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Lexaria BIOSCIENCE

Drug Delivery Platform Innovator
With Multiple Mainstream Applications

Corporate Presentation
July 2025

Lexaria Bioscience Corp.
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No statement within has been evaluated by the Food and Drug Administration, and no product or service is yet commercially approved and intended to diagnose, treat, cure or prevent any disease.

Table of Contents

Lexaria's Drug Delivery Platform Technology 01

Who We Are/What We Do

- Lexaria Bioscience is an **oral based, clinical stage, drug delivery enabling technology company**
- Our proprietary platform technology is called **DehydraTECH™**
  - Designed for **enhanced oral delivery** of peptides and small molecule Active Pharmaceutical Ingredients (APIs);
  - Combines ingredients together with a **dehydration processing** molecular association methodology;
  - **Enhances the pharmacokinetic performance** of APIs into the bloodstream, increasing bioavailability, improving speed of onset and increased brain absorption;
  - **Improves safety and tolerability** resulting in lower occurrences of adverse events;
  - Can be applied in **multiple oral product formats** such as tablets, capsules, and mouth melts;
  - **50 patents** have been granted to date with many more pending around the world for use with a broad range of bioactive molecules.
- We have a multi-pronged commercialization strategy focused on **partnering, out-licensing and internal development**

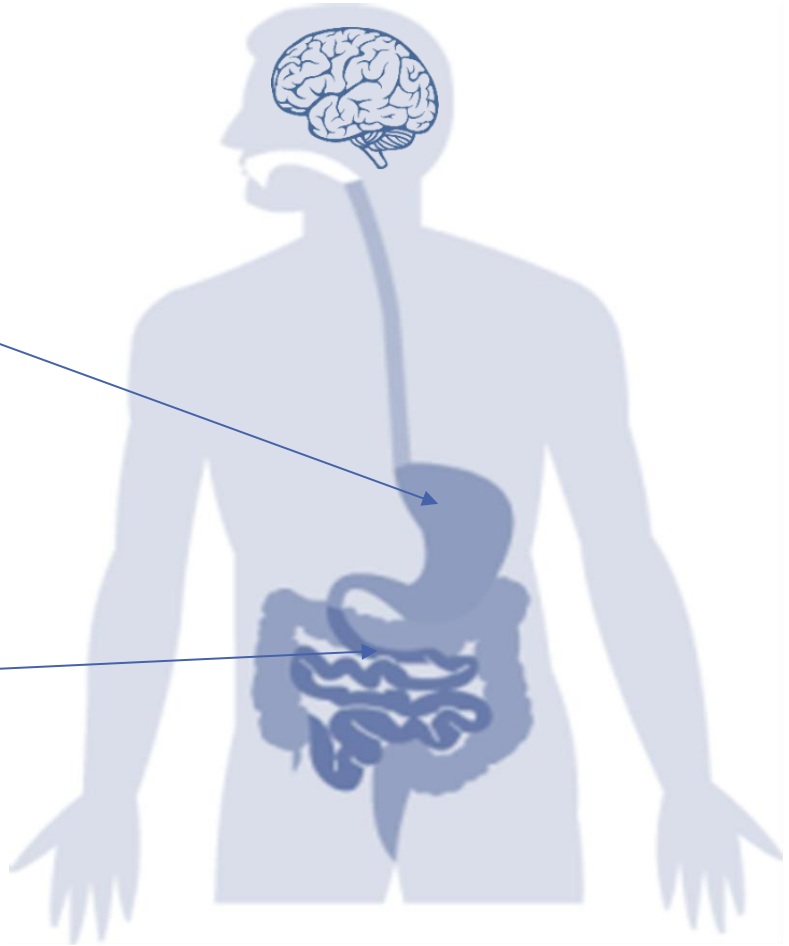
DehydraTECH Mechanism of Action

Ingestible Solid Orals / Liquids

Long chain fatty acid (LCFA) triglyceride oils influence gastric cholecystokinin production and motility(1)

Adjunct ingredients added to enhance stomach or small intestine uptake depending on desired site of absorption

Small intestine quickly absorbs LCFA-associated APIs into the bloodstream via the lymphatics bypassing first pass liver effect(2)



Enhanced brain absorption

Once absorbed systemically through dissolvable or solid oral form factors, LCFA-associated APIs are believed to enter brain preferentially through fatty acid transport proteins(3)

(1) https://www.gastrojournal.org/article/S0016-5085(99)70227-1/fulltext#back-bib2 (2) Based on dynamic light scattering particle size evaluation studies conducted by Canada's National Research Council as announced July 16, 2020 / https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3202979/pdf/nihms330214.pdf"
(3) https://onlinelibrary.wiley.com/doi/10.1111/j.1471-4159.2011.07245.x

Why GLP-1?

02

GLP-1 Marketplace

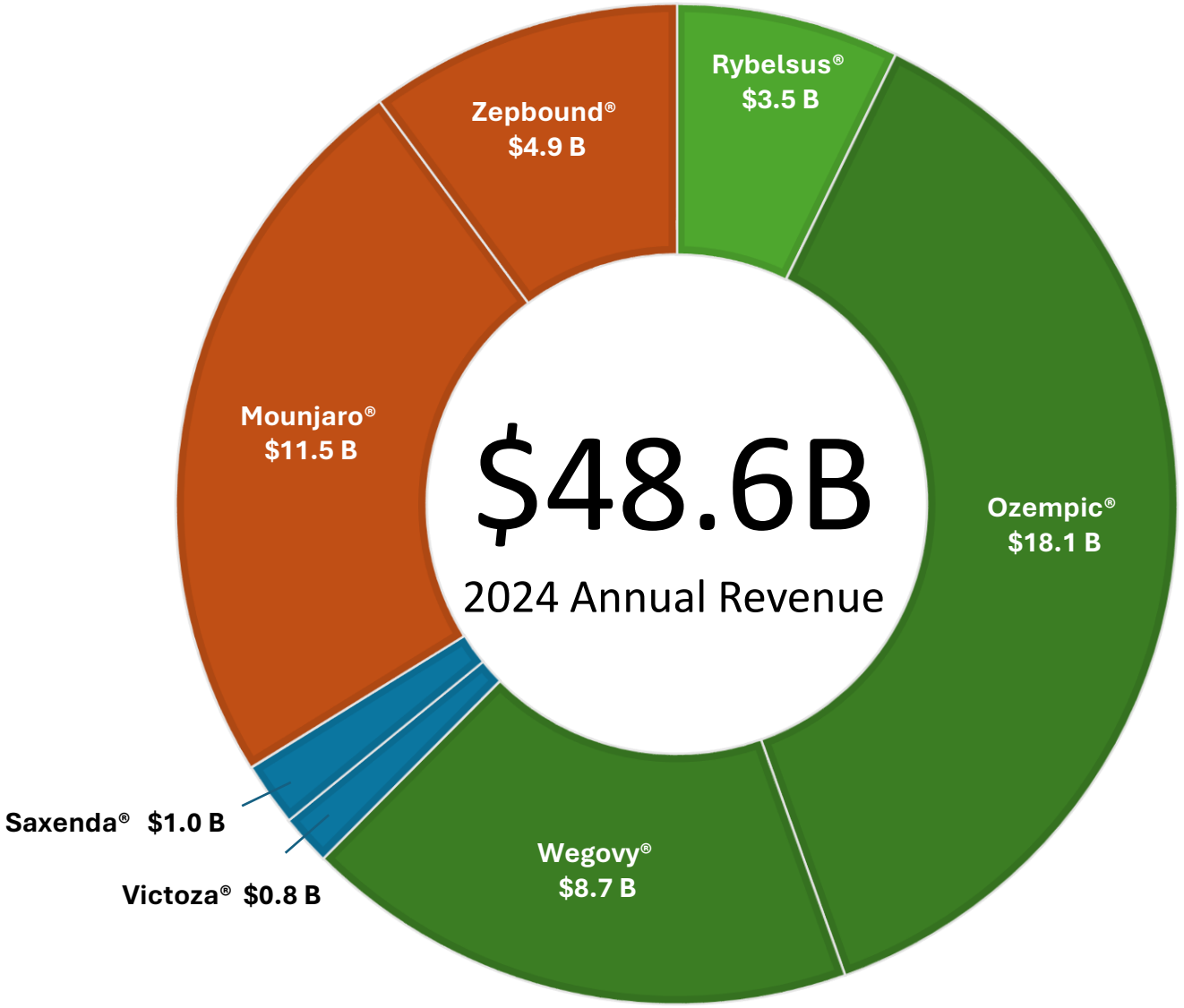
- GLP-1 drug market is exploding and expecting to **exceed $100B by 2030**[1]
- Market is **extremely concentrated**:

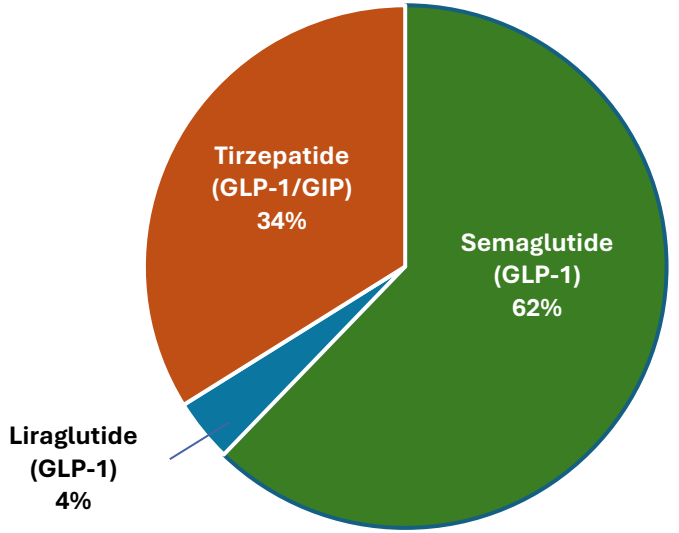
API	Company	Leading Drug Brand Name	
		Diabetes	Weight Loss
Semaglutide	Novo Nordisk	Ozempic® Rybelsus®	Wegovy®
Liraglutide[2]	Novo Nordisk	Victoza®	Saxenda®
Tirzepatide	Eli Lilly	Mounjaro®	Zepbound®

- Only **one product**, Rybelsus®, is currently approved and offered in an oral format powered by Novo Nordisk's proprietary salcaprozate sodium (SNAC) technology
- Given the choice, **patients prefer orals** over injectables
- Lexaria has **demonstrated oral utility** with many APIs, including the **top 3** (semaglutide, liraglutide, tirzepatide) within GLP-1 today

1 Source: JP Morgan Global Research - November 29, 2023 - "The increase in appetite for obesity drugs"
2 Drug went off patent in 2024 and is also being sold as an authorized generic by Teva Pharmaceuticals

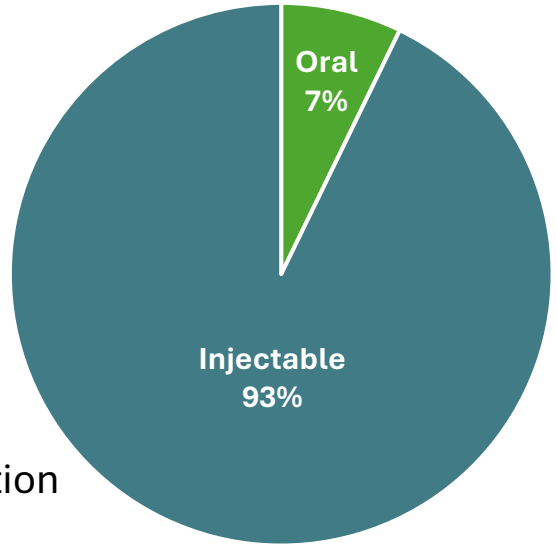
Leading GLP-1 Drugs





Active Pharmaceutical Ingredient (API)

"The Oral Opportunity"



Mode of Administration

Sources: Novo Nordisk and Eli Lilly 2024 Annual Reports

2024/25 Diabetes & Weight Loss R&D Program Focus

- Animal and human studies of DehydraTECH with various GLP-1/GIP APIs:
  - Animal Study #1 (WEIGHT-A24-1) – Zucker rats (n=72), 12 arms;
  - Human Pilot #1 (GLP-1-H24-1) – (n=7), 2 arms;
  - Human Pilot #2 (GLP-1-H24-2) – (n=9), 3 arms;
  - Human Pilot #3 (GLP-1-H24-3) – (n=8), 2 arms;
  - **Registered Phase 1b Human Study #4 (GLP-1-H24-4)** – (n=120 obese, pre-/T2D), 5 arms.
  - Human Pilot #5 (GLP-1-H25-5) – (n=8), 2 arms;
  - Animal Biodistribution Study (BDS-A25-1) - 2 arms
- Parameters to be tested include:
  - Pharmacokinetics
  - Body weight
  - Blood glucose (including post-dose food challenge)
  - Glucagon
  - Insulin and A1C levels
- Drugs under examination: Semaglutide – Liraglutide – Tirzepatide - Cannabidiol
- Semaglutide being evaluated both with, and without, SNAC presence
- Long-term stability and mode of action characterization testing are also be performed

NOTE: Tirzepatide is also a glucose-dependent insulinotropic polypeptide (GIP) receptor agonist
T2D = Type 2 Diabetes
SNAC = Salcaprozate Sodium

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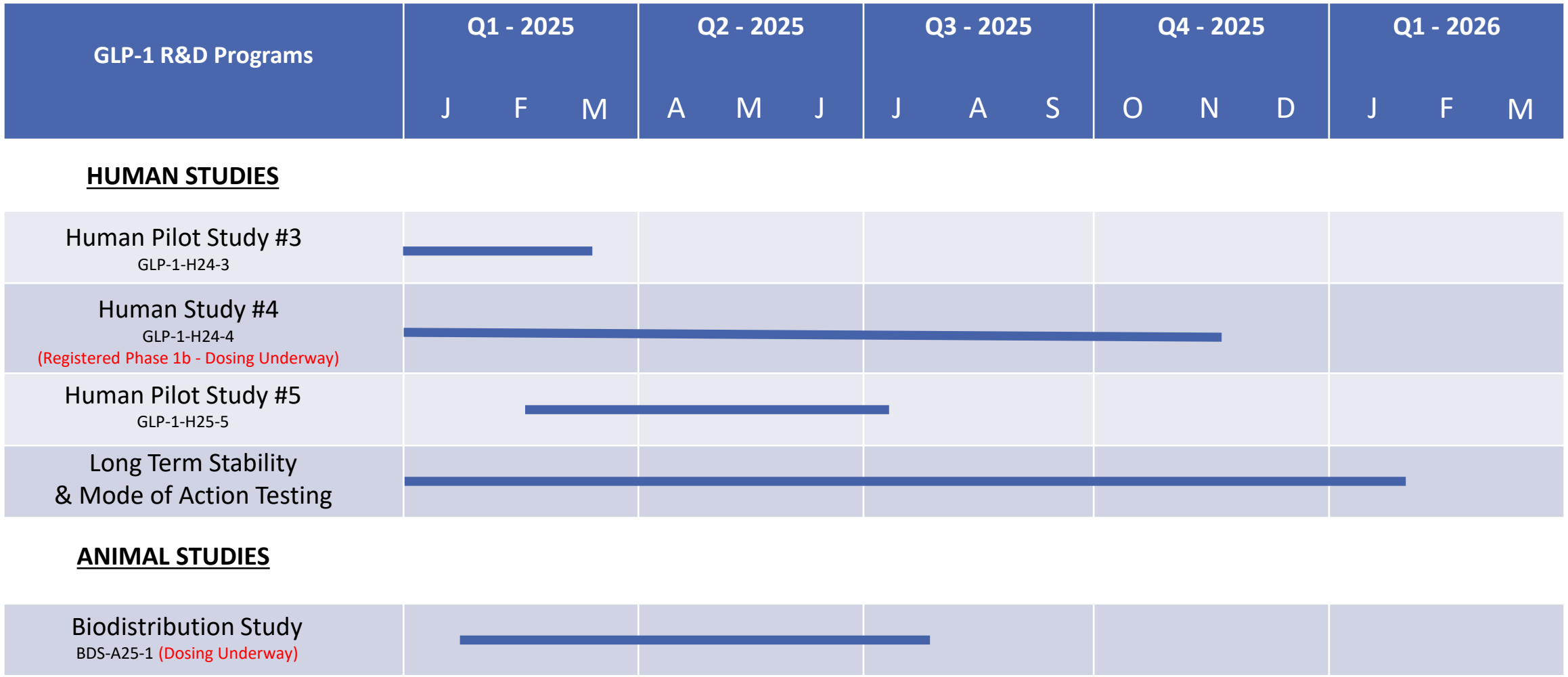
2025 GLP-1 R&D Program Timelines



Completed GLP-1 R&D Studies

GLP Animal Study #1	Human Pilot Study #1	Human Pilot Study #2	Human Pilot Study #3
WEIGHT-A24-1	GLP-1-H24-1	GLP-1-H24-2	GLP-1-H24-3

2024 Activities and Achievements 03

Human Pilot Study #1 – GLP-1-H24-1

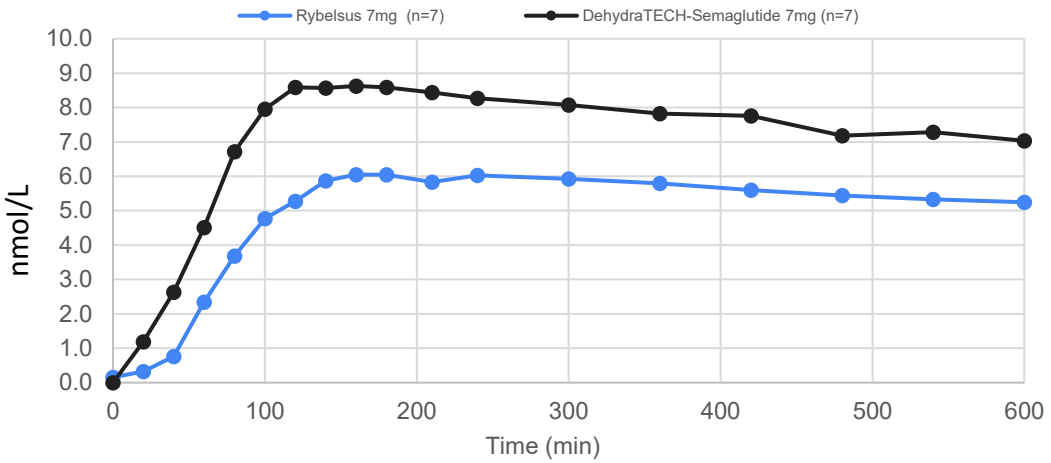
Study Design

- Randomized, cross-over, single-dose, Investigator-initiated pilot study in 7 healthy volunteers (completed in 2023):
  - Rybelsus® 7mg tablets vs. DehydraTECH-semaglutide 7 mg compound formulated capsules (using crushed Rybelsus® tablets);
- Blood sampled at 18 intervals from T=0 to T=600 min and again at T=24hr post-dose follow up (figures do not show T-24hr data);

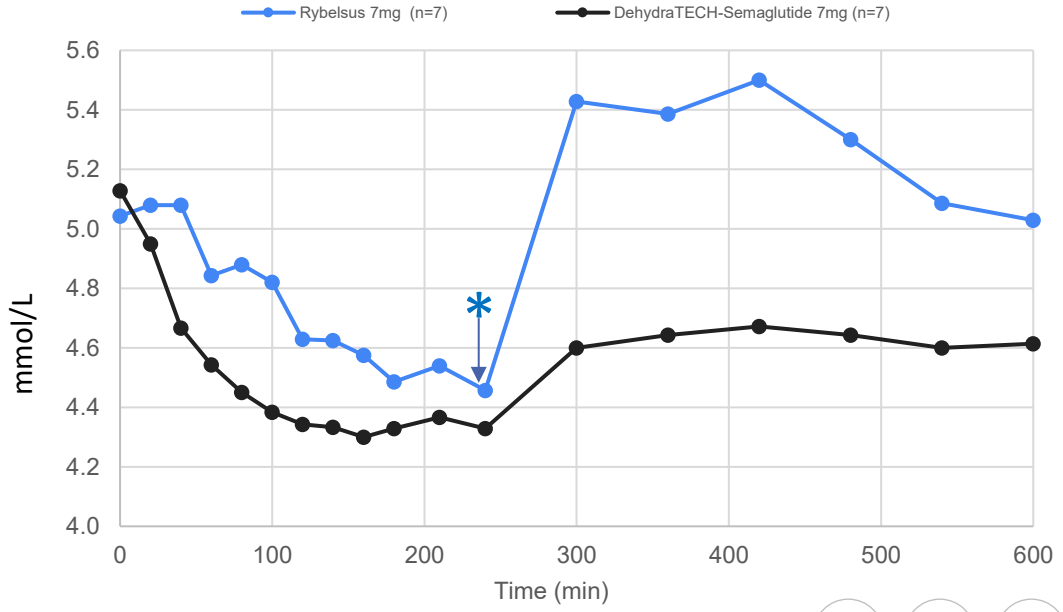
Key Results

- Sustained **higher** blood semaglutide levels / AUC demonstrated throughout the study duration with DehydraTECH ($p<0.05$);
- Blood glucose levels **lower** throughout the study have contributed to the pronounced GLP-1 effect profile witnessed; with DehydraTECH ($p<0.05$); most notably post prandially*;
- Enhanced central delivery attributes of DehydraTECH may have contributed to the pronounced GLP-1 effect profile witnessed;
- **Improvements** in GI tolerability observed:
  - **Zero** instances of moderate nausea/diarrhea with DehydraTECH-semaglutide;
  - **Moderate** nausea (n=2) and moderate diarrhea (n=1) only reported with Rybelsus® treatment.

Blood semaglutide levels



Blood glucose levels



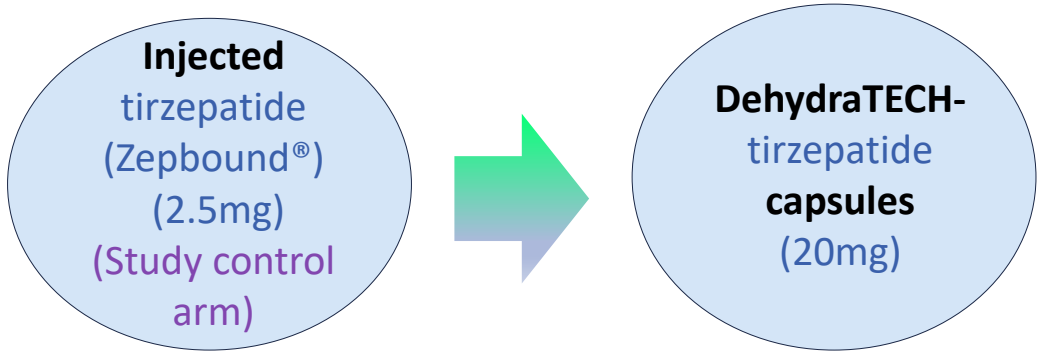
DehydraTECH Reduces Adverse Events

Summary

- DehydraTECH-semaglutide has generally been **better tolerated** than Rybelsus® oral tablets under both fasted and fed pre-dose conditions;
- Only **Rybelsus® tablets have produced moderate-grade adverse events ("AEs")** in Lexaria clinical studies to-date
- **Zero** serious AEs reported

Adverse Events from Pilot Studies #1 (GLP-1-H24-1) and #2 (GLP-H24-2)		
	Pilot Study #1 (n=7) Fasted Pre-Dose	Pilot Study #2 (n=9) Fed Pre-Dose
Rybelsus® Tablet	28 AEs (22 mild; 6 moderate; 20 GI related)	10 AEs (all mild; 7 GI related)
DehydraTECH-semaglutide	15 AEs (all mild; 8 GI related)	0 AEs

Human Pilot Study #3 Design - GLP-1-H24-3



2-arm cross over human exploratory pilot study
N = 8

Study Design

Randomized single dose (7-day), two-arm exploratory pilot study

Test side effects, blood saturation levels, blood sugar and blood insulin

Primary endpoint:

- Safety and tolerability of oral DehydraTECH-tirzepatide relative to subcutaneously administered tirzepatide in heathy volunteers

Secondary endpoint:

- Pharmacokinetics and efficacy of oral DehydraTECH-tirzepatide relative to subcutaneously administered tirzepatide in heathy volunteers

The new DehydraTECH-tirzepatide capsule formulation (from Zepbound®) designed with FDA-compliant co-ingredients. Zepbound® is a dual action GLP-1 + GIP drug

Human Pilot Study #3 Results - GLP-1-H24-3

Summary

- Oral DehydraTECH-tirzepatide evidenced **reduced adverse events of 47%** compared to injected Zepbound® and **reduced gastrointestinal ("GI")-related events of 54%**;
- **Blood glucose reduction** and insulin secretion levels from the oral DehydraTECH-tirzepatide were **comparable** to injected Zepbound®.

Results

- Mean baseline blood glucose levels (expressed in mg/dL) were 88.2±9.0 for oral DehydraTECH-tirzepatide and 87.8±11.3 for injected Zepbound®, compared to the Study-ending levels of 83.2±5.7 and 81.7±4.0 respectively;

Adverse Events from Human Pilot Study #3 - GLP-1-H24-3

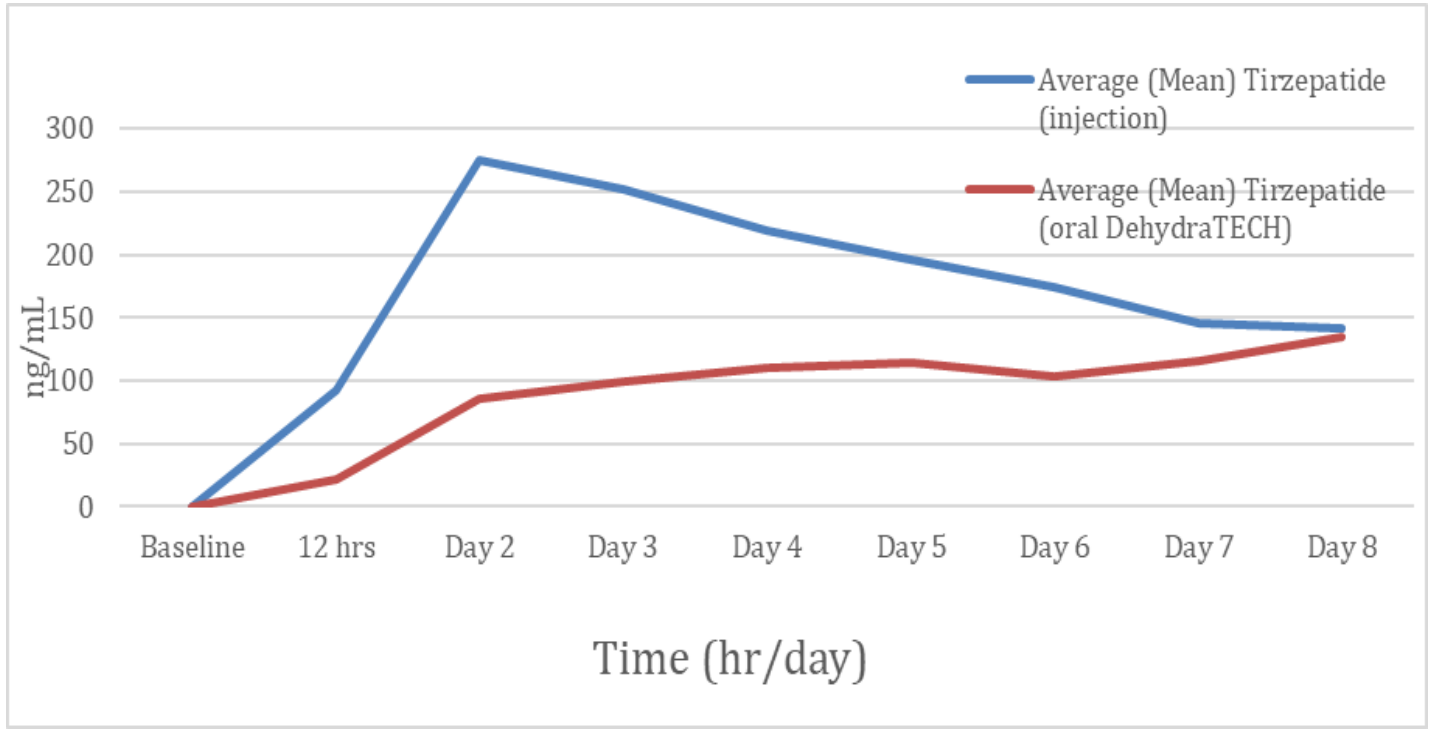
	Total Adverse Events (n=9)	GI Related Adverse Events (n=9)
Zepbound®	38 AEs	23 AEs
DehydraTECH-tirzepatide	20 AEs	10 AEs
Reduction in AEs	**-47%**	**-57%**

- Mean baseline blood insulin levels (expressed in µU/mL) were 11.2±4.1 for injected Zepbound® and 12.0±6.1 for oral DehydraTECH-tirzepatide, compared to the ending levels of 16.2±6.2 and 14.9±3.5 respectively.
- Of note, however, at peak times, the oral DehydraTECH-tirzepatide-**induced insulin levels were as much as approximately 100% higher** than those from the Zepbound® injection.

Human Pilot Study #3 Results - GLP-1-H24-3

Summary

- **More consistent accumulation of tirzepatide in the bloodstream** over a one-week duration with once-daily DehydraTECH-tirzepatide oral capsules as compared to once-weekly injection of Zepbound®
- Oral DehydraTECH-tirzepatide reaches **blood level parity** with injectable Zepbound® by the the end of the study



2025 Activities

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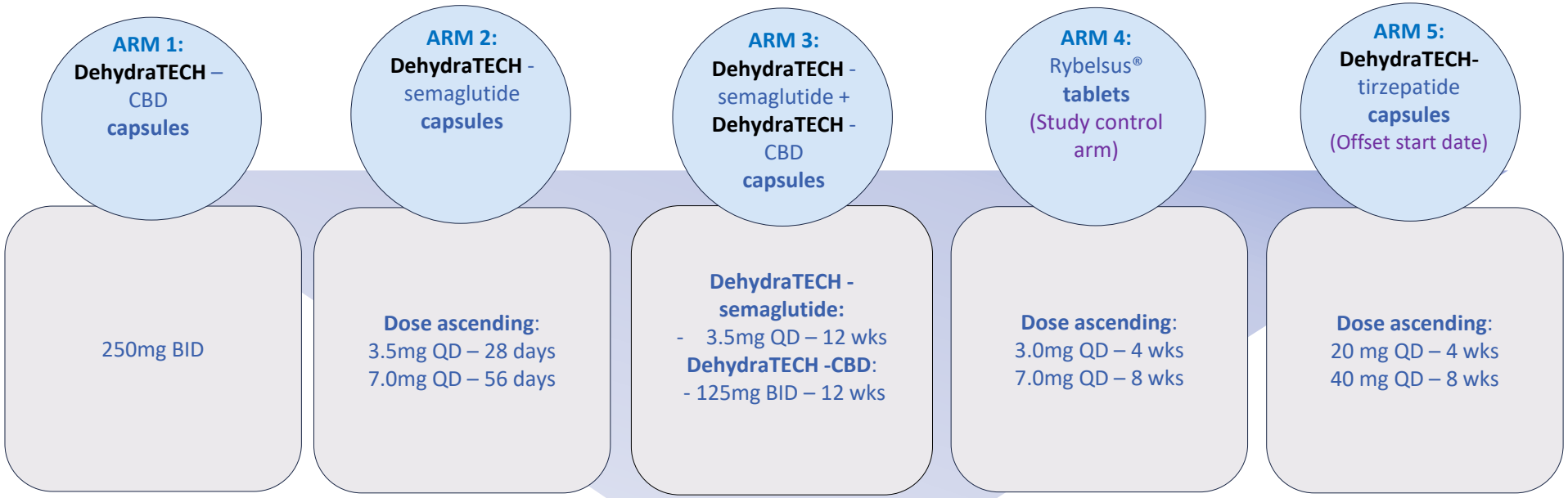
Phase 1b Human Study #4 Design - GLP-1-H24-4



Primary Endpoints

- Decrease in HbA1c and/or 5% bodyweight reduction
- Safety

Secondary Endpoints

- Fasting glucose, cholesterol levels
- Inflammation, estimated glomerular filtration rate
- Liver enzymes
- Assessment of adverse events using a visual analog scale

Each study arm expected to be N=16-20
QD: Once daily; BID: Twice daily

Study Design

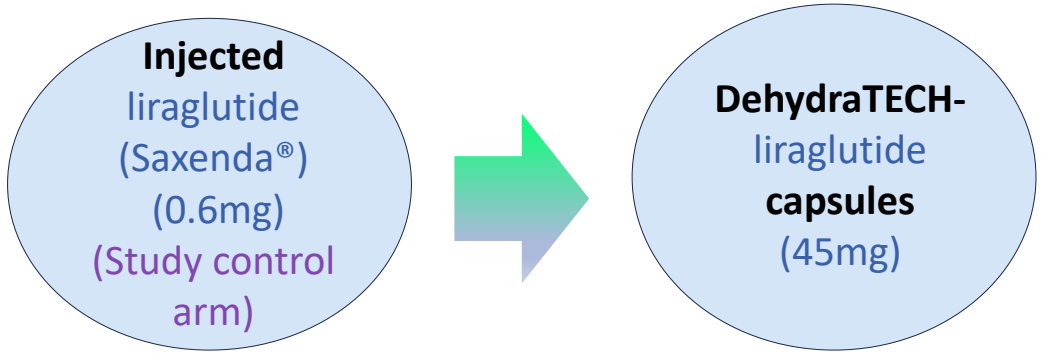
12-week study examining **DehydraTECH-processed GLP-1 and/or CBD** alone or in combination with different formulations in obese volunteers and/or patients with pre or Type 2 diabetes

The study will use pure semaglutide rather than Rybelsus® and pure tirzepatide rather than Zepbound®.

DehydraTECH - CBD

250mg BID dose in this study is higher compared to the previous study completed which used 30mg/kg and 100 mg/kg and showed 7% weight loss reductions in both dosing

Human Pilot Study #5 Design - GLP-1-H25-5



2-arm cross over human exploratory pilot study
N = 8

Study Design

Randomized single dose (7-day), two-arm exploratory pilot study

Test side effects, blood saturation levels, blood sugar, blood insulin and body weight analysis

Primary endpoint:

- Safety and tolerability of oral liraglutide relative to injectable liraglutide in heathy volunteers

Secondary endpoint:

- Pharmacokinetics and efficacy of oral **DehydraTECH**-liraglutide relative to injectable liraglutide in heathy volunteers

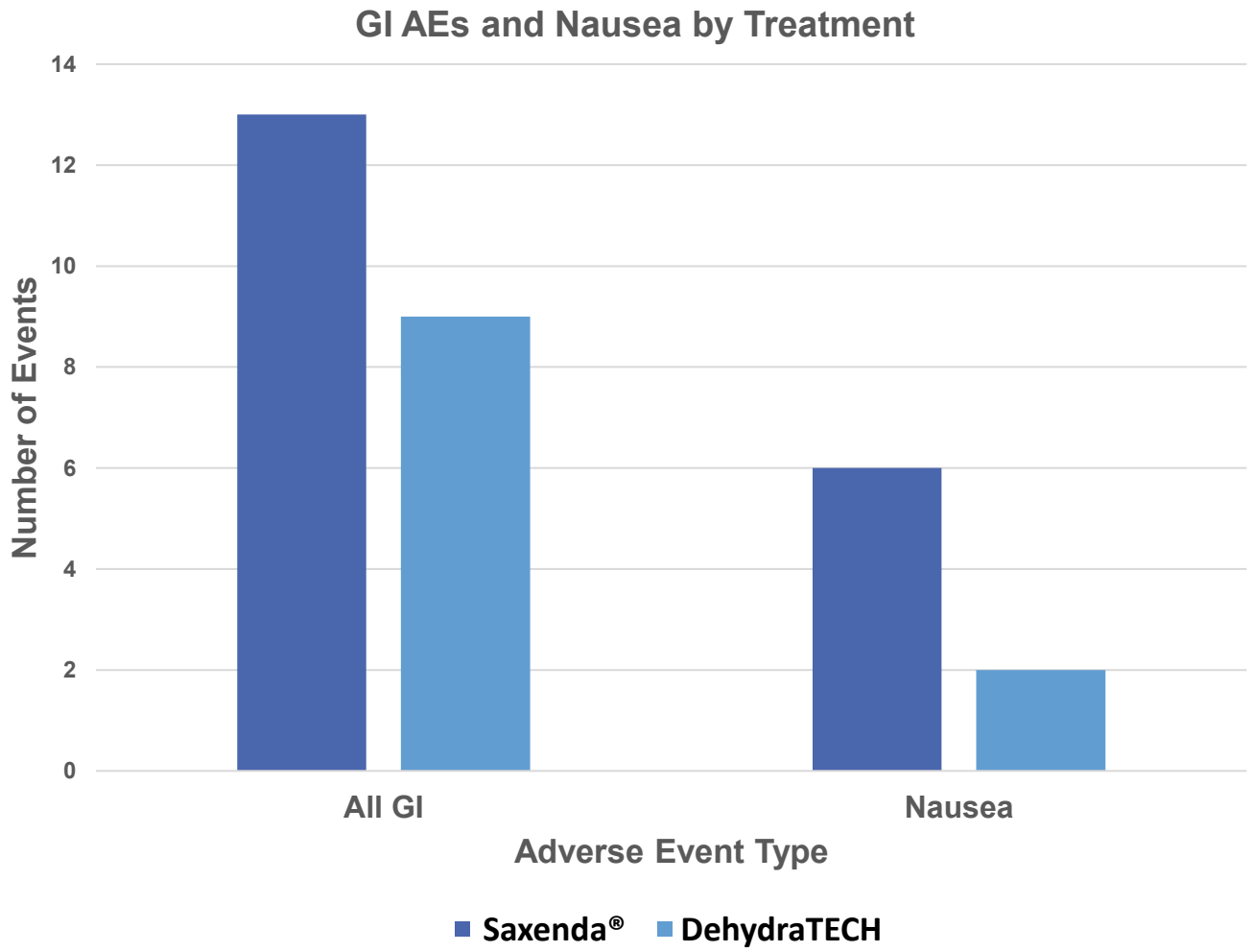
Potential Commercial Pathway:

In June of 2024, Teva Pharmaceuticals launched an authorized generic version of Novo Nordisk's Victoza® (liraglutide)

Human Pilot Study #5 Partial Results - GLP-1-H25-5

Summary

- **Improved AE profile with 22.7% reduction in AEs compared to Saxenda®, 31% reduction in gastrointestinal AEs and a 67% reduction in nausea specifically**
- Glycemic control parameters measured (glucose and insulin) tracked remarkably similar for both treatments
- Weight loss experienced by 9 out of 10 subjects in each arm
- Pharmacokinetic data analysis and reporting in process



Biodistribution Study Design - BDS-A25-1

FTS combined with ingredients in the proportions used within the Rybelsus® orally-administered product, designed to mimic Rybelsus® performance
(Study control formulation)

FTS combined *with* patented DehydraTECH ingredients and processes to evidence potential biodistribution differences when DehydraTECH is used

Lexaria seeking to discover whether the **DehydraTECH** processing of semaglutide improves its biodistribution in any significant way as compared to the study control.

Primary endpoint:

- **DehydraTECH**-semaglutide will be tracked via fluorescent imaging detection to evidence how and where semaglutide distributes and localizes following oral ingestion.

Secondary endpoint:

- Key tissues will be examined including the brain, pancreas, lung, kidney, liver and heart.

FTS = Fluorescently tagged semaglutide

Material Transfer Agreement

- In September of 2024, Lexaria **entered into a Material Transfer Agreement** with a **global pharmaceutical company** to evaluate DehydraTECH technology in a pre-clinical setting;
- **Awarded the partner** a temporary **exclusive license** option, limited to specific DehydraTECH concepts and formulations;
- Lexaria is responsible for **formulation** and **supply** of certain DehydraTECH compositions, **completed November 2024**;
- **Pharmacokinetics** of DehydraTECH compositions will be **evaluated in animal studies** and the outcome of the animal studies could result in a **potential collaboration**;
- Awaiting results of Human Study #4 - GLP-1-H24-4

Financial Information 05

Financial Information(1)

NASDAQ:LEXX | NASDAQ:LEXXW

Shares Outstanding	19.6 million
Fully Diluted	28.4 million
Share Price	US $0.87
Average Volume	147,378(2)
Market Cap	US $17.0 million
Cash and Equivalents (February 28, 2025)	US ~$6.5 million
Debt	US $0

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(1) As of 6/30/2025, source Nasdaq
(2) 1-month average volume, as of June 30, 2025

Investment Highlights 06

Investment Highlights

Multiple Mainstream Applications of DehydraTECH in Large Markets

- DehydraTECH is a **versatile drug delivery platform**
- DehydraTECH offers **faster and more effective drug absorption** into bloodstream and brain tissues
- DehydraTECH pipeline **addressing serious unmet patient needs** with substantial market potential
- **Large addressable market opportunities** in GLP-1 drugs, hypertension and other APIs
- **50 patents granted** and many more patent applications pending around the world

Catalysts

GLP-1 (Diabetes/Weight Loss):

- Registered Phase 1b Human Study #4: GLP-1-H24-4
- Human Pilot Study #5: GLP-1-H25-5
- Biodistribution Study: BDS-A25-1

Global Pharmaceutical Company MTA:

- Evaluation of DehydraTECH technology in a pre-clinical setting

Hypertension (TBD):

- FDA Investigational New Drug opening study HYPER-H23-1

Commercialization Pathway

- **Multi-pronged commercialization strategy:**
  - Attract and partner with pharmaceutical companies seeking the benefits of DehydraTECH technology
  - Potential to develop and launch a patented DehydraTECH-CBD product within GLP-1
  - Potential to develop and sell the world's first oral version of a leading injectable GLP-1 drug, liraglutide, utilizing DehydraTECH
- **Demonstrated oral utility with many APIs**, including the **top 3 in GLP-1** (semaglutide, liraglutide, tirzepatide)

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Drug Delivery Platform Innovator
With Multiple Mainstream Applications

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Appendices

07

A. GLP-1 Diabetes Animal Study - WEIGHT-A24-1
B. Human Pilot Study #2 - GLP-1-H24-2
C. DehydraTECH for Hypertension
D. Management, Directors, and Advisors
E. Product Pipeline
F. Scientific Publications

GLP-1 Diabetes Animal Study - WEIGHT-A24-1

Appendix A

Animal Study Design - WEIGHT-A24-1

Grp	Treatment	N
A	**DehydraTECH**-CBD (HYPER-H21-4-OTC composition)	6
B	**DehydraTECH**-CBD (DIAB-A22-1 / IVS231-22068-OTC composition)	6
C	**DehydraTECH**-CBD (HYPER-H23-1-P composition)	6
D	**DehydraTECH**-CBD (Secondary DIAB-A22-1 / IVS231-22068-P composition)	6
E	**DehydraTECH**-semaglutide (re-formulated Rybelsus® OTC version)	6
F	**DehydraTECH**-semaglutide (re-formulated Rybelsus®-P version)	6
G	**DehydraTECH**-semaglutide (pure API-P version)	6
H	**DehydraTECH**-liraglutide (pure API-P version)	6
I	Combo of one **DehydraTECH**-semaglutide and one **DehydraTECH**-CBD	6
J	Combo of **DehydraTECH**-liraglutide and one **DehydraTECH**-CBD	6
K	Vehicle (water)	6
L	Commercially available Rybelsus® tablet as a crushed powder	6
	Total N =	72

12-week study to investigate the effects of test formulations (**DehydraTECH**) containing CBD, semaglutide, or liraglutide on diabetes and obesity in the male Zucker diabetic fatty (ZDF) rats.

- Blood saturation levels
- Blood sugar levels
- Blood insulin
- Blood glucagon
- Brain tissue
- Weight loss

12-Week Animal Body Weight Results - WEIGHT-A24-1

Summary

- **DehydraTECH-liraglutide and a select DehydraTECH-CBD** formulation were the **top performing groups in the study** outperforming the Rybelsus® control group (L) in **body weight-loss**, by **11.53%** and **10.65%** respectively;
- **DehydraTECH-semaglutide** compositions with and without SNAC technology **outperformed Rybelsus®** control in body weight;
- **Weight-control improvement** demonstrated **in all study groups during the final 4-weeks**.

Results

- **The degree of improvement** (groups B-J) over Rybelsus® in body weight-control was **statistically significant**, $p<0.05$;
- The animals in the **vehicle control group** (K) experienced an **average weight gain of 1.40%.**

Summarized Animal Weights (grams)

DehydraTECH Groups	End of Acclimation Period	Day 28	% Change to Day 28	Day 56	% Change to Day 56	Day 84	% Change to Day 84
B: DHT-CBD2	394.6	393.3	**-0.33%**	386.1	**-2.15%**	374.9	**-5.00%**
C: DHT-CBD3	416.0	408.8	**-1.72%**	407.3	**-2.08%**	402.5	**-3.24%**
D: DHT-CBD4	431.2	431.7	+0.11%	434.2	+0.69%	419.0	**-2.83%**
E: DHT-Rybelsus®1 w/SNAC	394.9	394.6	**-0.06%**	401.4	+1.65%	393.6	**-0.32%**
F: DHT-Rybelsus®2 w/SNAC	406.2	409.1	+0.70%	406.7	+0.11%	403.1	**-0.78%**
G: DHT-Semaglutide No SNAC	394.2	394.8	+0.15%	399.0	+1.21%	394.1	**-0.02%**
H: DHT-Liraglutide No SNAC	392.2	385.7	**-1.65%**	373.6	**-4.74%**	369.1	**-5.88%**
K: Vehicle Control (Placebo)	427.7	442.5	+3.46%	440.1	+2.90%	433.7	+1.40%
L: Rybelsus® Control w/SNAC (No DehydraTECH)	430.2	446.7	+3.84%	459.2	+6.74%	454.5	+5.65%

12-Week Animal Blood Sugar Results - WEIGHT-A24-1

Summary

- **DehydraTECH-liraglutide and a select DehydraTECH-CBD** formulation were the **top performing groups in the study** outperforming the Rybelsus® control group (L) in **blood sugar**, by **11.13%** and **3.35%** respectively;
- Outcomes from this study are strongly supportive of Lexaria's **Registered Phase 1b Human Study**.

Results

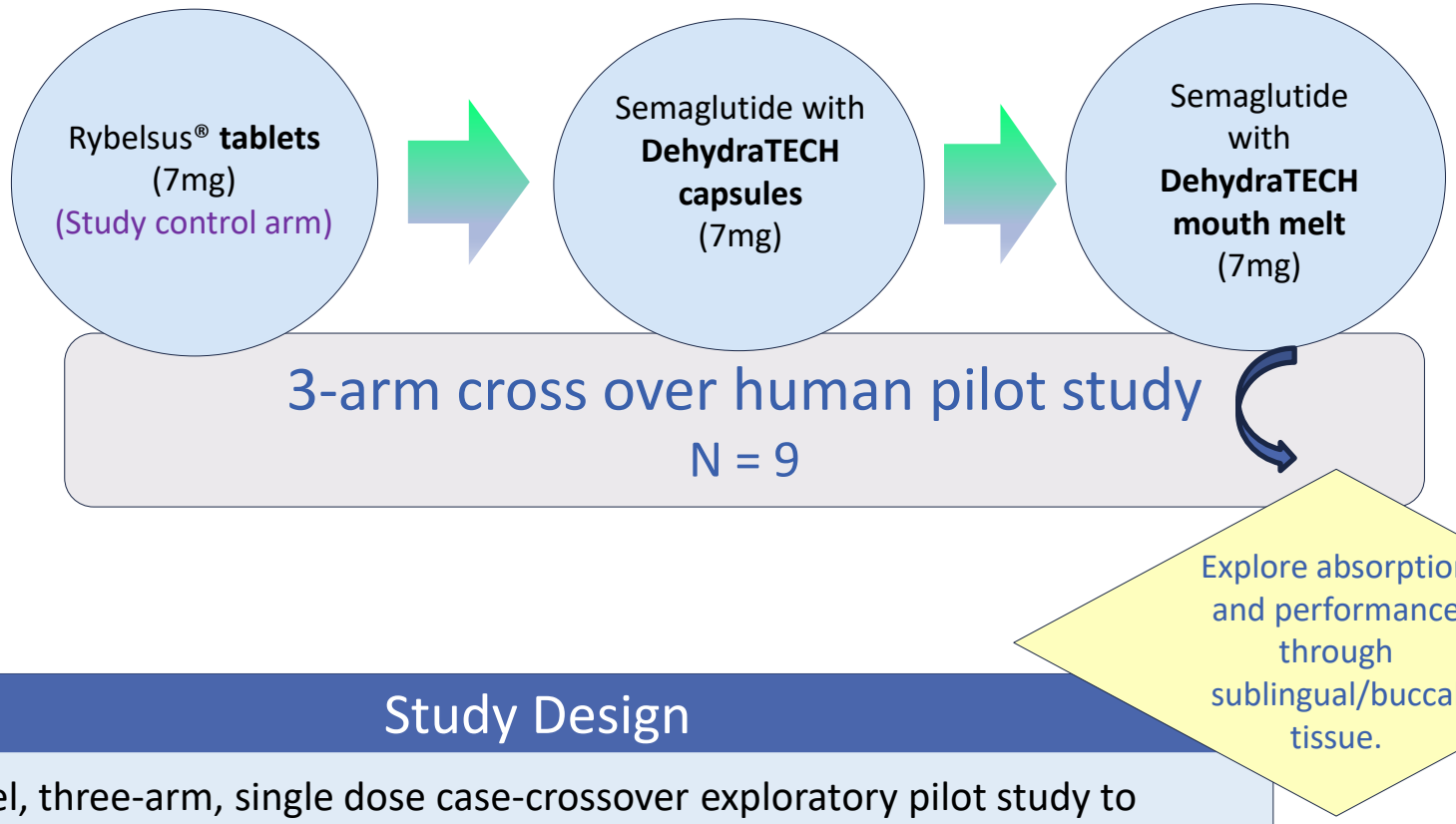
- The animals in the **vehicle control group** (K) experienced an **average increase in blood sugar of 10.33%;**
- **Additional data processing and interpretation remains**, including the analyses of **brain and blood absorption pharmacokinetic results.**

Summarized Blood Sugar Levels (mmol/L)							
DehydraTECH Groups	**End of Acclimation Period**	**Day 28**	**% Change to Day 28**	**Day 56**	**% Change to Day 56**	**Day 84**	**% Change to Day 84**
B: DHT-CBD2	28.4	29.2	2.73%	26.6	**-6.22%**	27.3	**-3.76%**
H: DHT-Liraglutide No SNAC	26.4	25.8	**-2.08%**	25.2	**-4.56%**	23.3	**-11.54%**
K: Vehicle Control (Placebo)	24.2	25.7	6.2%	27.7	14.46%	26.7	10.33%
L: Rybelsus® Control w/SNAC (No DehydraTECH)	24.3	25.1	3.29%	26.1	7.41%	24.2	**-0.41%**

Human Pilot Study #2 – GLP-1-H24-2

Appendix B

Human Pilot Study #2 Design - GLP-1-H24-2



Study Design

Open label, three-arm, single dose case-crossover exploratory pilot study to assess the tolerability, PK, and glucose homeostasis.

Test side effects, blood saturation levels, blood sugar and blood insulin

Primary endpoint:

- Safety and tolerability of oral ingestible and sublingual/buccal semaglutide with **DehydraTECH** vs Rybelsus®

Secondary endpoint:

- PK and PD of oral ingestible and sublingual/buccal semaglutide with **DehydraTECH** vs Rybelsus®

Results From Human Pilot Study #2 - GLP-1-H24-2

Summary

- Trend toward **higher overall absorption** under fed conditions evidenced with DehydraTECH-processed Rybelsus®.

Results

- Two study arms compared equal 7 mg semaglutide doses from a Rybelsus® swallowed tablet versus a DehydraTECH-processed Rybelsus® swallowed capsule;
- DehydraTECH-processed Rybelsus® **evidenced higher semaglutide levels in 17 of the 19 blood draws** taken until the 24-hour completion of the study **averaging 18.8% higher semaglutide levels over the course of the study compared to Rybelsus® alone**;
- Volunteers in this study were administered the drugs while they were in a "fed" state, as compared to an earlier study that demonstrated a **43% peak blood level improvement** wherein the volunteers were administered the drug in a "fasted" state.

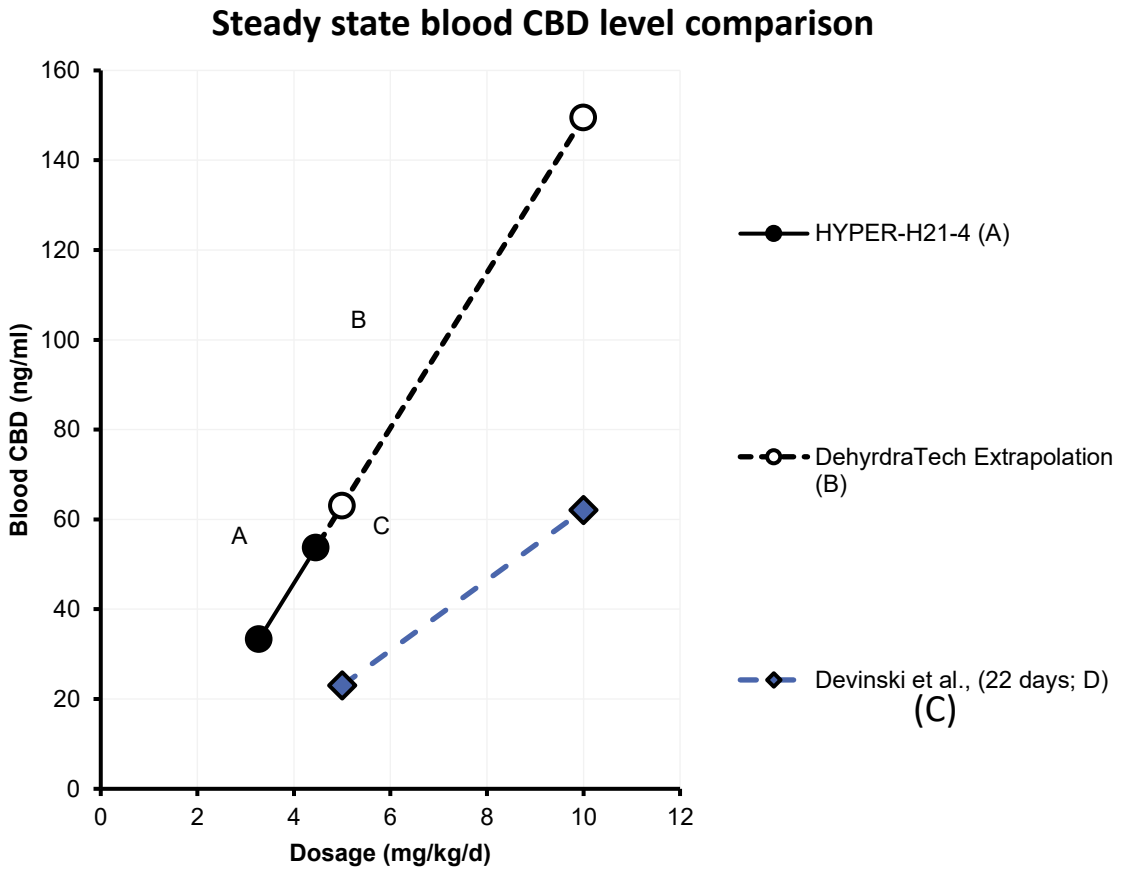
Semaglutide Absorption (nmol/l)			
Time (minutes)	**Rybelsus®**	**DehydraTECH Rybelsus®**	**Difference (%)**
0	0.00	0.00	N/A
40	0.36	1.06	196.9%
60	1.24	1.63	31.3%
80	1.70	2.12	24.8%
1,440 (24 Hrs)	3.77	3.92	4.1%
Average	**3.93**	**4.20**	**18.8%**

DehydraTECH for Hypertension

Appendix C

DehydraTECH-CBD PK compared to Epidiolex®

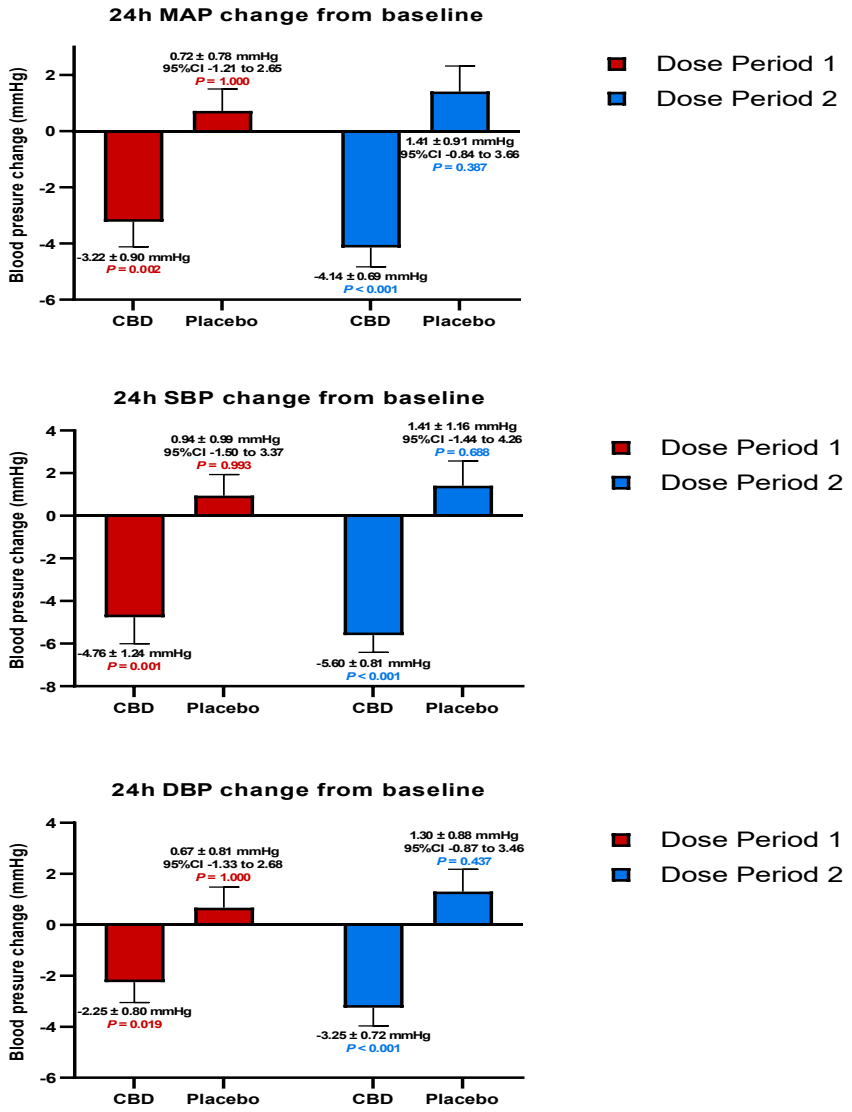
- HYPER-H21-4 evidenced superior steady-state pharmacokinetics relative to Epidiolex® in published literature comparison;
- Study assessed 3.38 mg/Kg and 4.46 mg/Kg **DehydraTECH**-CBD daily dose levels over a 5 week treatment period (2.5 weeks/dose period);
- Almost **3X higher** CBD levels shown in bloodstream at 4.46 mg/Kg dose when compared to published 5 mg/Kg Epidiolex® dose and extrapolated to 10 mg/Kg dose.(1)



(1)Devinsky Study https://pubmed.ncbi.nlm.nih.gov/28538134/

DehydraTECH for Stage 1 and 2 Hypertension

- Randomized, placebo-controlled investigator-initiated study HYPER-H21-4 in 66 patients with stage 1 or 2 hypertension
- 5-week treatment duration (i.e., a 2.5-week dose period @ 3.38 mg/Kg TID followed by 2.5-week dose period @ 4.46 mg/Kg TID);
- Significant reductions shown in mean arterial (MAP), systolic (SBP) and diastolic blood pressure ($p<0.05$);
- Other published research has shown reductions of ~4.6 mmHg for SBP and ~2.2 mmHg for DBP as clinically significant to reduce risk of MI, stroke and CHF. **DehydraTECH**-CBD exceeded these thresholds;
- Potential novel mechanism of action in reducing blood pressure and a reduction in pro-inflammatory biomarkers;
- Enhanced central delivery attributes of **DehydraTECH** may improve BP regulation;
- Study also suggested potential additive BP reduction benefits with standard of care medications; and
- Zero serious adverse events were recorded.



BP = Blood Pressure
MAP = Mean Arterial Pressure
SBP = Systolic Pressure

MI = Myocardial Infarction
CHF = Congestive Heart Failure
TID = Three Times Daily Dosing

DehydraTECH FDA Phase 1b IND Program

IND Opening Study – Stage 1/2 Hypertension

- Successful pre-IND meeting with the FDA in 2022 with 505(b)(2) NDA regulatory pathway confirmed;
- Received FDA clearance for IND opening study HYPER-H23-1:
  - Phase 1b randomized, double-blind, placebo-controlled study of the safety, pharmacokinetics, and pharmacodynamics of **DehydraTECH**-CBD for the treatment of stage 1 or 2 hypertension;
- Only a handful of other published studies have investigated resting blood pressure impacts of CBD; none have reported sustained reductions except **DehydraTECH**-CBD;
- FDA has issued clear guidelines defining the need for new antihypertensives that offer novel modes of action;
- Treatment of Stage 1 or 2 hypertensive patients not adequately managed with existing treatments.

Possible Future Studies

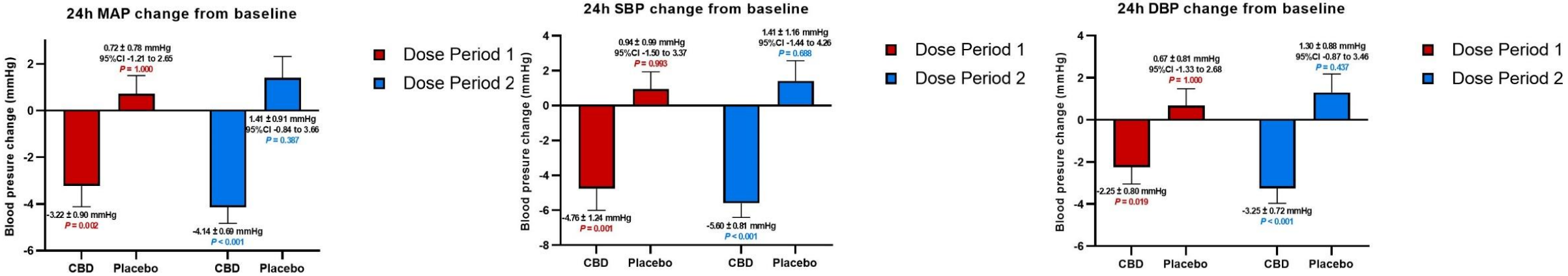
- Lexaria envisions potential additional new human clinical studies of **DehydraTECH**-CBD under IND based on its animal study successes:
  - Study EPIL-A21-1 demonstrated suppressed seizure activity at lower doses and more rapidly than Epidiolex®
  - Study DIAB-A22-1 evidenced suppressed body weight, improved triglyceride/cholesterol levels and reduced blood glucose levels

NDA = New Drug Application

Lexaria's Advanced Hypertension Program Results

Lexaria's Advanced Hypertension Program Delivers Results with No Serious Adverse Effects:

- 2018 - 12 person PK HCS evidenced 317% more CBD delivered to blood at 30-minutes
- 2021 - HYPER-H21-1: 24 person HCS **evidenced rapid and sustained drop in blood pressure**
- 2021 - HYPER-H21-2: 16 person HCS **evidenced up to a 23% average reduction in overnight blood pressure and reduced arterial stiffness**
- 2021 - HYPER-H21-3: 16 person HCS **reduced attenuated pulmonary artery systolic pressure** ("PASP") **by ~5 mmHg or 41%** overall in male participants
- 2022 - HYPER-H21-4: 66 person HCS evidenced:
  - **Exceptional safety and tolerability, statistically significant lowering of 24-hour ambulatory blood pressure ("BP"), BP lowered for the entire 5-week study duration and BP lowered both for patients currently taking other antihypertensive drugs as well as patients not taking any other antihypertensive drugs**



DehydraTECH-CBD Hypertension Program

Lexaria Issues Successful Results from First 2021 Study, HYPER-A21-1 - (May 6, 2021)

- Up to **2,178% more CBD delivered into bloodstream**
- Up to **1,737% more CBD delivered into brain tissue**

PRESS RELEASE

Lexaria's Newest DehydraTECH 2.0 Formulation Tested in Study HYPER-A21-2 Demonstrates Its Strongest CBD Absorption Results Ever - (May 20, 2021)

- **New formulation delivers** up to **2,708% more CBD into bloodstream**

PRESS RELEASE

Lexaria's DehydraTECH-CBD Lowers Blood Pressure - (July 29, 2021)

- **Human Clinical Study** HYPER-H21-1 **evidences a rapid and sustained drop in blood pressure** with **DehydraTECH-CBD** and **excellent tolerability**

PRESS RELEASE

Lexaria's Human Clinical Study Delivers Effective and Safe Blood Pressure Reduction Results over 24-hour Ambulatory Period - (September 7, 2021)

- **Human Clinical Study** HYPER-H21-2 **evidences** up to **a remarkable 23% decrease in blood pressure** with patented **DehydraTECH-CBD** relative to placebo

PRESS RELEASE

Management, Directors, and Advisors

Appendix D

Executives, Directors, and Advisors With Drug Delivery Technology and Capital Markets Expertise

Rich Christopher Chief Executive Officer

- 30+ years of pharmaceutical/medical device experience
- Former CFO/COO at InVivo Therapeutics, iCAD, Inc., Caliber Imaging and Diagnostics, and DUSA Pharmaceuticals
- Extensive experience with public Nasdaq start-ups, commercialization, fund raising and exits

John Docherty, M.Sc. President

- Specialist in development of drug delivery technologies
- Former President and COO of Helix BioPharma Corp. (TSX: HBP)
- Named inventor on multiple issued and pending patents
- Pharmacologist and toxicologist

Chris Bunka Chairman & Founder

- Serial entrepreneur involved in several private and public companies since the late 1980's
- Extensive experience in the capital markets, corporate governance, M&A and finance
- Named inventor on multiple patent innovations

Julian Gangolli Strategic Advisor

- Former President of GW Pharmaceuticals USA and Allergan N.A
- Extensive US and International executive level experience in Large Pharma, Specialty Pharmaceutical, and Start-Up Biotechnology environments
- Board of Directors member of three NASDAQ traded pharmaceutical companies; Revance Therapeutics, Krystal Biotech and Outlook Therapeutics

Dr. Philip Ainslie Scientific & Medical Advisor

- Research Chair and co-director for the Centre for Heart, Lung and Vascular Health at the University of British Columbia, Canada
- Won numerous national and international awards for his research and sits on various senior international scientific leadership and policy advisory groups.

Product Pipeline

Appendix E

DehydraTECH Pipeline

	Identification	Modality	Therapeutic / Commercial Use	Potential Indication(s)	Status: Formulation -->Animal PK --> *in vitro* / Animal PD --> Human POC --> Registered Trials
Active	DehydraTECH-GLP-1/GIP	Peptide	Metabolic Disorders	Diabetes / Weight Loss Management	
Active	DehydraTECH-CBD	Small Molecule	Metabolic Disorders	Diabetes / Weight Loss Management	
Pending	DehydraTECH-CBD	Small Molecule	Cardiovascular	St. 1/2 Hypertension*	
Past Work / Expansion Potential	DehydraTECH-Nicotine	Small Molecule	Nicotine Replacement	N/A	
Past Work / Expansion Potential	DehydraTECH-CBD	Small Molecule	Neurology	Seizure Disorders	
Past Work / Expansion Potential	DehydraTECH-Antiviral	Small Molecule	Antiviral	HIV/COVID-19/etc.	
Past Work / Expansion Potential	DehydraTECH-PDE5	Small Molecule	Cardiovascular	Erectile Dysfunction	
Past Work / Expansion Potential	DehydraTECH-Estradiol	Small Molecule	Hormone Therapy	HRT and Menopause	

2025 Objectives (Green):
- Comprehensive series of animal and human acute and chronic dosing GLP-1 PK/PD/POC studies

2025 Pending (Yellow)
- HYPER-H23-1 Phase Ib IND Authorization and Execution**

PK = Pharmacokinetic
PD = Pharmacodynamic
POC = Proof of Concept
CBD = Cannabidiol
CPG = Consumer Packaged Good product
GIP = Glucose dependent insulinotropic polypeptide

GLP-1 = Glucagon-Like Peptide 1 Agonists
PDE5 = Phosphodiesterase 5
HIV = Human Immunodeficiency Virus
HRT = Hormone Replacement Therapy
*For the treatment of stage 1 or stage 2 hypertensive patients not adequately managed with existing treatments
** Pending Additional Funding

Scientific Publications

Appendix F

List of Scientific Publications

For more information visit: Lexaria Research

International Journal of Molecular Sciences – June 2023
- Differences in Plasma Cannabidiol Concentrations in Women and Men: A Randomized, Placebo-Controlled, Crossover Study.

Advances in Therapy – June 2023
- The Influence of Oral Cannabidiol on 24-h Ambulatory Blood Pressure and Arterial Stiffness in Untreated Hypertension: A Double-Blind, Placebo-Controlled, Cross-Over Pilot Study.

Cannabis and Cannabinoid Research – April 2023
- Chronic Effects of Oral Cannabidiol Delivery on 24-h Ambulatory Blood Pressure in Patients with Hypertension (HYPER-H21-4): A Randomized, Placebo-Controlled, and Crossover Study.

Journal of Personalized Medicine – June 2022
- Chronic Effects of Effective Oral Cannabidiol Delivery on 24-h Ambulatory Blood Pressure and Vascular Outcomes in Treated and Untreated Hypertension (HYPER-H21-4): Study Protocol for a Randomized, Placebo-Controlled, and Crossover Study.

Journal of Functional Foods – November 2023
- Antihypertensive effects of CBD are mediated by altered inflammatory response: A sub-study of the HYPER-H21-4 trial.

Biomedicine & Pharmacotherapy – June 2023
- Effects of CBD supplementation on ambulatory blood pressure and serum urotensin-II concentrations in Caucasian patients with essential hypertension: A sub-analysis of the HYPER-H21-4 trial.

Pharmaceuticals – April 2023
- Trial of a Novel Oral Cannabinoid Formulation in Patients with Hypertension: A Double-Blind, Placebo-Controlled Pharmacogenetic Study.

Biomedicine & Pharmacotherapy – April 2023
- CBD supplementation reduces arterial blood pressure via modulation of the sympatho-chromaffin system: A substudy from the HYPER-H21-4 trial.

Advances in Therapy – September 2019
- Examination of a New Delivery Approach for Oral Cannabidiol in Healthy Subjects: A Randomized, Double-Blinded, Placebo-Controlled Pharmacokinetics Study.