypertension study – 2H:23

Pipeline

Exhibit XI – DehydraTECH Pipeline[15]



[15] Source: Lexaria May 2023 Corporate Presentation.

Summary

Lexaria has continued to generate new data for its DehydraTECH CBD product in a variety of indications. The lead programs in hypertension and nicotine have posted favorable results and support further clinical studies for the former and expanded relationships with partners for the latter. Lexaria's efficient use of capital has allowed the company's research and development activities to expand into new preclinical work including efforts in diabetes, hormone therapy and dementia. While still at an early stage, these programs could be excellent partnership opportunities that will support further growth and potentially provide growth capital. Research efforts around these indications help further characterize DehydraTECH CBD and its advantages compared with traditional delivery methods.

Recently released nicotine data prepared Lexaria to enter into discussions with prospective partners while IND development, submission and clearance are focal points for the hypertension program. Further efforts in hypertension are expected to include sharing the data with potential partners who will advance it to later-stage development and submission for approval with regulatory agencies. We maintain our price target of $12.00 per share.

PROJECTED FINANCIALS

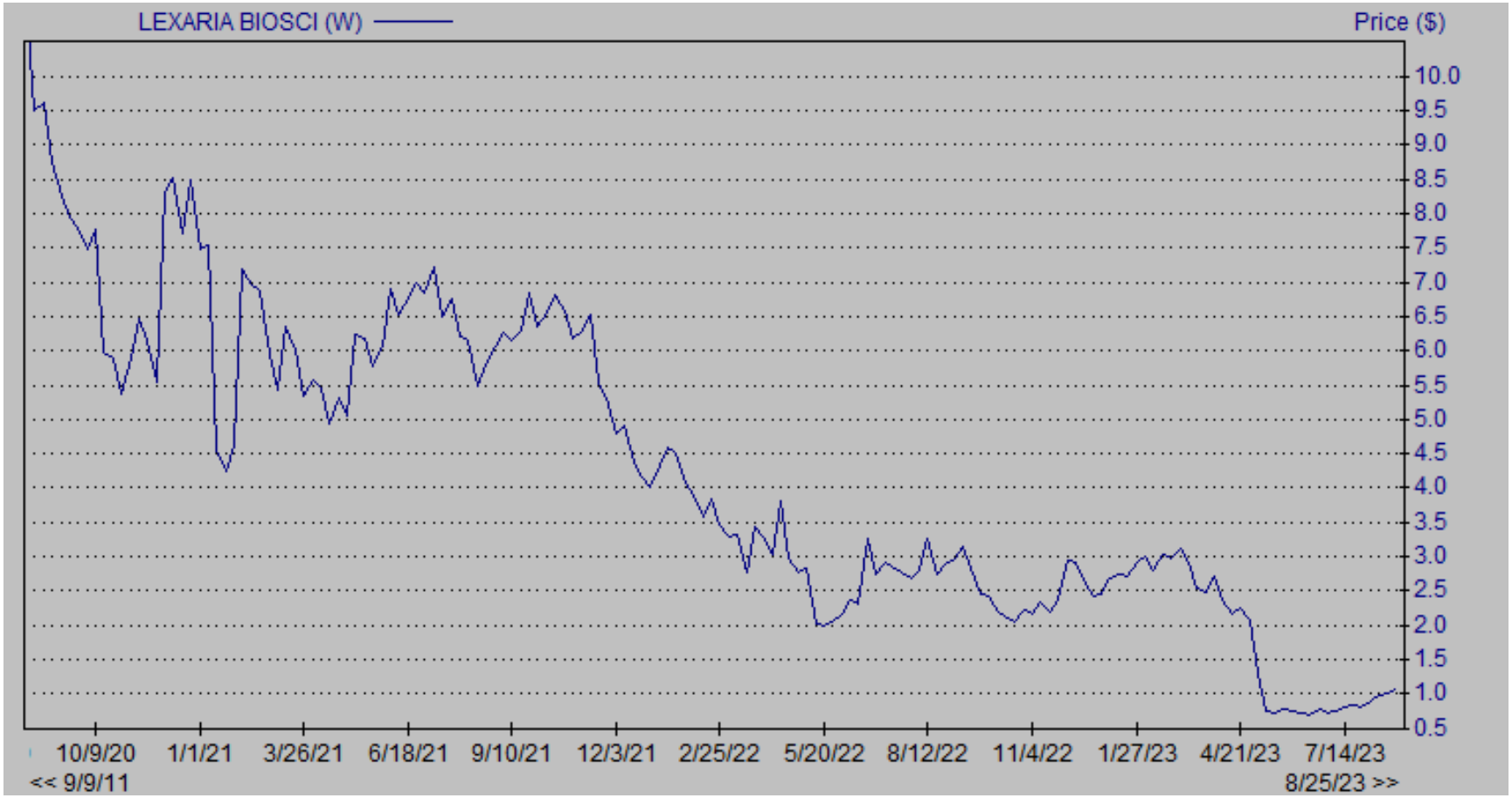
Lexaria Bioscience Corp. - Income Statement

Lexaria Bioscience Corp.	2022 A	Q1 A	Q2 A	Q3 A	Q4 E	2023 E	2024 E	2025 E
Total Revenues	**$255**	**$101**	**$35**	**$93**	**$175**	**$405**	**$1,012**	**$1,214**
YOY Growth	-65%	631%	15%	-7%	57%	58%	150%	20%
Gross Profit	$184	$86	$32	$80	$160	$358	$809	$971
Research & Development	$1,843	$829	$696	$1,641	$814	$3,980	$4,100	$4,223
General & Administrative	$5,725	$1,025	$647	$823	$700	$3,195	$3,323	$3,456
Income from operations	($7,384)	($1,769)	($1,311)	($2,384)	($1,354)	($6,818)	($6,614)	($6,708)
Discontinued operations	$0	$0	$0	$0	$0	$0	$0	$0
Non Controlling Interest	($114)	($13)	($13)	($7)	($7)	($40)	($37)	($38)
Pre-Tax Income	($7,269)	($1,756)	($1,298)	($2,377)	($1,347)	($6,778)	($6,614)	($6,708)
Net Income	**($7,269)**	**($1,756)**	**($1,298)**	**($2,377)**	**($1,347)**	**($6,778)**	**($6,614)**	**($6,708)**
Net Margin	*-2846%*	*-1730%*	*-3707%*	*-2551%*	*-770%*	*-1675%*	*-654%*	*-553%*
Reported EPS	**($1.24)**	**($0.30)**	**($0.22)**	**($0.37)**	**($0.17)**	**($1.03)**	**($0.66)**	**($0.55)**
Basic Shares Outstanding	5,885	5,951	5,951	6,441	8,000	6,586	10,000	12,250

Source: Company Filing // Zacks Investment Research, Inc. Estimates

HISTORICAL STOCK PRICE

Lexaria Bioscience Corp. – Share Price Chart[16]



[16] Source: Zacks Research System

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