



Lexaria Bioscience Corp.

CSE:LXX | OTCQX:LXRP

A global innovator in drug delivery platforms. Patented DehydraTECH™ drug delivery technology changes the way Active Pharmaceutical Ingredients enter the bloodstream.

Patented for:

- Cannabis & Hemp** – proven non-inhalation solutions for CBD & THC for beverages, edibles & oral products.
- Nicotine** - researching disruptive non-inhalation nicotine delivery solutions, together with Altria Group Inc.
- NSAIDs** (non-steroidal anti-inflammatory drugs such as ibuprofen), and fat-soluble **Vitamins**.

DehydraTECH™:

- Masks unwanted tastes** – eliminates the need for sugar-filled edibles.
- Reduces time of onset** – effects are felt within 15-20 min vs. 60-120 min.
- Avoids first-pass liver metabolism** – mitigating unwanted side effects.
- Increases bio-absorption up to 5-10X** - to equate blood absorption by inhalational delivery.
- Increases brain permeation up to 19X** – as demonstrated in animal studies



Strong IP Patent Portfolio – 16 patents granted, and approximately 60 patent applications pending. Patented for method of use & composition of matter claims.

Technology Licensees - of DehydraTECH™ for cannabis oral delivery growing fast; now includes 8 companies such as: 1906 New Highs & Hill Street Beverage Co.



Lexaria Nicotine LLC. – Co-owned together with Altria Group Inc. - who has licensed DehydraTECH™ to develop oral nicotine delivery forms. Lab testing has demonstrated that DehydraTECH™ improves oral nicotine delivery, enabling healthier nicotine delivery formats LexariaNicotineCo.com.

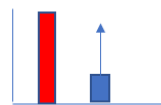
Lexaria's DehydraTECH™ Technology



Eliminates the need for sugar-filled edibles.



Effects are felt within 10-20 min (vs. 60-120 min).



Equates that of less healthy administration methods like inhalation



Animal testing confirms up to 19x improvement



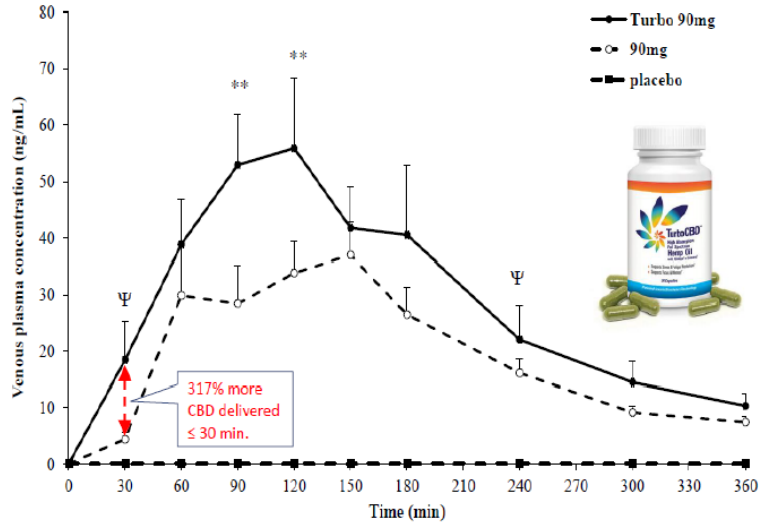
Easy to implement

Cannabinoid Delivery Clinical Findings with DehydraTECH™

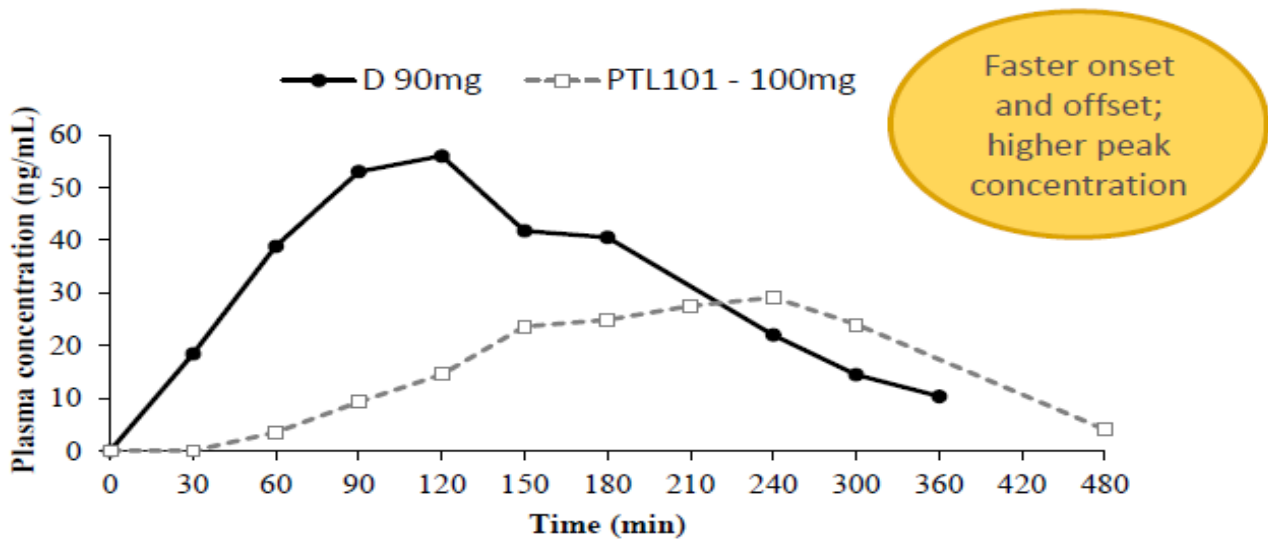
The degree and speed of cannabinoid absorption into blood plasma was tested in 2018 in a randomized, placebo-controlled, double-blind clinical study in 12 healthy human volunteers comparing a 90 mg CBD dose of Lexaria's TurboCBD™ powered by its patented DehydraTECH™ technology to a concentration-matched control formulation without DehydraTECH™ incorporation.

Key study highlights were as follows:

- 317% more CBD in blood @ 30 min ($\Psi p < 0.05$);
- Significantly higher peak blood concentration (** $p < 0.01$).
- Lower blood pressure ($p < 0.027$)
- Higher brain perfusion ($p < 0.017$)



Results from this study were compared to similar findings from a market comparator formulation that were also published in 2018, clearly demonstrating the superior absorption profile with DehydraTECH™ upon overlaying the pharmacokinetic curves.



Pharmacokinetic comparison of the ingestion of DehydraTECH™ 90mg (solid black solid circles) and PhytoTech Therapeutics' PTL101-100mg gelatin matrix capsules (dashed grey open squares) [Atsmon et al., Clinical Pharmacology in Drug Development 2018, 7(7) 751-758].