EMERALD HEALTH PHARMACEUTICALS

Combining nature & science to cure deadly diseases

emerald™
HEALTH PHARMACEUTICALS

Emerald Health Pharmaceuticals is focused on developing novel, patented synthetic cannabinoid-derived drug candidates to treat diseases with unmet medical needs.

RECENT ADVANCES

18/12/18 Forms scientific advisory board; initial appointments include global experts in cannabinoid science and drug discovery

18/09/27 Initiates Phase I clinical study of lead product candidate, EHP-101, for the treatment of multiple sclerosis and scleroderma

18/09/24 Announces publications on patented cannabinoid derivatives to treat scleroderma and amyotrophic lateral sclerosis

18/08/21 Recipient of the International Cannabis Research Society Scientific Innovation Award

18/07/12 Forms scleroderma scientific adivsory board

18/07/03 Presents preclinical data for its lead product candidate, EHP-101, in both multiple sclerosis and scleroderma

COMPANY HIGHLIGHTS

- Unique technology approach - developing new drugs that leverage the known benefits of cannabinoid interaction with the human endocannabinoid system (ECS) and modify the molecule to target other disease-relevant receptors. These drugs may positively impact central nervous system (CNS), autoimmune, inflammatory, metabolic and fibrotic diseases.
- Composition of matter patents for series of 20 distinct molecules derived from the non-psychoactive cannabinoids, cannabidiol (CBD) and cannabigerol (CBG). The two lead product candidates are EHP-101 (derived from CBD) and EHP-102 (derived from CBG).
- EHP-101 is a potential first-in-class disease-modifying therapy for multiple sclerosis and scleroderma. Demonstrated to be safe, anti-inflammatory, neuroprotective, analgesic (pain relief), anti-proliferative (prevention of growth/spread), and to reduce clinical signs and disease progression in preclinical models.
- Phase I clinical study initiated in September 2018, with data expected in Q3 2019. Study designed to support Phase II for EHP-101 in multiple sclerosis and scleroderma planned for Q4 2019.
- EHP-101 granted orphan drug status by the U.S. FDA and EU EMA for scleroderma indication; 7-year market exclusivity if approved; currently no scleroderma-specific approved approved drugs.
- EHP-102 granted orphan drug status by the U.S. FDA for Huntington's disease; 7-year market exclusivity if approved; currently no approved drugs.
- Extensive life sciences industry expertise including collaboration with VivaCell Biotechnology, a global leader in cannabinoid research.
- Multi-billion dollar market potential in four initial indications: multiple sclerosis, scleroderma, Parkinson's disease and Huntington's disease.
- Management & board have raised ~$1B for development-stage biotech companies and run clinical trials with aggregate budgets exceeding $1B. Executive Chairman is former Chairman and CEO of Inovio; CEO has 29+ years in life sciences; Chief Development Officer 29+ years in biotech product development.
- Over 15 years of research and development published in leading journals such as *Nature Scientific Reports, Biochemical Pharmacology* and *Journal of Neuroinflammation.*

emerald™
HEALTH PHARMACEUTICALS

MANAGEMENT & SCIENTIFIC ADVISORY BOARD

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

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 compounds.

Lisa Stanford, CPA - CFO with 30+ years of diversified experience in finance and accouning in the life sciences.

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

Rao Movva, PhD - Scientific Advisor with 30+ years in drug discovery and development; Novartis Distinguished Scientist.

BOARD OF DIRECTORS

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

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

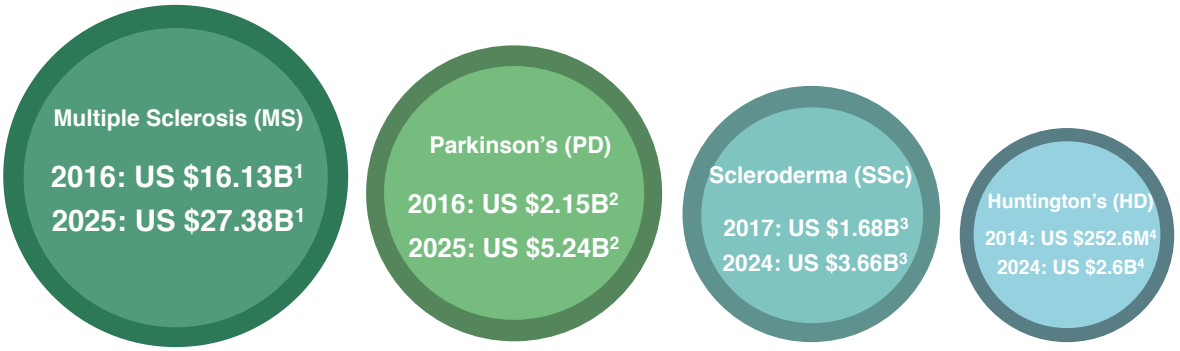
Jim Heppell, LLP - Former President and Director of BC Advantage Funds. Founding CEO and Director of Sophiris Bio Inc. (NASDAQ:SPHS).

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

To find out more about Emerald Health Pharmaceuticals please contact:

invest@emeraldpharma.life

GLOBAL MARKET VALUE & GROWTH RATE



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. There are no effective disease-modifying drugs for progressive forms or therapies that re-myelinate damaged neurons. Market value: US $16.3B in 2016; expected to reach US $27.38B by 2025, expanding at 6.3% compound annual growth rate (CAGR) from 2017-2025.

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. Market value: US $1.68M in 2017; expected to reach US $3.66B by 2024, expanding at 6.3% CAGR from 2017-2025.

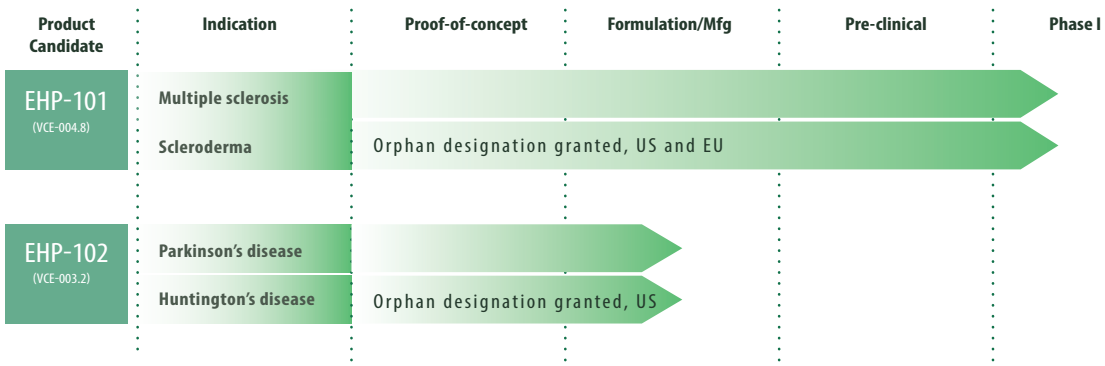
Scleroderma (Systemic Scleroderma or SSc)

SSc is a chronic systemic autoimmune disease causing fibrosis of skin and internal organs affecting over 179,800 patients in the USA. 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. Market value: US $1.68B in 2017; expected to reach US $3.66B by 2024, expanding at 10.3% CAGR from 2017-2024.

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. Market value: US $252.6M in 2014; expected to reach US $2.6B by 2024, expanding at 25.6% CAGR rate from 2014-2024.

PRODUCT PIPELINE



LOOKING FORWARD

EHP-101

Phase I human study initiated in Australia. This clinical study is intended to support Phase II in MS and scleroderma, which is expected to begin in Q4 2019.

EHP-102

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

REFERENCES

[1] Global Multiple Sclerosis Drugs Market Size, Market Share, Application Analysis, Regional Outlook, Growth Trends, Key Players, Competitive Strategies and Forecasts, 2017 To 2025 Research and Markets Report
[2] Parkinson's Disease Therapeutics Market - Global Industry Analysis Size, Share, Growth ,Trends, and Forecasts, 2017 To 2025 Transparency Market Research Report
[3] Scleroderma Diagnostics and Therapeutics Market Global Industry Analysis, Size, Share, Growth, Trends, and Forecast 2017 - 2024 Transparency Market Research Report
[4] Opportunity Analyzer: Huntington's Disease - Opportunity Analysis and Forecast to 2024 Research and Markets Report