EMERALD HEALTH PHARMACEUTICALS

Developing medicines based on cannabinoid science

emerald™
HEALTH PHARMACEUTICALS

Emerald Health Pharmaceuticals' research is founded on the known benefits of cannabinoid interaction with the human endocannabinoid system (ECS) and combines non-ECS receptors to potentially achieve additional therapeutic benefits against many diseases with unmet medical need.

RECENT ADVANCES

18/05/31 Appoints Dr. Alain Rolland as Executive VP & Chief Development Officer

18/05/02 Forms multiple sclerosis clinical advisory board

18/04/11 Regulation A+ offering qualified by SEC

18/03/21 Drug candidate shows potential for remyelination and disease modification in MS

18/03/05 Files for regulation A+ offering

18/02/26 EHP-102 granted FDA orphan drug designation for Huntington's disease

18/02/15 EHP-101 granted European orphan designation for scleroderma

18/02/06 Scientific team publishes evidence of neuroprotection using patented cannabinoid derivative for Parkinson's disease

COMPANY HIGHLIGHTS

- Developing new drugs that leverage the known benefits of cannabinoid interaction with the human endocannabinoid system (ECS) to positively impact central nervous system (CNS), autoimmune, inflammatory, metabolic and fibrotic diseases.
- Composition of matter patents for two series' of molecules containing over 20 new chemical entities (NCEs) derived from the non-psychoactive cannabinoids, cannabidiol (CBD) and cannabigerol (CBG). Two lead product candidates are called EHP-101 (derived from CBD) and EHP-102 (derived from CBG).
- First Phase I clinical study designed to support Phase II for EHP-101 in multiple sclerosis and scleroderma is intended to start this year.
- EHP-101 granted orphan drug status by the U.S. FDA and EU EMA for scleroderma indication.
- EHP-102 granted orphan drug status by the U.S. FDA for Huntington's disease.
- Extensive life sciences industry expertise including collaboration with VivaCell Biotechnology, a global leader in cannabinoid research.
- Multi-billion dollar market potential.
- Management & board members have raised ~$1B for development-stage companies and run clinical trials with aggregate budgets exceeding $1B. Executive Chairman is former CEO of Inovio; CEO has 28+ years in life sciences; Chief Development Officer has 30 years in biotech product development; CFO has 30+ years in finance and accounting.
- The company's two families of patented NCEs, based on CBD and CBG, have been modified through rational drug design to affect pertinent disease-related targets, including peroxisome proliferator-activated receptor-gamma (PPARγ), cannabinoid receptor type 2 (CB2) and the hypoxia inducible factor (HIF) pathway - all of which have been validated through decades of published research.
- Over 15 years of research and development published in leading journals such as *Nature Scientific Reports* and *Journal of Neuroinflammation*.

emerald™
HEALTH PHARMACEUTICALS

BOARD OF DIRECTORS

Avtar Dhillon, MD - Chairman and former CEO of Inovio Pharmaceuticals, Inc. (NASDAQ:INO). Board member of several life sciences companies.

Gaetano Morello, ND - Specialist in natural medicine. Practisingat the Complex Chronic Disease Program at Woman's Hospital in Vancouver, Canada.

Jim Heppell, LLP - Former President and Director of BC Advantage Funds. Founding CEO and Director of Sophiris Bio Inc. (NASDAQ:SPHS).

Punit Dhillon, BA Hons. - Former President & CEO of Oncosec Medical Inc. (NASDAQ: ONCS).

MANAGEMENT

Jim DeMesa, MD, MBA - Experienced public company CEO with over 29 years in biotech leadership and product development.

Jill Broadfoot - CFO with 30+ years in finance and public biotech company management.

Alain Rolland, PharmD, PhD - Executive VP and CDO with 30 years in pharma product development and management, including preclinical and clinical trial management.

Eduardo Muñoz, PhD - CSO with 30+ years of biomedical research. Expert in the development of cannabinoid based NCEs.

Mari-Luz Bellido, PhD, MBA - VP EU Operations with 10 years experience in cannabinoid R & D.

Giovanni Appendino, PhD - Scientific Advisor with 15+ years in cannabinoid research.

To find out more about Emerald Health Pharmaceuticals please contact:

info@emeraldpharma.life

LEAD PRODUCT CANDIDATES INDICATIONS

Multiple Sclerosis (MS)

MS is a chronic inflammatory, degenerative, demyelinating disorder of the central nervous system (myelin is an essential insulating sheath around many nerve fibers, increasing the speed at which impulses are conducted). There are over 900,000 patients in 7 major markets, no effective disease-modifying drugs for progressive forms or therapies that re-myelinate damaged neurons.

Scleroderma (Systemic Scleroderma or SSc)

SSc is a chronic systemic autoimmune disease causing fibrosis of skin and internal organs. It is classified as an orphan disease in the US and EU. There are no SSc-specific approved drugs on the market and current therapies prove non-effective or have significant toxicities.

Parkinson's Disease (PD)

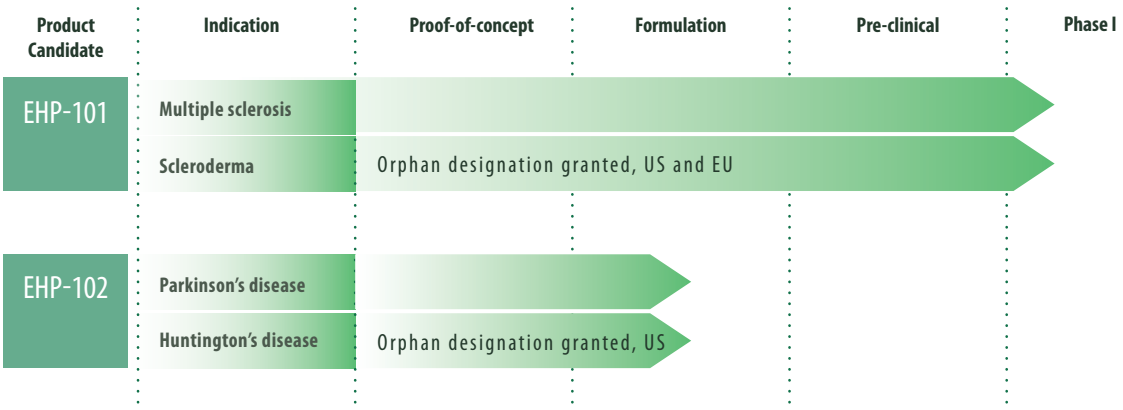
PD is a chronic, progressive neurodegenerative disorder affecting nearly 10 million people worldwide. There is no current cure for PD. Initial treatments become less effective as the disease progresses.

Huntington's Disease (HD)

A disorder that causes progressive breakdown of nerve cells which affects nearly 30,000 patients in the USA. There are no specific disease modifying therapies for HD.

	EHP - 101	EHP - 102
Cannabinoid template	CBD (cannabidiol)	CBG (cannabigerol)
Development stage	Entering clinical development this year	Manufacturing & formulation development
Mechanism of action	CB2, PPARγ receptor activation HIF-1 stabilization	PPARγ agonist and ERK1+2 activator
Activity	Anti-inflammatory, neuroprotection, re-myelination (MS)	Reduces inflammatory marker expression (iNOS, TNFa AND iL01-B)
Initial indications	Multiple sclerosis & scleroderma	Parkinson's and Huntington's disease

PRODUCT PIPELINE



LOOKING FORWARD

EHP-101

GLP toxicology studies and manufacturing being completed to initiate first human study this year in Australia. This Phase I study is intended to support Phase II in MS and scleroderma.

EHP-102

Preclinical proof-of-concept established for two indications. Formulation, manufacturing development and additional preclinical evaluations currently in process.