



Corporate Presentation

December 2021

Current Challenge in Prescribing Cannabis

| Limited science behind “medical” cannabis products

- **Trial and error** - physicians have a difficult time prescribing precise doses
- **Low bioavailability and toxicity** - many products require large ingestible doses with low efficacy (6%-10%) and possible toxicity for the liver and digestive system.
- **Epidiolex®** – the only cannabinoid pharmaceutical Rx product on the market – approved by the US-FDA – to treat epileptic seizures; manufactured by the former GW Pharma.



*Medical cannabis
without science is just
recreational marijuana*

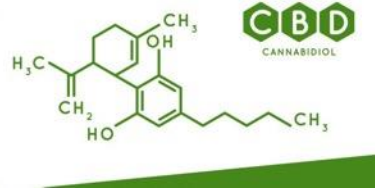
Two Master Formulations

| Medical cannabis products used as formulation bases for Rx drug candidates

Mentanine®

Base formulation for Rx CQ-001

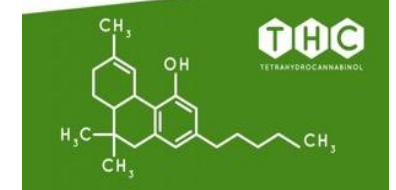
- Pharmaceutical Grade CBD Omega-3 proprietary formulation
- January 2022 market launch in USA under the 2018 US Farm Bill authorization; Q1, 2022 launch in Canada



Mentabinol®

Base formulation for Rx CQ-002

- Pharmaceutical Grade THC + L-Theanine proprietary formulation
- Q1, 2022 market launch in Canada under the Health Canada Cannabis Act



IP protected - patent pending – International patents filed

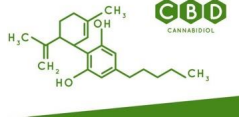
Delivery methods - can be delivered through sublingual, spray, soft gels, capsules (timed release)

Formulation bases - for Rx drug candidates to conduct clinical trials to treat:

‡ Anxiety & Depression ‡ PTSD, Schizophrenia ‡ Pain Management ‡ Addiction ‡ Other neurological conditions

The Scientific Difference

CBD



vs. Mentanine®



Pure Cannabidiol

Scientifically developed proprietary formula

CBD.....

- Does not effectively reach the section of the brain that regulates emotion. Thus, CBD alone is not effective for treating mental health ailments.
- Has nominal effect on neurological conditions.
- Requires high doses of CBD to achieve minimal efficacy.

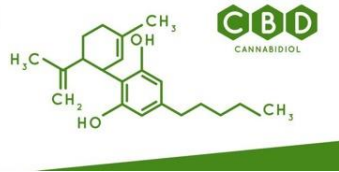
Mentanine®.....

- **Pre-clinical trials demonstrated a new pathway discovery:** Synergistically attaches to PPAR receptor allowing CBD to cross the blood-brain barrier to interact with the central nervous system (the brain) for amplified effects.
- Addresses neurological conditions including anxiety, depression, PTSD, schizophrenia and addiction.
- Requires minimum doses of CBD, yielding increased efficacy since it attaches to the PPAR receptors.

** Data derived from scientific research and pre-clinical trials by Dr. Steven Laviolette, Neuroscientist, Western University.*

Unique Formulation. Not a Generic Knockoff

| Comparison with similar FDA approved product



Epidiolex®



Double acting formula – on the center nervous system (the brain) and endocannabinoid system

Acts on the endocannabinoid system, requiring high dosage to reach desired results at the brain level

Active ingredients: CBD + Omega-3 compounds
10X more efficacy
Lower dose of CBD required.

Formula: 99% CBD – sesame as carrier oil (non-active)

- Sublingual delivery - bypassing digestive system, eliminating liver toxicity
- 80% to 90% of formula enters bloodstream – crossing the blood-brain barrier for greater efficacy
- Onset within minutes

- Oral delivery - can lead to liver toxicity
- Only 10% of the formula enters the blood stream
- Effect in hours

Proprietary formulation from Mentanine®, CQ-001 R_x US\$650/100ml

Pure CBD, Epidiolex® Rx US\$1,400/100ml

Pre-clinical Trials — Mentanin[®]

| Pharmaceutical Grade CBD Omega-3 formulation

Pre-clinical trial results —
published in peer-reviewed
European Journal of Neuroscience
Oct 2020



Received: 3 June 2020 | Revised: 8 September 2020 | Accepted: 16 October 2020

DOI: 10.1111/ejn.15023

ORIGINAL ARTICLE

EJN European Journal of Neuroscience FENS WILEY

Functional interactions between cannabinoids, omega-3 fatty acids, and peroxisome proliferator-activated receptors: Implications for mental health pharmacotherapies

Tony Jung^{1,2} | Roger Hudson^{1,2} | Walter Rushlow^{1,2,3} | Steven R. Laviolette^{1,2,3} 

¹Addiction Research Group, Schulich School of Medicine & Dentistry, University of Western Ontario, London, ON, Canada

²Department of Anatomy & Cell Biology, Schulich School of Medicine & Dentistry, University of Western Ontario, London, ON, Canada

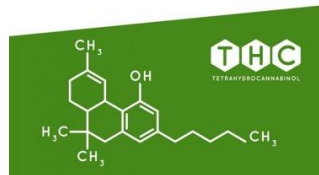
Abstract

Cannabis contains a plethora of phytochemical constituents with diverse neurobiological effects. Cannabidiol (CBD) is the main non-psychoactive component found in cannabis that is capable of modulating mesocorticolimbic DA transmission and may possess therapeutic potential for several neuropsychiatric disorders. Emerging evi-

The Scientific Difference

THC

Pure THC



vs. Mentabinol®

Scientifically developed proprietary formula



THC can cause.....

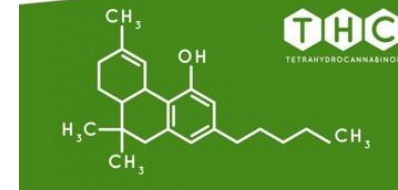
- Memory impairment & possible long-term cognitive side effects
- Depression-like and schizophrenia-related symptoms
- Anxiety and hyperactive activity
- Schizophrenia due to gene vulnerability

Mentabinol® Pre-clinical studies showed.....

- Complete blockage of memory impairment
- Reduced depression-like and schizophrenia related symptoms such as paranoia, and in some cases, it reversed symptoms
- Complete blockage of hyperactive activity and anxiety
- Complete blockage of gene vulnerability related cognitive issues*

Pre-clinical Trials — Mentabino[®]

| Pharmaceutical Grade THC + L-Theanine formulation



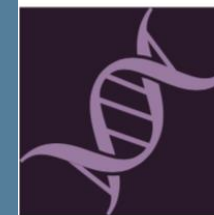
- **Scientifically developed** by CanaQuest's lead scientist and university-based experts in neuroscience
- **Pre-clinical trial results** – published in peer-reviewed journals

JNeurosci
THE JOURNAL OF NEUROSCIENCE

December 2020

l-Theanine Prevents Long-Term Affective and Cognitive Side Effects of Adolescent Δ -9-Tetrahydrocannabinol Exposure and Blocks Associated Molecular and Neuronal Abnormalities in the Mesocorticolimbic Circuitry

Marta De Felice^{1,2}, Justine Renard^{1,2}, Roger Hudson^{1,2}, Hanna J Szkudlarek^{1,2}, Brian J Pereira^{1,2}, Susanne Schmid², Walter J Rushlow^{1,2,3}, Steven R Laviolette^{4,2,3}



International Journal of
Molecular Sciences

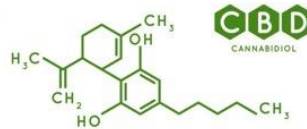
July 2021

Reversing the Psychiatric Effects of Neurodevelopmental Cannabinoid Exposure: Exploring Pharmacotherapeutic Interventions for Symptom Improvement

by Marta De Felice¹ and Steven R. Laviolette^{1,2,*}

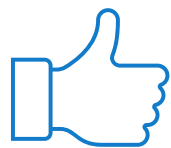
¹ Addiction Research Group, Department of Anatomy and Cell Biology, Schulich School of Medicine & Dentistry, University of Western Ontario, London, ON N6A 5C1, Canada

² Department of Psychiatry, Schulich School of Medicine & Dentistry, University of Western Ontario, London, ON N6A 5C1, Canada



Steps to US-FDA and Health Canada Approvals

| Obtaining Drug Identification Numbers DIN for **CQ-001 Rx**
 Targeting Rx drug candidate for two epilepsy rare conditions
 Dravet Syndrome and Lennox-Gastaut Syndrome



COMPLETED STEPS

- ✓ **CanaQuest Scientific Partnership Network**
 - ✓ Completed pre-clinical trials
 - ✓ Pre-approved clinical trial programs
- ✓ **Eurofins:** active service provider to obtain Health Canada approvals
- ✓ **Biopharma Global:** Full Service Agreement in place for US-FDA approvals
- ✓ **PharmaScience Inc.:** GMP pharmaceutical manufacturer identified. Contract manufacturing agreement is underway.



NEXT STEPS TO OBTAIN A DIN FOR CQ-001 Rx – Mentanine® base formulation

Health Canada

Work with Eurofins to obtain:

- Priority Review Status- achieved once Orphan Drug Status is issued in the USA and if there is no comparable approved Rx drug in Canada.
- Priority Review Status is needed for Health Canada's approval of **CQ-001 Rx** as a pharmaceutical drug, issuing a conditional DIN under the term Notice of Compliance with Conditions (NOC/c)
- Unconditional Health Canada DIN

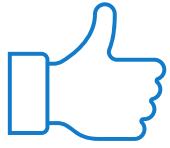
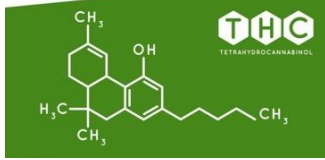
US-FDA

Work with BioPharma Global to obtain:

- Orphan Drug Status designation for expedited regulatory review of **CQ-001 Rx**
- Priority Review Voucher (PRV) which can be sold (extra PRV issued for orphan drugs of rare diseases afflicting < 200k patients and for children)
- Application for Breakthrough Therapy Designation and NDA New Drug Application submitted after clinical trials => US-FDA DIN approval

Steps to US-FDA and Health Canada Approvals

| Obtaining Drug Identification Numbers DIN for CQ-002 Rx
Targeting Rx candidate as a neurological drug



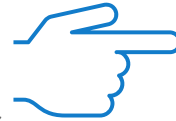
COMPLETED STEPS FOR CQ-002 Rx

✓ CanaQuest Scientific Partnership Network

- ✓ Research and pre-clinical trials completed
- ✓ Ready for establishing clinical trials

✓ **Eurofins & Biopharma Global:** active service providers to obtain Health Canada & US-FDA approvals

✓ **PharmaScience Inc.:** GMP pharmaceutical manufacturer identified. Contract manufacturing agreement is underway.



NEXT STEPS TO OBTAIN A DIN FOR CQ-002 Rx – Mentabinol® base formulation

CanaQuest Scientific Partnership Network

- Establish clinical program using CQ-002 Rx (Mentabinol® based formulation)
- Establish pre-clinical trials of blended formulas of CQ-001 Rx & CQ-002 Rx (THC & CBD ratios)

Work with Eurofins and BioPharma Global to:





- Review CanaQuest's regulatory strategy and identify gaps
- Advise on regulatory pathway for CQ-002 Rx
- Submit clinical trial applications, working in conjunction with the scientists and regulators.
- Advise on regulatory process and issues with the US-FDA and European Medicines Agency

2 – 2.5 years for Health Canada approval following the Clinical Trials Application (CTA) could be achievable (building on vast pre-existing data on THC).

Advanced Rx Drug Pipeline

| Preapproved human trials for CQ-001 Rx and CQ-002 Rx candidates






				TRIAL DATE	TRIAL DURATION	TIME TO OBTAIN DIN & Rx APPROVALS
 University of Montreal Hospital Research Centre	Cannabis use disorder & addiction	Therapeutic early phase trial Using CQ-001 & CQ-002 Rx separately & combined	Dr Didier Jutras-Aswad	Q1 2022 after financing	Phase 1: 3 months Phase 2: 12 months	After DIN is obtained for CQ-001 Rx, approval will be sought to add this ailment to its Rx label
	Anxiety	Clinical study 30 patients Using CQ-001 Rx	Dr Michael Van Ameringen Dr Arun V. Ravindran *joint program with U of Toronto	Q2 2022 after financing	Phase 1: 3 months Phase 2: 12 months	After DIN is obtained for CQ-001 Rx, approval will be sought to add this ailment to its Rx label
 Ontario Brain Institute	Epilepsy Specifically: Dravet and Lennox Gastaut Syndromes	Clinical trial 60 patients double blind Using CQ-001 Rx	Dr W. McIntyre Burnham, Co-Director of EPLINK and Director of the U of Toronto Epilepsy Research Program	Q3 2022 after financing	12 months	Pharmaceutical drug approval Drug Identification Number "DIN" estimated within Canada: ~2 years USA: ~3 years
	Autism	Clinical trial & pilot study Using CQ-001 Rx	Dr Gabriella Gobbi	Q1 2023	Phase 1: 3 months Phase 2: 12 months	After DIN is obtained for CQ-001 Rx, approval will be sought to add this ailment to its Rx label

Pipeline for Future Rx Drugs

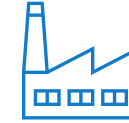
| Scientific Research



	Project	Description	Specialists	Status
	Neurological Conditions & Mental Health Focus on anxiety, PTSD, addiction	Research and pre-clinical trials; new formulated product development with synergistic botanicals	Dr Steven Laviolette + team of 13 scientists	Ongoing
	Alzheimer's	New program based on research & pre-clinical trials from Mentanine®	Dr Shawn Whitehead	New Program
	Anxiety & Pain management for cats and dogs	Research and pre-clinical trials Clinical trials with CQ-001 Rx, Mentanine® and CQ-002 Rx Mentabinol® derived formula	Dr David Ma Dr Adronie Verbrugghe + team of 4 scientists	Federal research program approved (Mitacs grant \$350,000) Starts after financing



Partnerships - Manufacturing



| Manufacturing ready to start

Canada

Launching Mentanine® and Mentabinol® in Q1 2022

PurCann Pharma, subsidiary of SiliCycle Inc. 

- **Non-Rx:** signed non-exclusive agreement to produce and distribute CanaQuest non-Rx products
- Extensive experience in global pharmaceutical space, regulatory and marketing expertise

PharmaScience Inc.



- **Rx Products:** contract manufacturing agreement is underway for non-exclusive production of CanaQuest Rx products in GMP facility

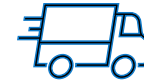
USA

Launching Mentanine® in January 2022

CBD - GMP Processor, California (powders, liquids)

- Producing Mentanine® (water soluble, high bioavailability) for distribution in the US
- Fully certified, quality manufacturer (seed to sale)

Partnerships - Distribution



| Distribution network in place

Canada

PurCann Pharma, subsidiary of SiliCycle Inc.



- Non-exclusive distribution across Canada
- Specialized in commercialization of cannabinoid products in Canada.

Canadian Cannabis Clinics

- Established relationships with MediKush, Pathway Health, Canada House, Hybrid Pharm.
- Patient referrals; with 100,000+ patients

E-commerce - (canaqueststore.com) – 99% complete

- Integrated with the clinics, PurCann and other 3rd party vendors

Future Over-the-Counter in Pharmacies – subject to pending revisions of the Cannabis Act, Mentanine® will be sold as an OTC Natural Health Product

USA

Dr Rick Goulding (MD), Florida - American Medical Association

Mentanine® distribution in the US

- 15,000 doctors with existing patients using cannabinoid products;
- US Veterans Affairs

Brand Vault 360 distribution



- Will formalize a consulting agreement for branding, marketing and distribution.
- Experienced at placing product with healthcare practitioners, clinics and all major pharmacies & retailers
- Database of 65,000 healthcare practitioners

Scientific Partners & Regulatory Advisors



Dr. Steven Laviolette, B.Sc., Ph.D., a Professor and Neuroscientist in the Schulich School of Medicine & Dentistry at Western University, Addiction Research Group Dept. of Anatomy & Cell Biology, Dept. of Psychiatry **R & D Program - 14 scientists**

<https://www.laviolettelab.com/> For a short video on the research, visit https://www.youtube.com/watch?v=O_D4wkHHbDg

- Recipient of numerous national and international research awards;
- Dr. Laviolette's research team has made numerous discoveries related to how the mammalian brain is influenced by chronic drug exposure and how signaling through the brain's cannabinoid and opioid systems can control emotional processing in specific brain circuits;
- Research from Dr. Laviolette's team has been published in the top tier of neuroscience and psychiatry journals in the world.



Dr. Tom Ng, B.S., Ph.D., COO, BioPharma Global, **Regulatory Consultants - 7 Leadership Team Members**

<https://www.biopharmaglobal.com/about-us/>

- Dr. Ng's academic background includes a B.S. in Biochemistry from the **University of Maryland** and a Ph.D. in Molecular Biology from **Johns Hopkins University**. He is also an Executive Board Member and President Emeritus of the CMNS Alumni Association Chapter at the University of Maryland;
- BioPharma Global is a full-service regulatory affairs consulting firm specializing in orphan products to treat rare diseases and non-orphan products;
- The team is comprised of globally recognized experts in rare diseases and other under-served disease areas, **including former FDA staff**.



Scientific Partners & Pharmaceutical Advisor



Dr. David W.L. Ma, Ph.D. Medical Sciences, Professor, Department of Human Health and Nutritional Sciences, University of Guelph
R & D Program - 5 scientists <https://www.uoguelph.ca/hhns/people/dr-david-wl-ma>

- Previously, had faculty position in the Department of Nutritional Sciences at the **University of Toronto**;
- Pursued postdoctoral training examining the linkage between diet and cancer at **Texas A&M University** studying the role of omega-3 fatty acids and folate in colon cancer;
- To date, Dr. Ma has authored over 130 peer reviewed publications.



Dr. Adronie Verbrugghe, Ph.D., Associate Professor, Veterinary College, University of Guelph
<https://ovc.uoguelph.ca/clinical-studies/faculty/Adronie-Verbrugghe>

- Graduated as a companion animal veterinarian (DVM) from **Ghent University, Belgium** in 2005, completed her PhD focusing on nutritional modulation of carbohydrate metabolism in cats in 2009 and 2 additional years as a postdoctoral fellow;
- Became board certified for the **European College of Veterinary and Comparative Nutrition** in 2010. In 2011, Dr. Verbrugghe joined the Ontario Veterinary College (OVC), **University of Guelph**, as Royal Canin Veterinary Diets Endowed Chair in Canine and Feline Clinical Nutrition;
- To date, Dr. Verbrugghe has authored 35 peer-reviewed publications.



Remi A Menes, BSc, MBA, Chairman of the CanaQuest, Advisory Committees – Vice-President, Specialty Patient Programs, McKesson Canada

- Extensive commercial, operations and business development experience in the biopharmaceutical, biotech, pharmaceutical, medical cannabis and the hemp-derived CBD sectors.
- Experience with launching pharmaceutical products; developing product life-cycle management strategies; establishing head office, division and field capabilities - in Canada, USA, Japan, Latin America and Western Europe.



Executive Team & Board of Directors

| 100+ Years of Management & Product Development Experience



Richard Rusiniak, Mechanical Engineer, CEO – Director

- Over 35 years of management, design and process experience;
- Co-founder and former President, CFO, and CTO of Cymat Corp (TSX: CYM) with a market valuation over \$150 million;
- Former project manager with Long Manufacturing, as well as The Ontario Research Foundation (Ortech). Projects on which he has consulted include NASA's Zero Gravity Program, Atomic Energy of Canada's Re-tubing Program and Hawker Siddeley's Bi-Level GO Train Modularization.



Paul Ramsay, BBA, President – Chairman

- Over 30 years of business development and management experience;
- Co-founder and former CEO and VP Business Development of Cymat Corp, (TSX: CYM) with a market valuation over \$150 million;
- Introduced and sold several newly developed products to several major corporations.



Ross Eastley, CA, CFO – Director

- Over 35 years of accounting and CFO experience in both private and public sector organizations;
- Former CEO for the Canadian Society of Immigration Consultants (CSIC);
- Former VP/Controller for Brandon University, Manitoba.



Cameron McDonald, BA, BSc, MBA – Independent Director

- Venture capital executive and entrepreneur with over 25 years of corporate finance and business development experience;
- Currently the CEO of Ocean Trout Canada Inc., a leading Canadian aquaculture company;
- Formerly an investment banker with Canaccord Adams (now Canaccord Genuity), worked on over \$500M in public financings on the TSX, TSXV and AIM exchanges as well as M&A advisory assignments, has completed the Chartered Financial Analyst "CFA" program.



CanaQuest Summary

Commercially Ready Products

- Mentanine® and Mentabinol®, being launched in Canada
- Mentanine® being launched in the USA


Pharmaceutical Rx Drug Pipeline


- Two master formulations that are pharma drug candidates targeting neurological conditions: **CQ-001 Rx** and **CQ-002 Rx**, derived from Mentanine® and Mentabinol® respectively
- Human clinical trials to commence in Q1, 2022
- Pre-clinical trials of **CQ-001 Rx** demonstrated greater efficacy and fewer side effects than Epidiolex®
- **CQ-001 Rx** projected to be launched in Canada within ~2 years
- GW Pharma was acquired by Jazz Pharmaceuticals for \$7.2 Billion within 3 years after launching Epidiolex®

CanaQuest Scientific Partnership Network

- World-leading scientists in neurology and mental health who develop and conduct trials of CanaQuest Rx drug candidates
- Harnessing high demand for Rx drug candidates to conduct clinical trials and studies



 **Winner** of the 2021 *Best Medical Cannabis and Botanical Oils Product Development Company – North America*, awarded by Global Health & Pharma, UK

 **Winner** of the *International CBD Life Science R&D Excellence Award 2020*, given by Global Health & Pharma, UK



Thank you

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