UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 1-K

ANNUAL REPORT PURSUANT TO REGULATION A

For the fiscal year ended:
December 31, 2020

Emerald Health Pharmaceuticals Inc.
(Exact name of issuer as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

82-0669961
(I.R.S. Employer Identification Number)

5910 Pacific Center Blvd, Suite 320, San Diego, CA 92121
(Full mailing address of principal executive offices)

(858) 352-0622
(Issuer's telephone number, including area code)

Common stock, par value $0.0001
(Title of each class of securities issued pursuant to Regulation A)

PART II

STATEMENTS REGARDING FORWARD-LOOKING INFORMATION

We make statements in this Annual Report on Form 1-K that are forward-looking statements within the meaning of the federal securities laws. The words "believe," "estimate," "expect," "anticipate," "intend," "plan," "seek," "may," and similar expressions or statements regarding future periods are intended to identify forward-looking statements. These forward-looking statements involve known and unknown risks, uncertainties and other important factors that could cause our actual results, performance or achievements, or industry results, to differ materially from any predictions of future results, performance or achievements that we express or imply in this Annual Report or in the information incorporated by reference into this Annual Report.

The forward-looking statements included in this Annual Report on Form 1-K are based upon our current expectations, plans, estimates, assumptions and beliefs that involve numerous risks and uncertainties. Assumptions relating to the foregoing involve judgments with respect to, among other things, future economic, competitive and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond our control. Although we believe that the expectations reflected in such forward-looking statements are based on reasonable assumptions, our actual results and performance could differ materially from those set forth in the forward-looking statements. Factors which could have a material adverse effect on our operations and future prospects include, but are not limited to:

- Unpredictable events, such as the COVID-19 outbreak, and associated business disruptions including delayed clinical (human) trials and laboratory resources could seriously harm our future revenues and financial condition, delay our operations, increase our costs and expenses, and impact our ability to raise capital;
- The success of our product candidates will require significant capital resources and years of clinical development efforts;
- The results of clinical testing and trial activities of our products;
- Our ability to obtain regulatory approval and market acceptance of, and reimbursement for our products;
- Our ability to protect our intellectual property and to develop, maintain and enhance a strong brand;
- Our ability to compete and succeed in a highly competitive and evolving industry;
- Our lack of operating history on which to judge our business prospects and management;
- Our ability to raise capital and the availability of future financing;
- Our ability to manage our research, development, expansion, growth and operating expenses; and
- Our reliance on third parties to conduct our research, preclinical (non-human) studies, manufacturing and clinical trials.

Any of the assumptions underlying forward-looking statements could be inaccurate. You are cautioned not to place undue reliance on any forward-looking statements included in this Annual Report. All forward-looking statements are made as of the date of this Annual Report on Form 1-K and the risk that actual results will differ materially from the expectations expressed in this Annual Report will increase with the passage of time. Except as otherwise required by the federal securities laws, we undertake no obligation to publicly update or revise any forward-looking statements after the date of this Annual Report, whether as a result of new information, future events, changed circumstances or any other reason. In light of the significant uncertainties inherent in the forward-looking statements included in this Annual Report, the inclusion of such forward-looking statements should not be regarded as a representation by us or any other person that the objectives and plans set forth in this Annual Report will be achieved.

Item 1. Business

Overview

Emerald Health Pharmaceuticals Inc. (the Company, EHP, we, our, and us) was formed on March 2, 2017 under the laws of the State of Delaware, and is headquartered in San Diego, California. We are a biotechnology/pharmaceutical company focused on developing drug product candidates currently containing novel, patented molecules to treat diseases with unmet medical needs, primarily autoimmune, neurodegenerative, inflammatory and fibrotic diseases. The Company was formed to acquire, discover, develop and commercialize drug candidates based on patented new chemical entities (NCEs) derived from non-psychoactive cannabinoids. We are currently developing two initial product candidates that together target four initial diseases, multiple sclerosis (MS), systemic sclerosis (SSc), a severe form of scleroderma, Parkinson's disease (PD) and Huntington's disease (HD). We believe treatments for these indications represent markets with underserved patient populations.

Our platform technology is a result of the unique convergence of science, biology, and cannabinoids. It consists of a library of 25 novel, patented derivatives of synthetically manufactured cannabidiol (CBD) and cannabigerol (CBG), two of the non-psychoactive molecules found naturally in the cannabis plant. The resulting molecules are NCEs covered by 21 issued international patents. In addition, we have 18 pending patent applications. We believe our technology platform represents an advancement to existing therapies because current treatments for the diseases we are targeting address primarily the symptoms of the diseases and our NCEs are chemically modified from CBD and CBG to act on biological receptors and pathways in the body to specifically treat these diseases, which CBD and CBG alone do not affect. In addition, we know of no other products on the market or product candidates in development that possess the same combined mechanism of action (MOA) as the novel molecules in our lead product candidates.

Our current product pipeline includes two initial product candidates from our library of NCEs, EHP-101 and EHP-102. EHP-101 is an oral formulation of a novel synthetic CBD derivative, known as VCE-004.8, and is our lead candidate, currently in Phase II clinical development. EHP-102 is a formulation of a novel synthetic CBG derivative, known as VCE-003.2, currently in preclinical development. Based on our studies to date, we believe that these initial product candidates have the potential to treat several diseases with unmet medical need. We are currently targeting four distinct diseases, two for each of these initial product candidates. With EHP-101, we are initially targeting MS and SSc, and with EHP-102, we are initially targeting PD and HD. Other applications and different formulations are also being investigated with our two current product candidates, and research is ongoing with other molecules within our NCE portfolio.

In September 2019, we successfully completed a Phase I clinical trial in Australia to establish EHP-101's safety, tolerability and pharmacokinetics (PK) in healthy volunteers. During 2020, we initiated a Phase IIa safety and efficacy clinical trial with EHP-101 in SSc patients and we have commenced the initiation of activities for a Phase II trial with EHP-101 in MS patients to begin in 2021. If such clinical trials are successful, the product candidates will then advance into additional clinical trials thereafter.

We have completed preclinical proof of concept (POC) studies for EHP-102. We are now in the manufacturing and formulation development stage and have initiated the nonclinical studies for HD and PD to allow for advancement to clinical trials.

We have been granted Orphan Drug Designation (ODD) from the Food and Drug Administration (FDA) in the United States and from the European Medicines Agency (EMA) in Europe for EHP-101 for the SSc indication and for EHP-102 for the HD indication. We have also received Fast Track designation by the FDA for EHP-101 for the SSc indication.

The starting material for the active pharmaceutical ingredient (API) in our product candidates are CBD and CBG, which may be classified by the United States Drug Enforcement Administration (DEA) as controlled substances in the United States depending on their origin and purity. In March 2019 we received a decision from the DEA that the API (VCE-004.8) in our lead product candidate (EHP-101) is not a controlled substance. We have also received the same decision from the United Kingdom (UK) Home Office and Canada's Controlled Substances Directorate.

Background and Pathology

The Endocannabinoid System

Based on current scientific knowledge, we believe the body's endocannabinoid system (ECS) promotes biological balance in our cells, tissues and organs, supporting brain, immune, and nervous system function and overall health and wellness.

The ECS is presently thought to include:

- main receptor sites on cells called cannabinoid type-1 (CB_1) and cannabinoid type-2 (CB_2) receptors;
- compounds known as endocannabinoids, such as anandamide and 2-arachydonoil glycerol, which are produced in the body from dietary fats, that bind to CB_1 and CB_2 receptors; and
- enzymes that impact the production and metabolism of these endocannabinoids.

In general, receptors within the body send vital information to cells, organs, and the nervous system, and are critical to maintaining optimal health and a stable balanced internal environment, or homeostasis, despite fluctuations in the external environment. In the human body, the ECS is believed to have more cellular receptor sites than any other receptor system. The ECS is comprised of mainly CB_1 and CB_2 receptors, that can be described as "lock-and-key" mechanisms, which are activated (unlocked) by specific molecules (the keys) produced in the body (endocannabinoids), or from plants (phytocannabinoids) and cannabinoid-like compounds, both natural and synthetic.

Endocannabinoids and their receptors are found throughout the body: in the brain and other organs, connective tissues, glands, and immune cells. In each tissue, the ECS performs different tasks, but the goal is always the same: homeostasis.

We believe the role of the ECS in maintaining homeostasis could make it a promising target in medicine. The widespread distribution of cannabinoid receptors suggests that the ECS is important in maintaining overall bodily function and health, including the brain and peripheral organs. Since CBD and CBG have demonstrated the ability to provide positive health benefits based on their effects on the ECS, and since our unique molecules are derived from CBD and CBG, the health benefits of the ECS form the initial basis for our technology. This, along with the ability of our novel molecules to affect additional receptors and pathways within the body outside of the ECS, provides us with the potential for unique therapeutic advantages over current therapies for the diseases we are targeting. Only CB_1 receptors in the brain are responsible for the psychoactive effects of cannabis. As with the natural molecules, CBD and CBG, our synthetic derivative molecules do not interact with CB_1 receptors and, therefore, have no potential for psychoactive effects. This lack of psychoactive effects has been verified in our studies conducted to date.

Our Unique Technological Advantage

Our patented molecules are NCEs derived from synthetically manufactured CBD and CBG. Based on the scientific and anecdotal information currently available, there is evidence that CBD and CBG may provide positive health and therapeutic effects, primarily through interactions with the ECS, with a good safety profile. Our strategy in the creation of our cannabinoid derivatives is to improve upon these health and therapeutic benefits and maintain a good safety profile by chemically modifying the CBD and CBG molecules so some interact with certain ECS receptors more efficiently, as well as affecting other receptors and physiologic pathways in the body outside the ECS, related to specific life-threatening diseases. Using this strategy, we currently have rationally designed 25 molecules with possible capabilities to treat diseases based on their MOA. We know of no other products on the market or product candidates in development that possess the same combined multi-modal MOA as the novel molecules in our lead product candidates. For additional information on our patent families, see "Intellectual Property" below.

Biologic Receptors and Physiologic Pathways Involved in Our Initial Product Candidates

We believe that one of the biologic and competitive advantages of our technology is the effect that the active pharmaceutical ingredient (API) (VCE-004.8) in our lead product candidate (EHP-101) could have on various additional biologic receptors and physiologic/biochemical pathways not displayed by other molecules (including other cannabinoids). Our synthetic cannabinoid derivatives are designed to improve on the bioactivities of their natural precursors and provide opportunities to advance their development into pharmaceutical products. Some examples of these receptors and pathways are:

Cannabinoid Receptor Type-2 (CB_2)

Cannabinoids are a complex group of molecules that comprise endocannabinoids (naturally occurring within the body), phytocannabinoids (from plants), and synthetic cannabinoids (made synthetically). Cannabinoids were initially identified by their ability to affect the classical endocannabinoid receptors in the body, CB_1 and CB_2. Tetrahydrocannabinol (THC), the primary psychoactive component of cannabis, produces many of its psychoactive effects by affecting CB_1 cannabinoid receptors. CB_2 receptors have been the subject of considerable attention, primarily due to their promising therapeutic potential for treating various pathologies while avoiding the adverse psychoactive effects that can accompany CB_1 receptor activation. We believe the biologic activity of cannabinoids (specifically CBD and CBG) accounts for their ability to modulate several key processes including neuroprotection, inflammation, immunomodulation and vascular responses. In studies conducted to date, our lead novel CBD-derived molecule has been shown to enhance the CB_2 receptor modulation activity compared to CBD and, therefore, can potentially increase its therapeutic benefits compared to CBD.

Peroxisome Proliferator-Activated Receptors

Peroxisome Proliferator-Activated Receptors (PPARs) play essential roles in the regulation of cellular differentiation, development, and metabolism (carbohydrate, lipid, protein). Three types of PPARs have been identified, alpha (α), gamma (γ), and beta/delta (β/δ). PPARγ is a nuclear receptor originally implicated in the regulation of cell growth, lipid metabolism and blood sugar regulation. However, PPARγ is broadly expressed and has also been recognized to play a key role in inflammatory and connective tissue balance. PPARγ activators have been shown to prevent inflammation, dermal fibrosis and loss of fatty tissue. PPARγ is activated by some endocannabinoids and related signaling lipids, as well as by certain natural and synthetic cannabinoids. In studies conducted to date, our lead molecules have shown modulation of PPARγ activity, providing the potential for immunomodulatory activity, neuroprotection and the promotion of oligodendrocyte progenitor cell differentiation and enhancement of their antioxidant defenses.

Hypoxia-Inducible Factor Pathway

The Hypoxia-Inducible Factor (HIF) pathway plays an important role in the body. HIF-1 is a protein complex that plays an integral role in the body's response to low oxygen concentrations, or hypoxia. HIF-1 is among the primary genes involved in the homeostatic process and has two subunits, HIF-1α and HIF-1β. HIF operates in all mammalian cell types and responds to changes in oxygen, providing cells with a master regulator that coordinates changes in gene transcription. Hypoxia preconditioning induced by mild hypoxia can be beneficial in a wide number of disorders, including neurologic and inflammatory diseases. Cellular adaptation to severe or mild hypoxia begins immediately with the activation of the HIF pathway, and regulates a plethora of genes involved in many biological processes, including red blood cell production, angiogenesis, neuroprotection, myelination, vascular tone and immunity. HIF-1α activation may play a role in the inflammatory and remitting phases of MS. In addition, there is evidence suggesting that activation of the HIF pathway may be also linked to neuroprotection and myelination. The erythropoietin (EPO) gene is HIF-dependent, and EPO is neuroprotective in different animal models of MS. In addition, HIF-1α activates several blood vessel-forming genes, including vascular endothelial growth factor-A (VEGF-A) and fibroblast growth factor-2 (FGF-2), which are mainly produced by vascular endothelial cells. The vascular endothelial cells produce factors that help maintain brain homeostasis within the context of the neurovascular unit. In general, HIF-1α activates many genes whose products exert neuroprotective activities and also HIF-1α activation is implicated in the modulation of the immune system. In studies conducted to date, the API (VCE-004.8) in our lead product candidate (EHP-101), has shown activation of the HIF pathway, providing the potential for neuroprotection, vascular protection, anti-inflammatory activity and remyelination in MS models. In addition, EHP-101 (oral form of VCE-004.8) prevented vascular disruption and inflammation of peripheral vessels in scleroderma models.

Others

The API (VCE-003.2) in our second product candidate (EHP-102) has been shown to affect PPARγ, like EHP-101. Unlike EHP-101, however, it does not affect CB_2 receptors or the HIF pathway, but has been shown to activate a transcription factor involved in nerve cell neurogenesis (the chicken ovalbumin upstream promoter transcription factor-interacting protein, Ctip2). It also reduces the expression of cyclooxygenase-2 (COX-2) in nerve cells (involved in inflammation and pain) and is an activator of the extracellular signal-regulated kinases (ERK) pathway (a member of the mitogen-activated protein kinases [MAPK] pathway) in hippocampal neuronal progenitor cells.

Our Initial Product Candidates

We call our initial product candidates EHP-101 and EHP-102. EHP-101 is a formulation of one of our CBD derivatives (VCE-004.8) for oral administration and EHP-102 is a formulation of one of our CBG derivatives (VCE-003.2) currently being developed for oral administration. Based on the combination of biologic receptors and physiologic/chemical pathways affected by our product candidates, we believe our unique cannabinoid-derived technology could be developed into suitable medications for neurodegenerative, neurological, autoimmune, inflammatory, metabolic and fibrotic disorders. Based on the many studies conducted to date, we believe that EHP-101 and EHP-102 have the potential to be disease modifying, while most other compounds approved for many of these diseases are limited to affecting the symptoms of the disease, as opposed to the disease itself.

Here is a summary of our two initial product candidates:

EHP-101 (API: VCE-004.8)

Overview

Our lead product candidate, EHP-101, is an oral formulation of our NCE called VCE 004.8, an aminoquinone derivative of synthetically manufactured CBD, that affects some of the known biologic receptors and physiologic pathways involved in MS and SSc. Thus, our first two chosen indications for EHP-101 are MS and SSc.

We believe that PPARγ and CB_2 activators have strong potential to directly affect the disease in MS and SSc. EHP-101 is a formulated product for oral administration, containing VCE-004.8, a ligand agonist of PPARγ and CB_2, that can directly bind and activate both receptors as demonstrated by *in vitro* binding and transcriptional assays. We believe the combination of activities toward both PPARγ and CB_2-dependent signaling pathways could represent an important advancement in the development of anti-inflammatory, neuroprotective, and antifibrotic therapies for MS and SSc.

In addition to PPARγ and CB_2 receptor modulation, VCE-004.8 activates the HIF pathway which also may have potential benefits in MS and SSc. Studies have indicated that HIF-1α activation may play a role in inflammatory and remitting phases of MS, including its potential for remyelination. For instance, HIF-1α activates many genes whose products exert neuroprotective activities. HIF-1α activation is also implicated in the modulation of the immune system. In addition, there is evidence suggesting that activation of the HIF pathway may be linked to neuroprotection and myelination. HIF-1α also activates several genes involved in vascular physiology, including VEGF-A and FGF-2, which are mainly produced by vascular endothelial cells. The vascular endothelial cells produce factors that maintain brain homeostasis.

Formulation and Pharmacokinetics

EHP-101 is formulated for oral administration as a combination of corn oil and long-chain mono-, di, and triglycerides with the API known as VCE-004.8.

To date, the pharmacokinetic (PK) profile of EHP-101 has been studied in a number of mouse, rat and dog studies and has also now been evaluated in a Phase I clinical (human) trial on EHP-101. PK studies evaluate the absorption, distribution, metabolism, and excretion (ADME) by the body and measures, among other things, the concentration of the substance in plasma.

Toxicology

To date, we have completed extensive animal toxicology studies on EHP-101 that supported a Phase I clinical trial, which was completed in September 2019. Additional studies have been completed or are ongoing to support Phase II clinical trials worldwide. In addition, using a CB_1 ligand agonist assay, we have found that EHP-101 has no CB_1 activity resulting in no psychoactive effects.

Manufacturing and Supply for EHP-101

A Good Manufacturing Practices (GMP) process has been developed to manufacture the API (VCE-004.8) and drug product (EHP-101) through various contract manufacturing organizations (CMOs). The initial CMOs of our API produced several multi-kilogram scale bulk batches for use in our nonclinical studies and clinical trials. The API is currently manufactured by a CMO with large scale and commercial capabilities. The API in EHP-101 (VCE-004.8) is a synthetic m/ lecule, produced from synthetically manufactured CBD, and we believe there are readily available supplies of all raw materials needed for the manufacture of EHP-101. We do not own or operate manufacturing facilities for the production of VCE-004.8, EHP-101, or any of the starting materials related to the production of EHP-101. We expect to depend on third-party suppliers and manufacturing organizations for all of our clinical trial quantities of raw materials, drug substance, and finished product.

Our Completed Clinical Trials

Our first-in-human Phase I clinical trial was conducted between September 2018 and September 2019, and included 104 healthy volunteers administered either a placebo (n=24) or EHP-101(n=80) at 12 different dose levels. A total of 48 subjects (6 subjects per cohort) received a single dose of either 0.91 mg, 3 mg, 9 mg, 20 mg, 25 mg (fasted and fed), 50 mg, 100 mg or 185 mg of EHP-101. Another 32 subjects (8 subjects per cohort) received daily repeated doses for 7 days of either 20 mg once per day (QD), 25 mg twice per day (BID), 51.9 mg QD, or 50 mg BID of EHP-101. Twenty-four (24) subjects received placebo (2 subjects at each tested dose level in the total of 12 cohorts studied).

The most common side effects reported in some subjects included mild-to-moderate headache, paresthesia (a feeling of pins and needles in the limbs), mild blurred vision as well as mild abdominal pain at the highest dose only. Similar side effects were observed with placebo treatments and no maximum tolerated dose was reached. There were no clinically significant abnormalities in vital signs, physical examination, echocardiograms, clinical laboratory parameters, or ophthalmological assessments.

The half-life of a 25 mg single dose was approximately 2 hours during fasted state and 7 hours during fed state. A mean increase of 1.5-fold in the maximum plasma concentration (C_{max}) and area under the curve (AUC, which represents the cumulative plasma concentration over time) was observed post administration with food. No drug accumulation in the blood was observed with QD dosing and minimal accumulation was observed with BID dosing for 7 days.

The C_{max} for a predicted anticipated therapeutic dose (ATD) was reached with a 20 mg single dose and the targeted drug exposure based on AUC was approached with a 50 mg single dose and 25 mg BID multiple dosing for 7 days, thus helping the selection of the dosing and treatment regimen for Phase II trials.

Preliminary drug-related biomarker analysis in plasma on Day 7 supports the MOA of EHP-101 related to the effects on the HIF pathway, PPARγ and CB_2 receptors. Some proteins were upregulated (increased concentrations post-dosing) related to vascular endothelial cell function (HIF pathway activation), lipid metabolism and control of inflammation, whereas other proteins related to CB_2 and PPARγ activation (inflammation and immunomodulation) were downregulated (decreased concentrations post-dosing). Also, preliminary proteomic, ELISA and MULTIPLEX analyses support the MOA of EHP-101 in regard to HIF pathway activation, anti-inflammation and immunomodulation in healthy volunteers.

Our Clinical Trials

We have begun a Phase IIa clinical trial of EHP-101 in SSc patients in Australia, New Zealand and the United States and we have commenced the initiation activities to begin a Phase II clinical trial for MS. Prior to initiating Phase IIa in SSc, we obtained an Investigational New Drug (IND) clearance (essentially "approval" to start the clinical trial), as well as Fast Track designation from the FDA in the United States. We have also received all clearances that were required to start the SSc Phase IIa clinical trial in Australia and New Zealand. In addition, we have also been granted Orphan Drug Designation from the FDA in the United States and from the EMA in Europe for SSc. We plan to also obtain all the clearances and approvals required to start the MS Phase II clinical trial.

EHP-101: Systemic Sclerosis (SSc)

SSc is a rare, heterogeneous, severe and life-threatening form of scleroderma that involves three main hallmarks: fibroblast dysfunction leading to increased deposition of extracellular matrix proteins, small vessel damage resulting in tissue hypoxia and an immune response with autoantibody production. SSc is characterized by progressive thickening and fibrosis (essentially scarring) of the skin secondary to excessive collagen accumulation, that can be limited to skin areas below, but not above, the elbows and knees, with or without involvement of the face (limited cutaneous SSc) or wider skin areas, including skin on the arms, above and below the elbows, frequently on the legs, above and below the knees, with or without involvement of the face as well as on the torso (diffuse cutaneous SSc, or dcSSc), both with internal organ involvement (e.g., lung, kidney, heart, stomach, bowels).

SSc is initiated by microvascular injury and inflammation followed by fibroblast activation, a key event in fibrosis development. Activated fibroblasts are responsible for the excessive collagen synthesis and transforming growth factor beta (TGFβ) production. TGFβ signaling plays a critical role in the regulation of cell growth, differentiation, and development in a wide range of biological systems. Excessive TGFβ signaling is the hallmark of SSc and different strategies aimed to disrupt this signaling pathway have been proposed for the treatment of SSc and related fibrotic diseases. Different studies prove that PPARγ and CB_2 receptors are potential therapeutic targets for the disease because of their involvement in the inhibition of inflammation and fibrosis progression. Vascular damage is also a key pathological event in SSc and therefore the activation of the HIF pathway should provide a clear benefit for SSc patients.

Recent evidence indicates that genetic and pharmacological manipulation of the ECS modulates the fibrotic response. Thus, CB_1 and CB_2 receptors have shown different patterns in experimental models of dermal fibrosis. While CB_1 activation is detrimental for the disease, CB_2 activation has shown protection in mice from experimental dermal fibrosis. As stated previously, EHP-101 has been shown to affect CB_2 but not CB_1 receptors.

SSc is a rare disease with no cure, with a prevalence of less than 200,000 patients in the United States. We have been granted ODD by the FDA in the United States and the EMA in the EU. SSc is a condition that is both chronically debilitating and life-threatening. The debilitating nature of the disease manifests itself through the development of painful lesions, disfigurement and the loss of ability to function normally. Currently there are no approved treatments specifically for SSc that could stop the pathological fibrotic transformation in tissues of patients with SSc. Despite recent progress in the understanding of SSc pathophysiology, the current therapeutic recommendations focus on the management of organ specific morbidity and no single therapeutic agent has been proven to be efficacious as a universal disease-modifying agent that provides benefit to SSc patients regardless of which organs are affected by the disease.

SSc is life-threatening because of its effects on several vital organs, such as heart, lungs, kidneys and the digestive tract. The life-threatening acute onset of severe hypertension and renal failure occurs in approximately 66% of patients with SSc within the first 12 months of diagnosis. Up to 80% of SSc patients develop interstitial lung disease. Despite advances in early recognition of the disease and availability of efficient treatments for some of its organ complications, the mortality of SSc continues to be high. Although the median survival rate is 21.9 years, it varies significantly among different population groups. Additionally, the side effects of immunosuppressive treatments, which SSc patients typically receive as a standard of care, often result in life-threatening complications requiring intensive care unit admissions. Furthermore, the sites of SSc activity, such as skin, lung and liver, are susceptible to malignant transformation. The incidences of skin, lung and liver cancers are 3 to 4-fold higher in SSc patients compared to the general population.

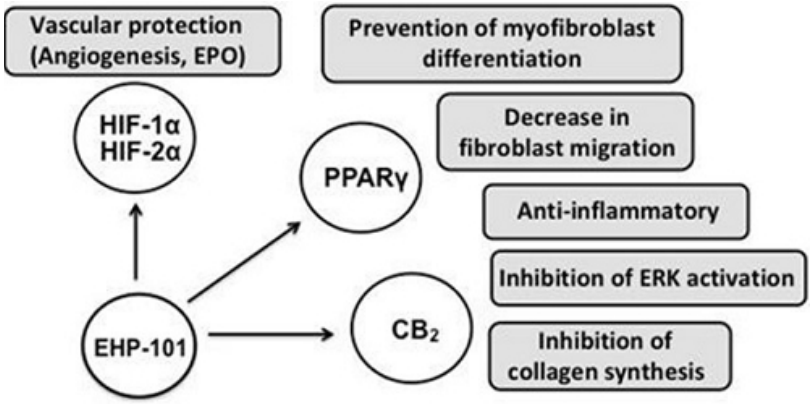
As described previously, EHP-101 behaves as a dual activator of PPARγ and CB_2 receptors and, therefore, inhibits collagen synthesis. Moreover, EHP-101 has been shown to inhibit the TGFβ-associated differentiation of cells (called myofibroblasts) that are responsible for fibrosis.

The anti-fibrotic effect of EHP-101 *in vivo* was investigated in a mouse model of scleroderma induced by bleomycin (BLM) in 64 mice (8 total groups with 8 mice in each group, using doses of 10 mg/kg and 20 mg/kg). EHP-101 reduced dermal thickness, blood vessel collagen accumulation and prevented other negative cell activities in the skin. In addition, it prevented the expression of several key genes associated with fibrosis, qualifying this synthetic cannabinoid NCE as a promising compound for the management of systemic sclerosis/scleroderma and, potentially, other fibrotic diseases.

As expected, histological examination of the skin after BLM administration resulted in increased dermal thickness and loss of the subcutaneous fat layer. Oral treatment with EHP-101 demonstrated a positive effect by reducing the progression of dermal thickness, skin fibrosis, and perivascular collagen deposition. The fact that pre-treatment with the CB_2 antagonist AM630 or the PPARγ antagonist T007907 partially negated the effect of EHP-101 indicates that the anti-fibrotic response was dependent on the dual PPARγ and CB_2 activation.

HIF activators have not been investigated extensively in fibrotic diseases such as SSc, however, based on our nonclinical studies, we believe that the potential of this class of compounds to induce vascular protection is expected from other experimental models.

Summary of Mechanisms of EHP-101 in SSc



The API in EHP-101 is a multifunctional molecule acting at different biologic targets that are the hallmark of SSc. EHP-101 has potent anti-inflammatory and anti-fibrotic activities by targeting PPARγ and CB_2 receptors. EHP-101 also inhibits fibroblast to myofibroblast differentiation and collagen synthesis. In addition, EHP-101 activates the HIF pathway and mediates the expression of growth factors that can help vascular remodeling that is impaired in the disease.

In summary, we believe that EHP-101 is a promising product candidate for SSc treatment by ameliorating fibrosis, inflammation, fibroblast migration, and collagen synthesis through PPARγ and CB_2 receptors and by providing vascular protection and angiogenesis through activation of the HIF pathway. These activities are summarized in the diagram above.

EHP-101: Multiple Sclerosis (MS)

MS is a chronic autoimmune disease of the central nervous system (CNS) that affects over 2.8 million people worldwide, and there is presently no cure for MS. MS is what is called a demyelinating disease. Myelin is a sheath around nerve cells which provides insulation for nerve fibers and is essential to maintain optimal nerve conduction. The hallmarks of MS include neuroinflammation, the loss of myelin (demyelination) and nerve cell damage. Disease progression is thought to be composed of two underlying processes: myelin destruction, or demyelination, with failure to remyelinate and progressive nerve cell damage with little capacity for recovery. Exacerbated innate and adaptive immune responses contribute to the pathophysiology of the disease and the majority of current therapies for MS are directed towards modulation of the immune response and inflammation. However, therapies aimed to stop the demyelination process and, ideally, remyelinate nerve cells are needed.

Cannabinoids such as CBD that do not bind to and activate CB_1 receptors, and therefore do not produce psychoactive effects, are considered of special interest as therapeutic agents in CNS diseases. In the CNS, there is evidence that CB_2 receptors regulate neurotoxicity in certain cells of the CNS, called microglia. Cannabinoids also activate the nuclear receptor superfamily of PPARs. Three forms of PPARs have been identified (PPARγ, PPARα and PPARβ/δ) and within these receptors, PPARγ can be activated weakly by cannabinoids such as CBD. Due, in part, to their PPARγ-activating properties, we believe these cannabinoids may exert anti-inflammatory activities, thus showing a therapeutic potential for the treatment of inflammatory diseases. PPARγ has been detected in certain nerve cells and participates in mechanisms that control activation of inflammatory response including modulation of cytokines and chemokine expression, neuronal dysfunction, and neurodegeneration. Neuroinflammation is an integral component of disorders such as MS, PD, Alzheimer's disease and stroke. PPARγ activators have been shown to reduce the incidence and severity of disease, suggesting that PPARγ could be a pharmacological target for the management of MS.

EHP-101 has been shown to bind to CB_2 and PPARγ receptors, providing anti-inflammatory activity in the CNS as well as other positive biologic effects. Microglial cells specifically express CB_2 receptors in Experimental Autoimmune Encephalomyelitis (EAE) models, and activated microglial cells expressed 10-fold more CB_2 receptor activity than microglia in the resting state, suggesting that this receptor plays an important role in microglial cell function in the CNS during autoimmune-induced inflammation. In addition, PPARγ is expressed in different CNS cell types and its activation by ligand agonists provides immunomodulatory and neuroprotective activity and promotes oligodendrocyte progenitor cell differentiation and enhances their antioxidant defenses.

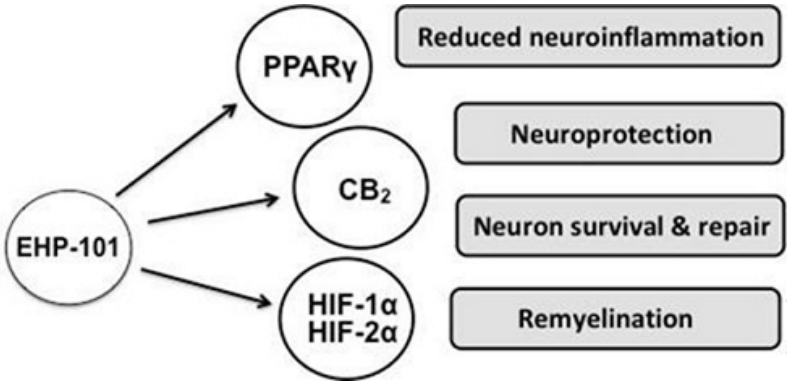
HIF operates in all mammalian cell types and responds to changes in oxygen, providing cells with a master regulator that coordinates changes in gene transcription. Hypoxia preconditioning induced by mild hypoxia can be beneficial in a wide number of disorders including neurologic and inflammatory diseases. Our studies indicate that EHP-101 stabilizes HIF-1α and activates the HIF pathway in different CNS cells as demonstrated by *in vivo* protein expression and functional assays. The results of these assays show that EHP-101 up-regulates the expression of neuroprotective genes such as erythropoietin and VEGF-A, and also induces peripheral angiogenesis *in vivo* and prevents vascular endothelial inflammation in the CNS and periphery.

In vivo experiments in two mouse models of MS, EAE and Theiler virus-induced encephalopathy (TMEV) using VCE-004.8, the API in EHP-101, have resulted in the prevention of demyelination, nerve cell damage and immune cell infiltration. VCE-004.8 also down-regulated the expression of several genes including chemokines, cytokines and adhesion molecules, which are closely associated with MS pathophysiology. In addition, EHP-101, the oral formulation of VCE-004.8, resulted in the reduction of MS symptoms in both mouse models.

EHP-101 has also been shown to induce statistically significant remyelination in the brain compared to placebo in two different cuprizone (CPZ) mouse models. To evaluate the effect of EHP-101 on myelin damage in an acute cuprizone-induced demyelination murine model, brain coronal sections from animals after 6 weeks of CPZ 0.2% diet and 2 weeks of EHP-101 treatment were evaluated. In this model, EHP-101 treatment began after CPZ diet removal to directly evaluate the effects of EHP-101 on remyelination. Spontaneous recovery from demyelination was insignificant after 1 and 2 weeks but remyelination was significantly accelerated by EHP-101 treatment. EHP-101 enhanced remyelination in both white and gray matter of the brain, namely the corpus callosum and the cortex.

Furthermore, the potential of oral administration of EHP-101 to promote remyelination was evaluated in a cuprizone/rapamycin (C/R) mouse model ("augmented cuprizone model"), a more aggressive demyelination model since the concomitant administration of rapamycin with cuprizone for 12 weeks reduces spontaneous myelin production by blocking differentiation of oligodendrocyte progenitor cells. In the study, oral administration of EHP-101 once daily at 5, 10, and 20 mg/kg for 6 weeks induced statistically significant, dose-dependent remyelination of demyelinated axons in the white matter (corpus callosum) at 10 mg/kg ($p < 0.005$) and 20 mg/kg ($p < 0.001$) versus vehicle-treated controls as shown by the enhanced density of myelinated axons.

Summary of Mechanisms of EHP-101 in MS



The API in EHP-101 is a multifunctional molecule acting at different biologic targets involved in the pathophysiology of MS. EHP-101 has potent anti-inflammatory and neuroprotective activity through effects on PPARγ and CB_2 receptors. In addition, EHP-101 activates the HIF pathway and mediates the expression of growth factors that play a role in CNS activity, homeostasis, and remyelination.

In summary, we believe that EHP-101 is a promising product candidate for MS treatment, by ameliorating neuroinflammation through PPARγ and CB_2 receptors and by inducting neuroprotection, blood brain barrier integrity and remyelination through activation of the HIF pathway. These activities are summarized in the diagram above.

EHP-102 (API: VCE-003.2)

Overview

Our second product candidate, EHP-102, is being developed for oral administration of our NCE called VCE-003.2, an aminoquinone derivative of synthetically manufactured CBG that affects some of the accepted biologic receptors and pathways involved in various neurodegenerative diseases. Based on preclinical studies to date, we are developing EHP-102 initially for two indications, HD and PD.

VCE-003.2 acts partly as a ligand activator of PPARγ measured by binding and transcriptional assays. Preclinical studies have shown that VCE-003.2 is neuroprotective and anti-inflammatory in animal models of PD and HD, as measured by proinflammatory cytokines and behavioral scores, respectively. In addition, VCE-003.2 also reduced mutant huntingtin (different spelling than the disease) protein aggregates (altered huntingtin protein is associated with HD) detected by confocal microscopy techniques.

In addition to PPARγ, EHP-102 has been shown to activate a transcription factor involved in nerve cell differentiation (the chicken ovalbumin upstream promoter transcription factor-interacting protein, Ctip2). EHP-102 also reduces the expression of cyclooxygenase-2 (COX-2) in nerve cells (involved in inflammation and pain). Furthermore, EHP-102 is an activator of the extracellular signal-regulated kinases (ERK) pathway (a member of the mitogen-activated protein kinases [MAPK] pathway) in hippocampal neuronal progenitor cells. This pathway influences nerve cell survival. In summary, EHP-102 exerts potent anti-inflammatory activity in the CNS and enhances neurogenesis (the regeneration of nerve tissue) and can, therefore, provide potential benefits in neurodegenerative diseases such as HD and PD.

Formulation and Pharmacokinetics

We are currently conducting manufacturing and formulation development for EHP-102 through our CMOs. Upon finalization of manufacturing process development and formulation prototype selection, we plan to continue the PK and nonclinical studies required for human clinical development.

Safety, Toxicology and Clinical Trials

We have begun the preclinical studies required to advance to clinical trials. Once the manufacturing and formulation development activities are completed for EHP-102, we plan to initiate Good Laboratory Practice (GLP) animal safety and toxicology studies in support of initiating human clinical development.

Manufacturing and Supply for EHP-102

An industrial scalable process is being developed to manufacture the EHP-102 API (VCE-003.2) and drug product through our contract manufacturers. We do not own or operate manufacturing facilities for the production of EHP-102, VCE-003.2, or any of the raw materials required. We expect to depend on third-party suppliers and CMOs for all of our nonclinical and clinical quantities of raw materials, drug substance and drug product.

Our Planned Clinical Trials

Since a Phase I clinical trial is not expected to begin within the next year, we have not yet begun to develop the full clinical development plan for EHP-102.

EHP-102 Indication 1: Huntington's Disease

HD is an autosomal dominant genetic disorder causing the mutation of a protein called the huntingtin protein which causes progressive degeneration of nerve cells in the brain, specifically, cells of the basal ganglia. This devastating and disabling disease affects middle-aged people with typical onset between the ages of 30 and 50. The genetic defect that causes HD is an abnormal repeat of certain DNA sequences on chromosome number 4. With each successive generation, the number of repeats increases. There is a 50% chance that the disease will be passed to offspring.

HD is a rare disease with approximately 30,000 patients annually in the United States. We have been granted ODD by the FDA in the United States and by the EMA in Europe in 2020.

One of the hallmark signs and symptoms of this disease is involuntary movements and tics. These involuntary movements and tics begin distally and move proximally as the disease progresses. The involuntary movements and tics are not specific and may involve the hands, feet, and face, with the most prominent movements taking place in the muscles of the back. The involuntary movements lead to the appearance that a patient is inebriated. Swallowing becomes difficult, and patients are at risk of choking. Reduced movement and rigidity are common. Patients may also suffer from flexion contractures and become bed bound. Finally, the patient is completely dependent on others for care. The risk of choking increases and the involuntary movements may become more severe or completely disappear. At this point the patients can no longer walk. Cognitive symptoms may include feelings of low self-esteem, guilt, anxiety, apathy, irritability, aggression, dementia and psychosis with paranoia and auditory hallucinations. The cause of death is usually from secondary causes of the disease such as choking and infection.

There is no known curative treatment for HD. Treatment is mostly directed at symptomatic relief with suppression of the involuntary movements and tics. Dopamine-depleting agents, dopamine activators, benzodiazepines, glutamate antagonists, acetylcholinesterase inhibitors, dopamine antagonists, anti-seizure medications, cannabinoids, lithium, along with deep brain stimulation and fetal cell transplantation are being used to treat the symptoms of HD.

The molecular mechanisms of HD pathophysiology are unclear. The current model of disease progression includes development of mitochondrial dysfunction in the huntingtin protein. PPARγ is believed to play a key role in neurodegenerative diseases as it regulates neural progenitor cell proliferation and differentiation. Studies have demonstrated that there are significant defects in the PPARγ signaling pathway in mutant huntingtin expressing cells as compared to wild-type huntingtin protein cells. PPARγ activators improve mitochondrial function in cells expressing mutant huntingtin. The activation of the PPARγ signaling pathway can help mitochondrial function, a pivotal process in the pathogenesis of HD. Therefore, the PPARγ pathway could be a rational therapeutic target in the treatment of HD.

Preclinical *in vitro* studies have shown that VCE-003.2 preserves the ability to activate PPARγ and exerts a prosurvival action in progenitor cells during neuronal differentiation. In addition to EHP-102's effect on PPARγ, our studies indicate effects on other targets involved in neurodegeneration. For example, EHP-102 reduced mutant huntingtin aggregates in striatal cells as noted above. The neuroprotective profile of EHP-102 was also analyzed using three *in vivo* models of striatal neurodegeneration, which mimic HD in humans. EHP-102 inhibited the up-regulation of proinflammatory markers and improved antioxidant defenses in the brain of the test animals.

To assess the pathophysiological relevance of the neuroprotective action of EHP-102 *in vivo*, we employed three mouse models of the disease.

In summary, these studies suggest that EHP-102 displays neuroprotective and anti-inflammatory activities in different mouse models of HD. For example, in these models EHP-102 has:

- prevented neural damage and neuroinflammation;
- improved motor symptomatology in mice expressing a mutated form of huntingtin protein in the brain;
- inhibited the up-regulation of proinflammatory markers such as COX-2, TNF-α, and IL-6;
- improved oxidative stress markers; and
- promoted neurogenesis in the striatum.

These data suggest that EHP-102 could have potential for the treatment of HD and other neurodegenerative diseases with neuroinflammatory traits.

EHP-102 Indication 2: Parkinson's Disease

PD is a long-term degenerative disorder of the CNS that mainly affects the motor system. It is a disease where damaged neurons (nerve cells) do not produce sufficient dopamine (dopamine helps transmit impulses from the brain to the muscles). Over 10 million people suffer from PD worldwide. The symptoms generally present slowly over time. Early in the disease, the most obvious symptoms are shaking, rigidity, slowness of movement, and difficulty with walking. Thinking and behavioral problems may also occur. Dementia becomes common in the advanced stages of the disease. Depression and anxiety are also common, occurring in more than a third of people with PD. Other symptoms may include sensory, sleep, and emotional problems. The main motor symptoms are collectively called "Parkinsonism," or "Parkinsonian syndrome."

Inflammation is a key pathogenic event in PD, so anti-inflammatory strategies are being investigated to limit neuronal deterioration in this disease. Certain cannabinoids have been shown to have anti-inflammatory and neuroprotective properties. In addition, epidemiological data support that the regular use of non-steroidal anti-inflammatory drugs (e.g., ibuprofen) reduces the risk of developing PD. In light of this, different anti-inflammatory agents have been investigated, at preclinical and clinical levels, with variable success in affecting the symptoms of PD.

Cannabinoids have been investigated for the reduction of inflammatory events in PD due mainly to selective CB_2 receptor activation. Activating these receptors elicited frequent positive responses, predominantly by recruiting microglial cells and infiltrated macrophages to the CNS areas lesioned in PD, as well as on the anti-inflammatory and neuroprotective effects derived from the selective activation of these receptors. In addition, another possible rationale for the therapeutic potential in PD may be the possibility of targeting PPARγ receptors with certain cannabinoids. This conclusion is based on: (i) the relevant role played by these nuclear receptors in the control of inflammation in numerous pathological conditions (ii) the well-described PPARγ-mediated anti-inflammatory activity of certain cannabinoids in different models of central and peripheral inflammation, and (iii) the effects of non-cannabinoid PPARγ activators (e.g., thiazolidinediones) in PD. The three different PPAR isotypes (α, β/δ and γ) are expressed in all cell types in the brain and all of them, by functioning in an integrated manner as a complex system – the so-called PPAR triad, have been reported to have neuroprotective properties.

Given the activity of EHP-102 on the PPARγ receptor, which is an important factor involved in the control of inflammation, we evaluated its anti-inflammatory and neuroprotective properties in a typical *in vivo* inflammatory model of PD, lipopolysaccharide (LPS)-lesioned mice. Positive results were obtained in all measurements assessed, both qualitative and quantitative. Unlike EHP-101, EHP-102 has no activity on CB_2 receptors, however, in this study proinflammatory mediators such as tumor necrosis factor-α (TNF-α), interleukin-1β (IL-1β), and inducible nitric oxide synthase (iNOS) were strongly reduced by the treatment with EHP-102. Thus, in this model and others, EHP-102 reduced inflammatory marker expression and prevented dopaminergic neuronal loss (i.e., the loss of nerve cells that produce dopamine, which is the main pathologic feature of PD). It also improved clinical symptoms and recovered movement parameters (motor coordination and activity) in mice injected with 3-nitroproprionic acid (3-NP) and treated with our drug candidate. These data lead us to believe EHP-102 could be a potential treatment for PD.

Intellectual Property

We believe it is important to our success that we:

- obtain and maintain patent and other legal protections for the proprietary molecules, technology, inventions and improvements we consider important to our business;
- prosecute our patent applications and defend our issued patents;
- preserve the confidentiality of our trade secrets; and
- operate without infringing the patents and proprietary rights of third parties.

We have sought and intend to continue to seek appropriate patent protection for our product candidates, as well as other proprietary technologies and their uses by filing additional patent applications in the United States and selected other countries.

As of the date of this Annual Report, we owned a total of 21 issued (granted) patents: four United States patents, three Japanese patents, two European patents, two Mexican patents, two patents in the Russian Federation, two Australian patents, two Israeli patents, two Indian patents, one patent in China and one patent in Hong Kong. In addition, we have 18 pending patent applications. These patents and patent applications will expire between 2030 and 2041 and could be eligible for patent term extension for delay caused by regulatory review, thereby further extending their patent terms. Our patent portfolio is not specific to any single indication, which we believe could provide us with patent protection for our developed products for additional patient populations in markets with unmet medical need.

Our patent plan is focused on providing patent protection for our NCEs derived from cannabinoids, their formulation and therapeutic applications. The following is a summary of our seven patent families:

Family Number	Patent Publication/Application Number	Status	Expiry	Title	Description
001 **CBD** **PPARγ**	US8772349 EP2551255B1* JP05575324B2 WO2011/117429 *Validated in DE, ES, GB, FR, IT, & NL	Granted Granted Granted Expired	2030	Cannabinoid Quinone Derivatives	Cannabinoid quinone derivatives to be used as medicaments, particularly as PPARγ activators for treating diseases which etiology is based on an impaired PPARγ function and can benefit from PPARγ activation.
001.2 **CBD** **PPARγ**	US9701618 AU2014390738 CA2945867A1 CN106232570A EP3131874A1* JP06167248B2 KR2016146765A IN201617038938A BRPI1623902A2 MX2016013151A WO2015158381A1 RU2667504 IL248030 HK17104665.7 *Validated in BE, CH DE, DK, ES, FR, GB, IE, IT, LI, & NL	Granted Granted Pending Granted Granted Granted Allowed Granted Pending Granted Expired Granted Granted Granted	2034	Cannabidiol Quinone Derivatives	CBD quinone derivatives to be used as medicaments in therapy, particularly or treating diseases and conditions responsive to PPARγ modulation due to their high PPARγ activatory effect
001.3 **HIF**	WO2018/177516 AU2017406103 CA3058352 EP3600274A1 IL269623 JP2019553369 US10,919,843 US17/176,743	Expired Pending Pending Pending Pending Pending Granted Pending	2037	Cannabidiol derivatives as inhibitors of the HIF prolyl hydroxylases activity	CBD quinone derivatives to be used as medicaments in therapy, particularly for treating diseases and conditions responsive to HIF-1 activation.
001.4 **CBD** **Formulations**	PCT/US20/17035	Pending	2040	Formulations of Cannabidiol Derivatives	Formulations of CBD derivatives to be used as Modulators of Cannabinoid Receptor Type 2 (CB_2)
001.5 **CBD** **Fibrosis**	PCT/US2021/017052	Pending	2041	Compositions of Cannabidiol Derivatives and their use as modulators of Cannabinoid Receptor Type 2 (CB_2) Cannabidiol Quinone Derivatives	Composition and Method for the treatment and preventions of cardiac fibrosis Composition and Method for the Treatment and Prevention of Cardiac, Pulmonary, Dermal, and Renal Fibrosis
002 **CBG** **PPARγ**	US9802880 AU2015222384 CA2937275A1 CN106061937A EP2913321A1 JP6619349 KR2016126006 MX2016010952 WO2015128200A1 BRPI1619891A2 IN201647028497A RU2684913 IL247149 HK17103324.2	Granted Granted Pending Pending Allowed Granted Pending Granted Expired Pending Granted Granted Granted Pending	2035	Cannabigerol Derivatives	CBG derivatives to be used as medicaments in therapy particularly for treating PPARγ-related diseases due to their high PPARγ activatory effect.
003.1 **CBGA Salts**	PCT/EP2019/084764	Pending	2038	Cannabigerol Quinone Acid and Salts	CBG quinone acid and its salts, and new methods of synthesis

Controlled Substances Laws

The federal Controlled Substances Act of 1970 (CSA) and its implementing regulations establish a "closed system" of distribution for controlled substances in the United States. The CSA imposes registration, security, recordkeeping and reporting, storage, manufacturing, distribution, labeling, importation, exportation, disposal and other requirements under the oversight of the DEA. The DEA is the federal agency responsible for regulating controlled substances, and requires those individuals or entities that manufacture, import, export, distribute, research, or dispense controlled substances to comply with the regulatory requirements to prevent the diversion of controlled substances to illicit channels of commerce.

The DEA categorizes controlled substances into one of five schedules — Schedule I, II, III, IV, or V — with varying qualifications for listing in each schedule. Schedule I substances by definition have a high potential for abuse, have no currently "accepted medical use" in treatment in the United States and lack accepted safety for use under medical supervision. They may be used only in federally approved research programs and may not be marketed or sold for dispensing to patients in the United States. Pharmaceutical products having a currently accepted medical use may be listed as Schedule II, III, IV or V substances, with Schedule II substances presenting the highest potential for abuse and physical or psychological dependence, and Schedule V substances presenting the lowest relative potential for abuse and dependence. The regulatory requirements are more restrictive for Schedule II substances than Schedule III-V substances. For example, all Schedule II drug prescriptions must be signed by a physician, physically presented to a pharmacist in most situations, and cannot be refilled. While cannabis and THC are Schedule I controlled substances, products approved for medical use in the United States that contain cannabis, THC or cannabis/THC extracts must be placed in Schedules II-V, since approval by the FDA satisfies the "acceptable medical use" requirement.

Facilities that research, manufacture, distribute, import or export any controlled substance must register annually with the DEA. The DEA registration is specific to the particular location, activity(ies) and controlled substances utilized. For example, separate registrations are required for importation and manufacturing activities, and each registration authorizes which schedules of controlled substances the registrant may handle. However, certain coincident activities are permitted without obtaining a separate DEA registration, such as distribution of controlled substances by the manufacturer that produces them.

The DEA inspects all manufacturing facilities to review security, record keeping, reporting and compliance with other DEA regulatory requirements prior to issuing a controlled substance registration. The specific security requirements vary by the type of business activity and the schedule and quantity of controlled substances handled. The most stringent requirements apply to manufacturers of Schedule I and Schedule II substances. Required security measures commonly include background checks on employees and physical control of controlled substances through storage in approved vaults, safes and cages, and through use of alarm systems and surveillance cameras. An application for a manufacturing registration as a bulk manufacturer (not a dosage form manufacturer or a repacker/relabeler) for a Schedule I or II substance must be published in the Federal Register and is open for 30 days to permit interested persons to submit comments, objections, or requests for a hearing. A copy of the notice of the Federal Register publication is forwarded by the DEA to all those registered, or applicants for registration, as bulk manufacturers of that substance. Once registered, manufacturing facilities must maintain records documenting the manufacture, receipt and distribution of all controlled substances. Manufacturers must submit periodic reports to the DEA of the distribution of Schedule I and II controlled substances, Schedule III narcotic substances, and other designated substances. Registrants must also report any controlled substance thefts or significant losses and must adhere to certain requirements to dispose of controlled substances. As with applications for registration as a bulk manufacturer, an application for an importer registration for a Schedule I or II substance must also be published in the Federal Register, which remains open for 30 days for comments. Imports of Schedule I and II controlled substances for commercial purposes are generally restricted to substances not already available from a domestic supplier or where there is not adequate competition among domestic suppliers. In addition to an importer or exporter registration, importers and exporters must obtain a permit for every import or export of a Schedule I and II substance, Schedule III, IV and V narcotic, specially designated Schedule III non-narcotics, or Schedule IV or V narcotics controlled in Schedule I or II by the Convention on Psychotropic Substances and submit import or export declarations for Schedule III, IV and V non-narcotics. In some cases, Schedule III non-narcotic substances may be subject to the import/export permit requirement, if necessary, to ensure that the United States complies with its obligations under international drug control treaties.

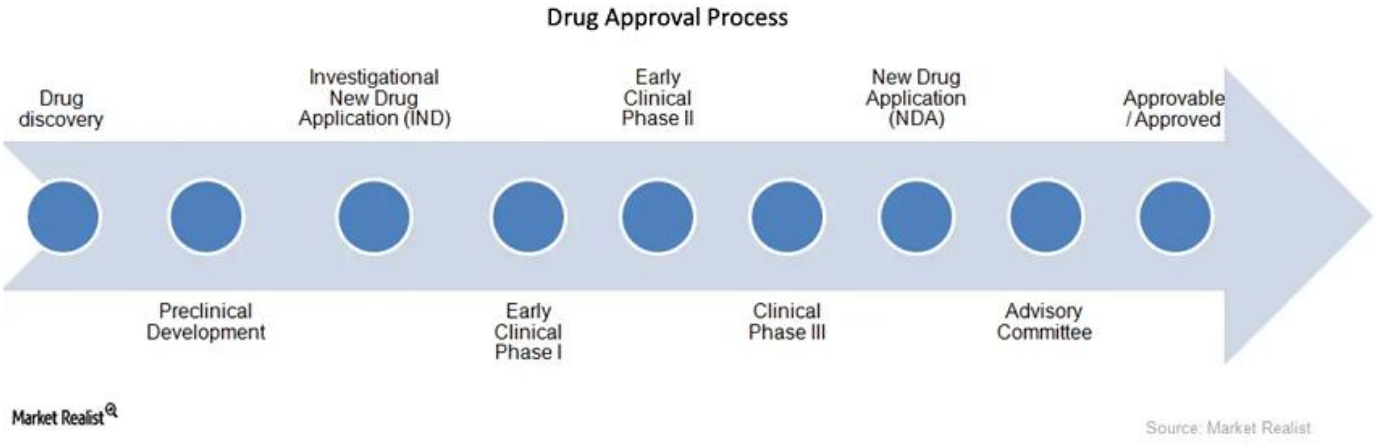
For drugs manufactured in the United States, the DEA establishes annually an aggregate quota for the amount of substances within Schedules I and II that may be manufactured or produced in the United States based on the DEA's estimate of the quantity needed to meet legitimate medical, scientific, research and industrial needs. The limited aggregate amount of cannabis that the DEA allows to be produced in the United States each year is allocated among individual companies, which, in turn, must apply annually to the DEA for individual manufacturing and procurement quotas. The quotas apply equally to the manufacturing of the API and production of dosage forms. The DEA may adjust aggregate production quotas a few times per year, and individual manufacturing or procurement quotas from time to time during the year, although the DEA has substantial discretion in whether or not to make such adjustments for individual companies.

The states also maintain separate controlled substance laws and regulations, including licensing, recordkeeping, security, distribution, and dispensing requirements. State authorities, including Boards of Pharmacy, regulate use of controlled substances in each state. Failure to maintain compliance with applicable requirements, particularly as manifested in the loss or diversion of controlled substances, can result in enforcement action that could have a material adverse effect on business, operations and financial condition. The DEA may seek civil penalties, refuse to renew necessary registrations, or initiate proceedings to revoke those registrations. In certain circumstances, violations could lead to criminal prosecution.

The starting materials for the API in our product candidates are CBD and CBG, which may be classified by the United States DEA as controlled substances in the United States depending on their origin and purity. In March 2019, we received a determination from the DEA that the API (VCE-004.8) in our lead product candidate (EHP-101) is not a controlled substance, based mainly on the facts that our molecule is (1) an NCE which is no longer CBD, (2) chemically derived from synthetic CBD, containing no remaining CBD or other controlled substances and (3) non-psychoactive. We also received the same decision from the UK Home Office in 2018 and from Canada's Controlled Substances Directorate in 2019. The determination that VCE-004.8 is not a controlled substance eliminates increased costs and complexities associated with developing controlled substances, by facilitating the manufacturing and import of the product to the U.S. and simplifying the conduct of nonclinical studies and the selection of U.S. clinical sites to conduct the clinical trials being planned in MS and SSc patients. For example, with this determination, manufacturing facilities do not require controlled substance certification for handling and dispensing the molecules and drug products. The determination also facilitates importation and simplifies the conduct of nonclinical and clinical trials, as contracted nonclinical research organizations and clinical sites have less administrative burden. Once we advance our second product candidate (EHP-102) further in development, we will request a similar decision from the DEA in the United States and appropriate authorities in other countries for the API in EHP-102 (VCE-003.2).

Most of the preclinical testing and all of the manufacturing of the API and formulations for EHP-101 and EHP-102 are conducted in Europe, China and Canada in accordance with applicable laws and regulations in those jurisdictions. We have completed a Phase I clinical trial for EHP-101 in Australia and have begun a Phase IIa clinical trial for SSc in Australia, New Zealand and the United States. We may decide to develop, manufacture or commercialize our product candidates in additional countries in the future. As a result, we may be subject to controlled substance laws and regulations from regulatory agencies in countries where we develop, manufacture or commercialize EHP-101 and EHP-102 in the future.

FDA Approval Process



Government regulation and product approval is required for a new drug to enter the market. The above graphic shows the FDA's typical drug approval process. We are currently in the clinical development stage (Phase II) for EHP-101 and in the preclinical development stage for EHP-102. Since we are conducting our current Phase II clinical trial with EHP-101 for SSc in Australia, New Zealand and the United States, approvals to conduct clinical trials in those countries have been obtained from the Health Research Ethics Committee (HREC) and TGA in Australia, the Director General of Health and an Ethics Committee in New Zealand, and the FDA (IND clearance) and a central Institutional Review Board (WIRB-Copernicus) in the United States. We plan to conduct our initial Phase II clinical trial with EHP-101 for MS in Australia and the United States and will seek similar approvals to conduct these clinical trials.

Employees

As of the date of this Annual Report, we have 18 full-time employees and one part-time employee.

Legal Proceedings

We are not currently a party to any legal proceedings, the adverse outcome of which, individually or in the aggregate, we believe will have a material adverse effect on our business, financial condition or operating results.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of our operations together with our financial statements and related notes appearing at the end of this Annual Report. This discussion contains forward-looking statements reflecting our current expectations that involve risks and uncertainties. Actual results and the timing of events may differ materially from those contained in these forward-looking statements due to a number of factors, including those discussed elsewhere in this Annual Report.

Operating Results

Results of Operations for the Years Ended December 31, 2020 and 2019

Revenues

The Company is a pre-revenue development stage biotechnology company focused on the development of product candidates to treat diseases with unmet medical needs. We have no products approved for commercial sale and have not generated any revenues from product sales since our inception in March 2017.

Research and Development Expenses

Research and development (R&D) expenses consist primarily of expenses associated with preclinical development and clinical trials, and payments to third-party contract research organizations, or CROs, contract manufacturing organizations, or CMO's, contractor laboratories and independent contractors, and research and development personnel related expenses, such as salaries, benefits, travel and other related expenses, including stock-based compensation. To date, our research and development expenses have related primarily to the development of, and clinical trials for, our lead product candidate EHP-101, as well as to the preclinical development of EHP-102.

Our research and development expenses were approximately $7.8 million for the year ended December 31, 2020, compared to approximately $9.9 million for the year ended December 31, 2019. This decrease was primarily related to an overall reduction in clinical expenses and related contract manufacturing costs, regulatory expenses and nonclinical studies of approximately $3.1 million as we completed our Phase I clinical trial for our lead product candidate EHP-101 in August 2019. This decrease in research and development expenses was offset by an increase in stock-based compensation and research and development personnel related expenses of approximately $1.4 million compared to the prior period. We incurred R&D expenses during the year ended December 31, 2020 of approximately $2.4 million related to our Phase II clinical trial for SSc.

We expect research and development expenses to increase in 2021 as compared to 2020 as we advance our Phase II clinical trials with our lead product candidate EHP-101 and continue our preclinical development work with EHP-102. These expenditures are subject to numerous uncertainties regarding timing and cost to completion. Completion of our clinical trials and preclinical development may take several years or more and the length of time generally varies according to the type, complexity, novelty and intended use of a product candidate.

General and Administrative Expenses

General and administrative expenses consist primarily of legal and patent fees, professional service fees, facility and office expenses, and general and administrative personnel related expenses, such as salaries, benefits, travel and other related expenses, including stock-based compensation.

Our general and administrative expenses were approximately $4.2 million for each of the years ended December 31, 2020 and 2019.

Other (Income)/Expense

Other (income)/expense consists of interest expense, interest income, sublease income, and foreign currency losses.

From inception through March 2019, we received advances from Emerald Health Sciences Inc. (EHS), our significant (former majority) stockholder, to fund our operations under a revolving loan agreement (Related Party Loan). During the year ended December 31, 2020, we recognized approximately $0.4 million in interest expense on our Related Party Loan, compared to approximately $2.4 million in interest expense for the year ended December 31, 2019. The decrease is due primarily to a non-cash charge of approximately $1.4 million recorded during the year ended December 31, 2019 related to accretion of a beneficial conversion feature on the Related Party Loan. The remaining decrease is due to a lower principal balance on the Related Party Loan, during the year ended December 31, 2020, as compared to the year ended December 31, 2019.

During the year ended December 31, 2020 we recognized a foreign currency loss of $41,272, compared to a loss of $33,282 recognized during the year ended December 31, 2019. Foreign currency losses are due primarily to the timing of fluctuations in the exchange rates between the U.S. Dollar and other foreign currencies, related to contracts and other transactions which are denominated in currencies other than the U.S. Dollar.

Net Loss

Our net loss was approximately $12.4 million for the year ended December 31, 2020, compared to approximately $16.4 million for the year ended December 31, 2019.

Liquidity and Capital Resources

Since our inception in 2017, we have devoted most of our cash resources to research and development and general and administrative activities. We have financed our operations to date primarily with the use of the proceeds from the Related Party Loan and with capital raised from a Tier 2 offering (the Regulation A Offering) pursuant to Regulation A (Regulation A+) under the Securities Act of 1933, as amended.

The Regulation A Offering was qualified by the SEC in March 2018. We initially offered a maximum of 10,000,000 shares of common stock on a “best efforts” basis, at a price of $5.00 per share. In July 2019, we amended the terms of the Offering and began offering the remaining 6,216,803 shares of common stock at a price of $6.00 per share. A subsequent post-qualification offering circular amendment was qualified by the SEC in November 2020, pursuant to which we were qualified to offer an additional 2,850,000 shares of common stock at a price of $6.00 per share. The Company closed and terminated the Regulation A Offering effective March 28, 2021. As of April 19, 2021, since the commencement of the sale of shares pursuant to the Regulation A Offering in March 2019, we have received subscriptions for a total of approximately 10.5 million shares of common stock pursuant to the Regulation A Offering for gross proceeds of approximately $60 million (inclusive of both completed sales and subscriptions in process). In addition, during the year ended December 31, 2019, we sold 65,700 shares of common stock for gross proceeds of $328,500 in an exempt offshore offering under Regulation S under the Securities Act.

To date, we have not generated any revenue from the sale of products, and we do not anticipate generating any revenue from the sale of products for the foreseeable future. We have incurred losses and generated negative cash flows from operations since inception. During the period from March 2, 2017 (inception) through December 31, 2020, we have incurred cumulative net losses of approximately $40.1 million. Our future expenditures and capital requirements will depend on numerous factors, including, among others, the progress of our research and development efforts.

We believe that we have sufficient capital to finance our operations at least through the third quarter of 2022, however, if our operating and development costs are higher than expected, we will need to obtain additional financing prior to that time. Further, we expect that after such period, we will be required to raise additional funds to fund our operations and to further advance clinical development of and to commercially develop our product candidates. There is no assurance that such financing will be available when needed, or that ultimately, we will achieve profitable operations and positive cash flow.

Credit Facilities

In September 2017, the Company and EHS entered into the Related Party Loan, which was amended in January 2018 and November 2019. Borrowings under the Related Party Loan may be drawn down from time to time, and repaid by us in cash, or at the option of EHS, converted into shares of the Company at $2.00 per share, or at a price to be equally agreed to between EHS and the Company. In November 2019, the Related Party Loan was amended to reduce the interest rate from 12% to 10%, compounded semiannually. The Related Party Loan is payable upon demand and has no expiration date.

As of April 6, 2021, the outstanding balance under the Related Party Loan has been settled in full. In total, EHS advanced approximately $11.3 million to the Company under the Related Party Loan, and there are no outstanding obligations to EHS under the Related Party Loan as of the date of this Annual Report. Of this amount, approximately $3.1 million was paid in cash, approximately $5.2 million was offset through cashless discharges (described below) and $3.0 million was converted into 1.5 million shares of the Company's common stock at a conversion price of $2.00 per share. A total of approximately $2.2 million of interest expense was incurred (excluding a non-cash charge of approximately $1.4 million recorded during the year ended December 31, 2019 related to accretion of a beneficial conversion feature) under the Related Party Loan, of which approximately $2.0 million was paid to EHS in cash and approximately $0.2 million was offset through a cashless discharge.

In May 2019, our Board of Directors authorized a funding arrangement with EHS (Related Party Note Receivable), which was amended in August 2019 and September 2019 to extend the repayment dates, pursuant to which we advanced funds to EHS in the form of interest bearing (12%) short term notes under a Promissory Note between EHS and EHP (the Promissory Note). Advances under the Promissory Note were originally due for repayment with accrued and unpaid interest three months from the date of the advance. A total of $5,000,000 was advanced and $178,933 accrued as interest receivable under the Related Party Note Receivable, all of which was offset through cashless discharges against the unpaid principal and accrued interest payable balances, respectively, under the existing Related Party Loan with EHS.

On January 23, 2020, our Australian subsidiary, EHP Australia, entered into a loan agreement with Rocking Horse Nominees Pty Ltd (Rocking Horse), whereby Rocking Horse advanced $AU1.2 million (approximately $0.8 million) to EHP Australia. The loan was secured by the tax incentive refund anticipated to be received during 2020 for eligible spending incurred under the Australian research and development tax incentive program during 2019. The loan had an upfront establishment fee of 1.2% and bore interest at 1.25% per month compounded daily. The entire principal balance of the loan and approximately $53,000 of accrued interest were repaid to Rocking Horse during the year ended December 31, 2020.

On April 22, 2020, we received loan proceeds of $292,152 (PPP Loan) from Silicon Valley Bank pursuant to the Paycheck Protection Program (PPP) established as part of the Coronavirus Aid, Relief and Economic Security Act (CARES Act). The PPP Loan, which is evidenced by a Note dated April 21, 2020, bore interest at a rate of 1% per annum, and was expected to mature on April 21, 2022. On February 18, 2021, the entire principal balance and accrued interest under the PPP Loan were forgiven by the lender.

Capital Expenditures

We do not have any contractual obligations for ongoing capital expenditures at this time.

Contractual Obligations, Commitments and Contingencies

We are required to make future payments to Emerald Health Biotechnology España S.L.U. (EHBE), formerly VivaCell Biotechnology España S.L. (VivaCell) based on the achievement of milestones set forth in the Intellectual Property Transfer Agreement (IPTA) between the Company and VivaCell. These payments are based on the achievement of development or regulatory milestones, including commencement of various phases of clinical trials, filing of product license applications and approval of product licenses from the United States Food and Drug Administration (FDA) or a foreign regulatory agency. The aggregate amount of additional milestone payments that we could be required to pay under our agreement with EHBE is 2.7 million Euros, or approximately $3.3 million per product, based upon the exchange rate at December 31, 2020. These amounts assume that all remaining milestones associated with the milestone payments are met. In the event that product license approval for any of the related products is obtained, we are required to make royalty payments of 2.5% of net revenues from commercial sales of the related products.

During the year ended December 31, 2020, milestone payments of approximately $460,000 were paid to EHBE in accordance with the IPTA. The milestone liability was accrued during 2019, due to the completion of our first Phase I clinical study in 2019. Because future milestones are contingent, we are not in a position to reasonably estimate how much, if any, additional milestone payments will ultimately be paid, or when. Many of the remaining milestone events are related to progress in clinical trials which will take several years to achieve.

On May 1, 2018, we entered into a two-year non-cancelable building lease for our corporate headquarters in San Diego, California. Effective August 15, 2019, the lease was amended to include additional space at the existing premises and to extend the term of the original lease through August 31, 2022. Under the lease, the Company pays a base rent of $21,238 per month through August 31, 2021, after which time the base rent will increase by approximately 3% per year. Our remaining obligations under this operating lease are $257,312 in 2021 and $174,818 in 2022.

In July 2020, we entered into an agreement to sublease a portion of our existing non-cancelable building lease to a tenant, effective August 1, 2020, and continuing through August 31, 2022. The Company paid commissions of $7,000 related to the execution of the sublease and was expected to incur future losses of approximately $55,000 in conjunction with the sublease. EHS agreed to reimburse the Company for the commission fee and future expected losses, which were offset against the Related Party Loan as of December 31, 2020.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements.

Trend Information

Because we are still in the startup phase and have only recently commenced our research and product development, we are unable to identify any recent trends in revenue or expenses. Unpredictable events, such as the COVID-19 outbreak, and associated business disruptions including delayed clinical trials and laboratory resources could harm our financial condition, affect our operations, increase our costs and expenses, and impact our ability to raise capital. Our operations could be subject to unpredictable events, such as earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics such as the COVID-19 outbreak, and other natural or manmade disasters or business interruptions, for which we may not be insured. We do not carry insurance for all categories of risk that our business may encounter. The occurrence of any of these business disruptions could seriously harm our operations and financial condition, delay our product development and regulatory approvals of clinical trials, and increase our costs and expenses. Additionally, COVID-19 has caused significant disruptions to the global financial markets, which could impact our ability to raise additional capital. The ultimate impact on us and any delays in our research and development is unknown, but our operations and financial condition could suffer in the event of any of these types of unpredictable events. Further, any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our business, results of operations, financial condition and cash flows.

Item 3. Directors, Officers and Significant Employees

The table below sets forth our directors, officers and significant employees of as of the date of this Annual Report.

Name	Position	Age	Term of Office	Approximate hours per week for part-time employees
Officers and Significant Employees:				
James DeMesa	President and Chief Executive Officer	63	(1)	
Alain Rolland	Chief Development Officer	61	(2)	
Joachim Schupp	Chief Medical Officer	68	(3)	
Lisa Sanford	Chief Financial Officer	54	(4)	
Eduardo Muñoz	Chief Scientific Officer	62	Since June 2017	25 hours per week (5)
Nancy Coulson	Senior Vice President Regulatory and Quality Affairs	76	(6)	20 hours per week
Directors:				
James L. Heppell	Director & Chairman	65	(7)	
James DeMesa	Director	63	Since December 2019	
Gaetano A. Morello	Director	59	Since March 2017	
Punit S. Dhillon	Director	40	Since March 2017	

(1) James DeMesa has served as Chief Executive Officer since March 2017. He was appointed President in November 2019, subsequent to the resignation of Avtar Dhillon as President in August 2019.

(2) Alain Rolland was appointed Chief Development Officer as of May 1, 2018. From February 1, 2018 through April 20, 2018, he served as Vice President of Product Development.

(3) Joachim Schupp was appointed Chief Medical Officer as of January 1, 2019. From August 1, 2018 through December 31, 2018, he served as Senior Vice President of Medical Affairs.

(4) Lisa Sanford has served as Chief Financial Officer since October 1, 2018. From July 20, 2018 through September 30, 2018, she served as Vice President of Finance.

(5) Dr. Muñoz is a consultant who may be deemed a significant employee and acts as our Chief Scientific Officer pursuant to a consulting agreement with the University of Córdoba where Dr. Muñoz is employed in the Department of Cellular Biology, Physiology and Immunology.

(6) Nancy Coulson was engaged as a senior regulatory advisor, averaging approximately 80 hours per month from March 2017 through January 2020. Effective February 1, 2020, Ms. Coulson was hired as a part-time employee serving as Senior Vice President of Regulatory and Quality Affairs.

(7) James L. Heppell has served as a Director since 2017 and was appointed Chairman as of November 15, 2019, upon the resignation of Avtar Dhillon as Executive Chairman.

There is no arrangement or understanding between the persons described above and any other person pursuant to which the person was selected to his or her office or position.

James M. DeMesa, MD, MBA, President and Chief Executive Officer. Dr. DeMesa has over 30 years of experience in biotech and pharmaceutical leadership, product development, and clinical and regulatory management. He has completed partnerships and collaborations with pharmaceutical, biotech, and medical device companies and has raised more than $250 million to advance product development to clinical stage, regulatory approval, and commercialization. He is a former practicing physician and CEO of two public biotech companies: Migenix, from 2001 to 2008 and GenSci Regeneration Sciences, from 1996 to 2001 (now part of Integra LifeSciences). Dr. DeMesa also currently serves as Director for two biotech companies: OncoSec Medical Incorporated and Induce Biologics. Prior to his CEO roles, Dr. DeMesa was Vice President, Medical and Regulatory Affairs at Biodynamics International (now part of RTI Surgical) and Bentley Pharmaceuticals (now part of Teva Pharmaceuticals). Dr. DeMesa received a bachelor's degree in Chemistry, and MD, and MBA degrees from the University of South Florida and did his medical residency at the University of North Carolina.

Alain Rolland, PharmD, PhD, Chief Operating Officer and Executive Vice President. Dr. Rolland has over 30 years of international leadership experience in pharmaceutical and biotech companies. He has focused on the discovery and development of biologics and small molecules in a variety of therapeutic areas including immuno-oncology, cardiovascular and hematological disorders, dermatology, and infectious disease vaccines. Prior to joining EHP, Dr. Rolland was a co-founder and served as CEO, President and Director of CHIME BioTherapeutics, Inc. He was previously Executive Vice President and Chief Scientific Officer at HUYA Bioscience International, Executive Vice President, Product Development at Vical, and Senior Vice President, Preclinical R&D, Head of the Woodlands Center of Valentis. Dr. Rolland has published over 90 scientific articles and book chapters and is editor of three scientific books. He is a member of several scientific societies, the founding Editor-in-Chief of Current Pharmaceutical Biotechnology, and an editorial board member of several journals. He has been honored by the American Association of Pharmaceutical Scientists as an "AAPS Fellow" for professional excellence and outstanding contributions to the pharmaceutical sciences. Dr. Rolland earned his doctorate degree in Pharmacy (Pharm.D.) and in Pharmaceutical Sciences (Ph.D.) from Rennes University, France.

Joachim P.H. Schupp, MD, Dr. med, Chief Medical Officer. Dr. Schupp has over 30 years of international pharmaceutical industry experience in all phases of drug development and several therapeutic areas. He directed multiple Phase I – IV clinical studies and led multiple international cross-functional project teams at Ciba-Geigy and Novartis Pharmaceuticals in Switzerland, which resulted in worldwide approval of several New Drug Applications (NDAs), Biologics License Applications (BLAs) and supplemental applications for small molecule drugs, biologics and devices currently on the market. Dr. Schupp also served as Vice President, Clinical & Regulatory Affairs at HUYA Bioscience International, Chief Medical Officer at Imprimis/Transdel Pharmaceuticals, Inc., Vice President, Clinical Development at Apricus Biosciences, Inc., Vice President, Medical Affairs at Adventrx Pharmaceuticals, Inc. and Vice President, Clinical Data Services at ProSanos, Inc. Prior to joining EHP, Dr. Schupp managed his own consulting business (MEQVal), providing services as a medical monitor and drug safety physician. Dr. Schupp received his MD and doctorate (Dr. med.) from Freie Universität Berlin in Germany and practiced medicine in Germany, South Africa, UK and Switzerland.

Lisa Sanford, Chief Financial Officer. Ms. Sanford has 30 years of diversified experience in finance and accounting in the life sciences, biotechnology, and pharmaceutical industries. From April 2000 through July 2018, Ms. Sanford managed her own consulting business, providing finance and accounting services for both public and private companies. Ms. Sanford also served as an audit senior manager at Ernst & Young LLP, where she worked for 12 years and was involved in multiple IPOs and business combinations. She received her bachelor's degree in Accounting from Lehigh University and is a Certified Public Accountant.

Eduardo Muñoz, PhD, MD, Chief Scientific Officer. Dr. Muñoz has been a Professor of Immunology in the Department of Cell Biology, Physiology and Immunology of the University of Córdoba (Spain) since 1992 and Director of the Inflammation and Cancer Research Group at the Institute Maimonides for Biomedical Research of Córdoba since 2012. Dr. Muñoz has more than 35 years of experience in biomedical research and is the author of more than 250 articles, patents, and book chapters with more than 9,000 citations. He is experienced in the mechanism of actions of cannabinoids and endocannabinoids as well as the development of cannabinoid-based new chemical entities. Dr. Muñoz belongs to the editorial board of several scientific journals and is a co-founder of three biotech companies, Emerald Health Biotechnology España, S.L.U. (Spain), Glactone Pharma AB (Sweden) and InnnoHealth Group (now part of Evonik Industries AG). He received a PhD in Medicine and Surgery at the University of Córdoba and was an associate researcher at Tufts University in Boston, and at the Institute Pasteur in Paris.

Nancy Coulson, Senior Vice President Regulatory and Quality Affairs. Ms. Coulson has over 30 years of experience in providing strategic counsel for regulatory, clinical, and quality affairs. As a senior advisor for medical device and pharmaceutical companies, she manages United States and international regulatory documents, briefing packages, and global regulatory dossiers across multiple product categories. Ms. Coulson has also completed several successful pre-approval inspections for new drug and device manufacturing facilities. Most recently, she was Worldwide Director, Regulatory Affairs at Cordis, a Johnson & Johnson company, where she provided strategic direction on global regulatory submissions. She also held scientific and senior regulatory positions at Bristol-Myers Squibb, Bausch & Lomb, GenSci, and Migenix. She received a Bachelor of Science in Chemistry from LeMoyne College and an MBA from Chapman University.

James L. Heppell, BSc, LLP, Chairman. Mr. Heppell was founder and CEO of the Advantage Life Sciences I Fund, which won the Canadian Venture Capital Deal of the Year Award in 2006 for having the highest realized return of all venture capital funds in Canada. Earlier in his career, he practiced corporate securities law with Fasken Martineau DuMoulin and later served as President and CEO of Catalyst Corporate Finance Lawyers, a boutique corporate finance law firm representing life science and tech companies. He is a past member of the Securities Policy Advisory Committee to the British Columbia Securities Commission and is a Past-Chairman of the Securities Section of the Canadian Bar Association. Over the years, Mr. Heppell has written a number of articles, co-edited the Annotated British Columbia Securities Act and coordinated and taught numerous courses on corporate finance and corporate governance issues. He earned a BSc in microbiology and a law degree from the University of British Columbia.

Gaetano A. Morello, ND, Director. Dr. Morello is an accomplished clinician with direct, first-hand experience in the clinical and medical application of cannabinoids. Dr. Morello has practiced at the Complex Chronic Disease Program (CCDP) at Woman's Hospital in Vancouver, Canada since 2013 and is also a study investigator at the CCDP Clinical Cannabis Trial. He has also served on the Quality Assurance Committee for the College of Naturopathic Physicians of British Columbia since 2010 as well as other health and medical panels. He has authored Cleanse, The Healing Power, of the Endocannabinoid System, Ultimate Inside Out Approach, Whole Body Cleansing, Stress and Anxiety, A Powerful Antioxidant, and was a contributing author to A Textbook of Natural Medicine, and numerous journal publications. He has made more than 500 medical presentations in the United States, Canada, Australia, Germany, and Italy in the last decade. Dr. Morello has a BSc in Cell Biology/ Nutrition from the University of British Columbia and a Doctorate in Naturopathic Medicine from Bastyr University.

Punit S. Dhillon, Director. Mr. Dhillon is the co-founder and former CEO of OncoSec Medical Incorporated, a leading biopharmaceutical company developing cancer immunotherapies for the treatment of solid tumors. Mr. Dhillon serves as a Director and Audit Committee Chair for Emerald Bioscience Inc. and Emerald Health Therapeutics, and also serves as Director for Arch Therapeutics Inc. (OTCQB: ARTH). Prior to OncoSec, from 2003-2011, he served as Vice President of Finance and Operations at Inovio Pharmaceuticals. Collectively, he has led and assisted in raising over $500 million through financings, M&A deals and several licensing transactions with large pharma. His management experience spans corporate finance, M&A integration, in-licensing of key intellectual property, strategy implementation, corporate transactions and collaborations with leading universities and global disease specific opinion leaders. Mr. Dhillon also co-founded and is the Director of the Young Entrepreneur Leadership Launchpad (YELL), a registered Canadian charity that partners with schools to support entrepreneurial learning. In 2018, he was awarded the Biocom Life Science Catalyst Award. Mr. Dhillon holds a BA (Honours) in Political Science and a minor in Business Administration from Simon Fraser University.

Involvement in Certain Legal Proceedings

To our knowledge, none of our current directors or executive officers has, during the past ten years:

- been convicted in a criminal proceeding or been subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);
- had any bankruptcy petition filed by or against the business or property of the person, or of any partnership, corporation or business association of which he or she was a general partner or executive officer, either at the time of the bankruptcy filing or within two years prior to that time;
- been subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction or federal or state authority, permanently or temporarily enjoining, barring, suspending or otherwise limiting, his involvement in any type of business, securities, futures, commodities, investment, banking, savings and loan, or insurance activities, or to be associated with persons engaged in any such activity;

- been found by a court of competent jurisdiction in a civil action or by the SEC or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended, or vacated;

- been the subject of, or a party to, any federal or state judicial or administrative order, judgment, decree, or finding, not subsequently reversed, suspended or vacated (not including any settlement of a civil proceeding among private litigants), relating to an alleged violation of any federal or state securities or commodities law or regulation, any law or regulation respecting financial institutions or insurance companies including, but not limited to, a temporary or permanent injunction, order of disgorgement or restitution, civil money penalty or temporary or permanent cease-and-desist order, or removal or prohibition order, or any law or regulation prohibiting mail or wire fraud or fraud in connection with any business entity; or

- been the subject of, or a party to, any sanction or order, not subsequently reversed, suspended or vacated, of any self-regulatory organization (as defined in Section 3(a)(26) of the Securities Exchange Act of 1934, as amended (the Exchange Act)), any registered entity (as defined in Section 1(a)(29) of the Commodity Exchange Act), or any equivalent exchange, association, entity or organization that has disciplinary authority over its members or persons associated with a member.

Except as set forth in our discussion below in "Interest Of Management And Others In Certain Transactions," none of our directors or executive officers has been involved in any transactions with us or any of our directors, executive officers, affiliates or associates which are required to be disclosed pursuant to the rules and regulations of the SEC.

Compensation of Executive Officers

The following table represents information regarding the total compensation for the three highest paid executive officers or directors of the Company for the year ended December 31, 2020:

Name	Capacity in which compensation was received	Cash Compensation ($)	Other Compensation ($)[4]	Total Compensation ($)
James M. DeMesa [1]	President & Chief Executive Officer	$ 398,750	$ 228,756	$ 627,506
Alain Rolland [2]	Chief Operating Officer	$ 341,250	$ 147,699	$ 488,949
Joachim Schupp [3]	Chief Medical Officer	$ 312,500	$ 140,466	$ 452,966
All (non-executive) directors as a group (3 persons)	Director	$ 153,251	$ -	$ 153,251

(1) Dr. DeMesa's annual salary was increased to $470,000 as of October 1, 2020. He is eligible to earn a bonus of up to 50% of his annual salary, subject to Board approval and achievement of certain milestones and metrics.

(2) Dr. Rolland's salary was increased to $390,000 as of October 1, 2020. He is eligible to earn a bonus of up to 40% of his annual salary, subject to Board approval and achievement of certain milestones and metrics.

(3) Dr. Schupp's salary was increased to $350,000 as of October 1, 2020. He is eligible to earn a bonus of up to 40% of his annual salary, subject to Board approval and achievement of certain milestones and metrics.

(4) Other compensation consists of bonuses paid during 2020.

Director Compensation

In April 2019, the Board of Directors approved a compensation plan, which was amended in October 2020, and provides for our non-employee directors to receive compensation for their services effective April 1, 2019. Board compensation consists of annual cash retainers for various responsibilities and annual option grants.

In January 2018, two of our directors, Gaetano A. Morello and Punit S. Dhillon, were each granted 100,000 options to purchase our Common Stock at $5.00 per share. In December 2018, our three non-employee directors were granted options to purchase a total of 300,000 shares of our Common Stock at $2.50 per share. In August 2020, our three non-employee directors were granted options to purchase a total of 75,000 shares of our Common Stock at $6.00 per share.

Employment Agreements

We have employment agreements with our four executive officers, James DeMesa, Alain Rolland, Joachim Schupp and Lisa Sanford. The initial term of each employment agreement is for a period of three years to be extended automatically for successive one-year periods unless terminated earlier by either party upon written notice at least ninety days prior to the end of that period. The Company may terminate the executive officer's employment, for cause, as defined in the agreement, at any time, without any advance notice. Further, subject to the terms of the agreement, the executive officer may terminate employment with us, at any time for any reason or no reason at all, upon six weeks' advance written notice. Subject to the notice provisions described in the agreement, the executive officer may terminate employment with us for good cause as defined in the agreement. Subject to the agreement provisions, in situations where the Company terminates the executive officer's employment without cause, or the term of the agreement ends without the Company offering to extend the agreement on the same terms, or the executive officer resigns for good cause, then the executive officer will be, under certain conditions, entitled to severance compensation from the Company equal to six months of executive officer's then current base salary.

Item 4. Security Ownership of Management and Certain Securityholders

Principal Shareholders

The following table shows the beneficial ownership of our Common Stock as of April 23, 2021 held by (i) each person known to us to be the beneficial owner of more than 10% of any class of our voting securities; (ii) each director who is the beneficial owner of more than 10% of any class of our voting securities; (iii) each executive officer who is the beneficial owner of more than 10% of any class of our voting securities; and (iv) all directors and executive officers as a group. As of April 23, 2021, there were 21,865,517 shares of our Common Stock outstanding.

Beneficial ownership is determined in accordance with the rules of the SEC, and generally includes voting power and/or investment power with respect to the securities held. Shares of Common Stock subject to the conversion of a security, or subject to options and warrants currently exercisable or which may become exercisable within 60 days of the date of this Annual Report, are deemed outstanding and beneficially owned by the person holding such convertible securities, options or warrants for purposes of computing the number of shares and percentage beneficially owned by such person, but are not deemed outstanding for purposes of computing the percentage beneficially owned by any other person. The persons or entities named have sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them.

The percentages below are based on shares of our Common Stock beneficially owned as of April 23, 2021. Unless otherwise indicated, the business address of each person listed is c/o Emerald Health Pharmaceuticals Inc., 5910 Pacific Center Blvd, Ste 320, San Diego, CA 92121.

Title of Class	Name and Address of Beneficial Owner:	Amount and Nature of Beneficial Ownership	Amount and Nature of Beneficial Ownership Acquirable by Exercise of Option or Conversion of Security	Percent of Class
Common Stock	All directors and named executive officers as a group (9 persons)	382,000 shares owned	1,335,621 shares acquirable	7.4%
	Greater than 10% Beneficial Owners:			
Common Stock	Emerald Health Sciences Inc. 200-375 Water Street, Vancouver, BC, V6B OM9	10,500,000 shares owned	-	48.0%

Item 5. Interest of Management and Others in Certain Transactions

Transactions with Related Persons

Except as described below and except for employment arrangements which are described under "Directors, Officers and Significant Employees" above, since March 2, 2017 (inception), there has not been, nor is there currently proposed, any transaction in which we are or were a participant, the amount involved exceeds the lesser of $120,000 or 1% of the average of the Company's total assets at year-end for the fiscal years ended December 31, 2019 and December 31, 2020, and any of our directors, executive officers, holders of more than 10% of our common stock or any immediate family member of any of the foregoing had or will have a direct or indirect material interest.

In June 2017, we entered into the IPTA and a Research Agreement with EHBE. A majority of the shares of EHBE are owned by Emerald Health Research Inc. (EHR), which is a wholly owned subsidiary of EHS, our significant stockholder. EHP has no ownership or voting rights related to EHR or EHBE.

In September 2017, we entered into the Related Party Loan with EHS, our significant (former majority) stockholder, which was amended in January 2018 and November 2019. Borrowings under the Related Party Loan may be drawn down from time to time, and repaid by us in cash, or at the option of EHS, converted into shares of the Company at $2.00 per share, or at a price to be equally agreed to between EHS and the Company. In November 2019, the Related Party Loan was amended to reduce the interest rate from 12% to 10%, compounded semiannually. The Related Party Loan is payable upon demand and has no expiration date.

In April 2019, we received a written notice of demand (Notice) from EHS for payment of all accrued interest on the Related Party Loan as of March 31, 2019, which resulted in a cash payment of $1,044,901 to EHS. Also in April 2019, we received a second Notice from EHS that called for the following, upon qualification by the SEC of our Form 1-A Post-Qualification Offering Circular Amendment on Form 1-A filed in May 2019 (the Post-Qualification Offering Circular Amendment): (1) repayment of $2,000,000 of the unpaid principal balance under the loan, and (2) the conversion of an additional $2,500,000 of the unpaid principal balance under the loan at a conversion price of $2.00 per share. Our Post-Qualification Offering Circular Amendment was qualified by the SEC on June 7, 2019 and the repayment of the $2,000,000 of unpaid principal was transacted as a cashless discharge and offset between the Related Party Loan and the Related Party Note Receivable (as defined below). Concurrently, 1,250,000 shares of EHP common stock were issued to EHS at a conversion price of $2.00 per share, further reducing the principal balance of the Related Party Loan by $2,500,000.

In May 2019, our Board of Directors authorized a funding arrangement with EHS (the Related Party Note Receivable), which was amended in August 2019 and September 2019 to extend the repayment dates, pursuant to which we advanced funds to EHS in the form of interest bearing (12%) short term notes under a Promissory Note between EHS and EHP (the Promissory Note). Advances under the Promissory Note were originally due for repayment with accrued and unpaid interest three months from the date of the advance. A total of $5,000,000 was advanced and $178,933 accrued as interest receivable under the Related Party Note Receivable, all of which was offset through cashless discharges against the unpaid principal and accrued interest payable balances, respectively, under the existing Related Party Loan with EHS.

In November 2019, we received a written Notice from EHS for payment of $3,000,000 of the unpaid principal balance and $178,933 of accrued interest on the Related Party Loan, which was transacted as a cashless discharge and offset between the Related Party Loan and the remaining unpaid principal and accrued interest balances under the Related Party Note Receivable (as defined below) as of November 15, 2019.

During the year ended December 31, 2020, we received written Notices from EHS for payments of $750,000 of the unpaid principal balance and a total of $822,524 of accrued interest on the Related Party Loan. Additionally, in December 2020, $180,930 of the unpaid principal balance was offset against amounts due from EHS to EHP for reimbursements of expenses related to office expenses, including space allocated to other EHS affiliates. As of December 31, 2020, we had an outstanding principal balance of approximately $2.8 million under the Related Party Loan plus accrued interest of $95,478.

In February 2021, we received a written Notice from EHS, for payment of $500,000 of the unpaid principal balance on the Related Party Loan.

In March 2021, we received a written Notice from EHS, for payment of $1,819,771 of the unpaid principal balance and $161,415 of accrued interest on the Related Party Loan.

In April 2021, we received a written Notice from EHS for conversion of the remaining unpaid principal balance under the Related Party Loan in the amount of $500,000 at a conversion price of $2.00 per share into 250,000 shares of EHP common stock. Following the issuance of the shares of common stock to EHS, the Related Party Loan was fully settled and there are no outstanding obligations to EHS under the Related Party Loan as of the date of this Annual Report.

In November 2019, the Company and EHS entered into a Board Observer Agreement, whereby the Company granted to EHS the right to designate an observer on the Board of Directors for so long as EHS maintains ownership of any securities of the Company. Dr. Avtar Dhillon, was appointed as the initial Board Observer pursuant to the Board Observer Agreement.

In December 2019, the Company entered into an Independent Contractor Services Agreement with Dr. Avtar Dhillon, pursuant to which Dr. Dhillon will provide ongoing corporate finance and strategic business advisory services to the Company. In exchange for his services, Dr. Dhillon receives a monthly fee of $10,000. The Independent Contractor Services Agreement had an initial term of one year and will renew automatically thereafter unless terminated earlier by either party. Either party may terminate the agreement for cause upon written notice to the other party, or without cause upon 30 days' prior written notice to the other party.

Punit Dhillon, who serves on our Board of Directors, is the nephew of Dr. Avtar Dhillon, former President and Executive Chairman. Currently, Dr. Avtar Dhillon serves as a Board Observer and provides corporate finance and strategic business advisory services to the Company.

Two of our non-employee directors on our Board of Directors are also on the Board of Directors of our significant (former majority) stockholder, EHS.

We have also entered into indemnification agreements with each of our directors and executive officers. In general, these indemnification agreements require the Company to indemnify a director to the fullest extent permitted by law against liabilities that may arise by reason of his or her service for the Company.

Review, Approval and Ratification of Related Party Transactions

The Audit Committee of the Board of Directors (established in March 2019) reviews and approves all related party transactions.

Item 6. Other Information

None.

Item 7. Financial Statements

Emerald Health Pharmaceuticals Inc.
Index to Financial Statements

	Page
INDEPENDENT AUDITORS' REPORT	F-2
AUDITED FINANCIAL STATEMENTS	
Consolidated Balance Sheets as of December 31, 2020 and 2019	F-3
Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31, 2020 and 2019	F-4
Consolidated Statements of Stockholders' Equity/(Deficit) for the years ended December 31, 2020 and 2019	F-5
Consolidated Statements of Cash Flows for the years ended December 31, 2020 and 2019	F-6
Notes to Consolidated Financial Statements	F-7

INDEPENDENT AUDITORS' REPORT

To the Board of Directors of
Emerald Health Pharmaceuticals Inc.
5910 Pacific Center Blvd, Suite 320
San Diego, CA 92121

We have audited the accompanying consolidated financial statements of Emerald Health Pharmaceuticals Inc. and its subsidiaries (the "Company"), which comprise the consolidated balance sheets as of December 31, 2020 and 2019, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Emerald Health Pharmaceuticals Inc. and its subsidiaries as of December 31, 2020 and 2019, and the results of their operations and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

/s/ *DELOITTE & TOUCHE LLP*

San Diego, California
April 30, 2021

Emerald Health Pharmaceuticals Inc.

Consolidated Balance Sheets

	December 31, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 17,036,840	$ 983,261
Restricted cash	2,752,890	-
Incentive and other tax receivables	513,953	1,420,107
Other current assets	694,445	548,280
Total current assets	20,998,128	2,951,648
Property and equipment, net	35,068	52,458
Other noncurrent assets	59,136	-
Total assets	$ 21,092,332	$ 3,004,106
Liabilities and stockholders' equity/(deficit)		
Current liabilities:		
Accounts payable	$ 428,304	$ 1,945,549
Accrued expenses	2,343,139	1,977,627
Deposits held in escrow	2,752,890	-
Accrued interest payable	97,531	505,289
Related party loan	2,819,771	3,750,701
Total current liabilities	8,441,635	8,179,166
Loans payable	292,152	-
Total liabilities	8,733,787	8,179,166
Commitments and contingencies (Note 6)		
Stockholders' equity/(deficit):		
Common stock, $0.0001 par value, 100,000,000 shares authorized; 19,585,029 shares issued and 19,510,029 shares outstanding at December 31, 2020; 14,492,085 shares issued and 14,417,085 shares outstanding at December 31, 2019	1,959	1,449
Additional paid-in-capital	52,648,471	22,546,309
Accumulated other comprehensive loss	(183,169)	(38,724)
Accumulated deficit	(40,108,708)	(27,684,086)
Treasury stock, at cost (common stock: 75,000 at December 31, 2020 and December 31, 2019)	(8)	(8)
Total stockholders' equity/(deficit)	12,358,545	(5,175,060)
Total liabilities and stockholders' equity/(deficit)	$ 21,092,332	$ 3,004,106

See accompanying Notes to Consolidated Financial Statements.

Emerald Health Pharmaceuticals Inc.

Consolidated Statements of Operations and Comprehensive Loss

	Years Ended December 31,	
	2020	**2019**
Revenue	$ -	$ -
Operating expenses:		
Research and development	7,797,908	9,930,943
General and administrative	4,163,360	4,194,301
Total operating expenses	11,961,268	14,125,244
Operating loss	(11,961,268)	(14,125,244)
Other (income)/expenses:		
Other income	(48,211)	-
Related party interest income	-	(178,933)
Interest expense	470,293	2,389,317
Foreign exchange loss	41,272	33,282
Net loss	(12,424,622)	(16,368,910)
Other comprehensive income (loss):		
Foreign currency translation adjustments	(144,445)	(36,916)
Comprehensive loss	$ (12,569,067)	$ (16,405,826)
Net loss per share, basic and diluted	$ (0.77)	$ (1.27)
Weighted-average common shares outstanding, basic and diluted	16,154,859	12,936,182

See accompanying Notes to Consolidated Financial Statements.

Emerald Health Pharmaceuticals Inc.

Consolidated Statements of Stockholders' Equity/(Deficit)

	Common Stock Outstanding		Additional Paid in	Note Receivable from	Accumulated Other Comprehensive	Accumulated	Treasury Stock		Total Stockholders' Equity/
	Shares	Amount	Capital	Stockholder	Loss	Deficit	Shares	Amount	(Deficit)
Balance at December 31, 2018	9,925,000	$ 1,000	$ 574,522	$ -	$ (1,808)	$ (11,315,176)	75,000	$ (8)	$ (10,741,470)
Issuance of common stock under Regulation A offering, net of issuance costs	3,176,385	317	15,738,585						15,738,902
Issuance of common stock under Regulation S offering, net of issuance costs	65,700	7	276,717						276,724
Issuance of common stock upon conversion of related party loan	1,250,000	125	2,499,875						2,500,000
Accretion of beneficial conversion feature on related party loan			1,360,840						1,360,840
Funds advanced under note receivable from stockholder				(5,000,000)					(5,000,000)
Discharge between related party loan and note receivable from stockholder				5,000,000					5,000,000
Stock-based compensation expense			2,095,770						2,095,770
Net loss and comprehensive loss					(36,916)	(16,368,910)			(16,405,826)
Balance at December 31, 2019	14,417,085	$ 1,449	$ 22,546,309	$ -	$ (38,724)	$ (27,684,086)	75,000	$ (8)	$ (5,175,060)
Issuance of common stock under Regulation A offering, net of issuance costs	4,972,944	498	27,524,244						27,524,742
Issuance of common stock for services	100,000	10	599,990						600,000
Issuance of restricted common stock under equity incentive plan	20,000	2	(2)						-
Stock-based compensation expense			1,977,930						1,977,930
Net loss and comprehensive loss					(144,445)	(12,424,622)			(12,569,067)
Balance at December 31, 2020	19,510,029	$ 1,959	$ 52,648,471	$ -	$ (183,169)	$ (40,108,708)	75,000	$ (8)	$ 12,358,545

See accompanying Notes to Consolidated Financial Statements.

Emerald Health Pharmaceuticals Inc.

Consolidated Statements of Cash Flows

	Years Ended December 31,	
	2020	**2019**
Operating activities		
Net loss	$ (12,424,622)	$ (16,368,910)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	24,596	28,545
Stock-based compensation	2,577,930	2,095,770
Accretion of beneficial conversion feature on related party loan	-	1,360,840
Changes in operating assets and liabilities:		
Incentive and other tax receivables	906,154	(1,004,001)
Other current assets	(327,095)	(256,069)
Other noncurrent assets	(59,136)	-
Accounts payable	(1,604,195)	1,262,919
Accrued expenses	373,398	978,482
Accrued interest payable	(407,758)	(195,358)
Net cash used in operating activities	(10,940,728)	(12,097,782)
Investing activities		
Purchases of property and equipment	(7,206)	-
Net cash used in investing activities	(7,206)	-
Financing activities		
Issuance of common stock	29,837,664	16,846,973
Deposits held in escrow	2,752,890	-
Funds received under loans payable	1,087,373	-
Funds repaid under loans payable	(795,221)	-
Funds received under related party loan	-	1,674,380
Funds repaid under related party loan	(750,000)	-
Funds advanced under note receivable from stockholder	-	(5,000,000)
Stock issuance costs	(2,233,858)	(541,100)
Net cash provided by financing activities	29,898,848	12,980,253
Effect of exchange rate changes on cash	(144,445)	(36,916)
Net increase in cash and cash equivalents, and restricted cash	18,806,469	845,555
Cash, cash equivalents, and restricted cash at beginning of period	983,261	137,706
Cash, cash equivalents, and restricted cash at end of period	$ 19,789,730	$ 983,261
Supplemental disclosure of cash flow information:		
Interest paid to related party	$ 822,524	$ 1,044,901
Interest paid on loans payable	$ 53,183	$ -
Non-cash investing and financing activities:		
Conversion of related party loan to common stock	$ -	$ 2,500,000
Discharge between related party loan and note receivable from stockholder	$ -	$ 5,000,000
Discharge between related party loan and related party receivables	$ 180,930	$ -
Deferred stock issuance costs in accounts payable and accrued expenses	$ 96,019	$ 16,955

See accompanying Notes to Consolidated Financial Statements.

1. Description of Business

Emerald Health Pharmaceuticals Inc. (EHP, or the Company) was incorporated in the State of Delaware in March 2017. The Company is a biotechnology/pharmaceutical company, focused on developing product candidates to treat diseases with unmet medical needs primarily in inflammatory, autoimmune, metabolic, neurodegenerative and fibrotic diseases. EHP was formed to acquire, discover, develop and commercialize drug product candidates based on novel, patented molecules chemically derived from non-psychoactive cannabinoids. The Company's platform technology consists of a library of twenty-five novel, patented derivatives of synthetically manufactured cannabidiol (CBD) and cannabigerol (CBG), two of the molecules found naturally in the cannabis plant. The Company is currently developing two initial product candidates that together target four initial diseases, multiple sclerosis (MS), systemic sclerosis (SSc), a severe form of scleroderma, Parkinson's disease (PD) and Huntington's disease (HD).

The Company acquired certain intellectual property from Emerald Health Biotechnology España, S.L.U. (EHBE), formerly known as VivaCell Biotechnology España S.L. (VivaCell). During the year ended December 31, 2018, EHBE became a wholly owned subsidiary of Emerald Health Research Inc. (EHR) which is a wholly owned subsidiary of Emerald Health Sciences Inc. (EHS). EHS is also a significant (former majority) stockholder of EHP. EHP has no ownership or voting rights related to EHBE. See Note 7.

The Company is subject to risks common to other life science companies in the development stage including, but not limited to, uncertainty of product development and commercialization, lack of marketing and sales history, development by its competitors of new technological innovations, dependence on key personnel, market acceptance of products, product liability, protection of proprietary technology, ability to raise additional financing, and compliance with FDA and other government regulations. If the Company does not successfully commercialize any product candidates, it will be unable to generate recurring product revenue or achieve profitability.

The global spread of the novel coronavirus (COVID-19) has created significant volatility, uncertainty and economic disruption. The ultimate effects of COVID-19 on the Company's business, operations and financial condition are unknown at this time. In the near term, the potential exists for enrollment in its Phase IIa clinical trial to be delayed or slowed based on this, as patients may elect to postpone voluntary treatments and physicians' offices are either closed or operating at a reduced capacity. However, the extent to which COVID-19 impacts the Company's business will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of COVID-19 and the actions to contain it or treat its impact, among others.

The Company's financial statements have been prepared assuming the Company will continue as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The Company has experienced losses and recurring cash outflows from operations since inception and has an accumulated deficit of $40,108,708 as of December 31, 2020. The Company has funded operations with capital raised from a Tier 2 offering (the Offering) pursuant to Regulation A (Regulation A+) under the Securities Act of 1933, as amended (the Securities Act), as well as an exempt offshore offering under Regulation S under the Securities Act. In addition, the Company has received loan proceeds from separate loan arrangements, including a revolving loan with its stockholder, EHS. Amounts advanced under this loan and accrued interest are due upon demand. See Note 3.

2. Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States (GAAP).

Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries, Emerald Health Pharmaceuticals Australia Pty Ltd. (EHP Australia) and Emerald Health Pharmaceuticals, España Sociedad Limitada (EHP España). EHP Australia's functional currency, the Australian dollar, is also its reporting currency, and its financial statements are translated to U.S. dollars prior to consolidation. EHP España's functional currency, the Euro, is also its reporting currency, and its financial statements are translated to U.S. dollars prior to consolidation. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly liquid investments with an original maturity of three months or less from the date of purchase to be cash equivalents. As of December 31, 2020, the Company's cash deposits are held in an FDIC-insured financial institution.

Restricted cash consists of cash held in an escrow account, received as deposits from potential investors towards purchases of common stock under the Offering which have not yet been fully consummated as of the balance sheet date, as described in Note 4.

The following table provides a reconciliation of cash, cash equivalents and restricted cash, reported within the condensed consolidated statements of cash flows:

	Years Ended December 31,	
	2020	2019
Cash and cash equivalents	$ 17,036,840	$ 983,261
Restricted cash	2,752,890	-
Total cash, cash equivalents and restricted cash presented in the consolidated statements of cash flows	$ 19,789,730	$ 983,261

Incentive and Tax Receivables

The Company's subsidiary, EHP Australia, is incorporated in Australia and is eligible to participate in an Australian research and development tax incentive program. As part of this program, EHP Australia is eligible to receive a cash refund from the Australian Taxation Office (ATO) for a percentage (currently 43.5%) of the research and development costs incurred by EHP Australia. The cash refund is available to eligible companies with an annual aggregate revenue of less than $AU20.0 million (Australian Dollars) during the reimbursable period. As of December 31, 2020 and 2019, the Company's estimate of the amount of cash refunds expected to be received for eligible spending as part of this incentive program was $0.5 million and $1.3 million, respectively, which amounts are included in incentive and other tax receivables. In May 2020, the Company received $1.3 million as a cash refund from the ATO for eligible spending incurred during the year ended December 31, 2019.

In addition, EHP Australia incurs Goods and Services Tax (GST) on services provided by Australian vendors. As an Australian entity, EHP Australia is entitled to a refund of the GST paid. The Company's estimate of the amount of cash refund expected to be received related to GST incurred as of December 31, 2020 and 2019, was $46,816 and $78,198, respectively, which amounts are included in incentive and other tax receivables.

Property and Equipment

Property and equipment generally consist of computer equipment and software and office furniture and are recorded at cost and depreciated over the estimated useful lives of the assets (generally three to five years) using the straight-line method. Leasehold improvements are stated at cost and are amortized on a straight-line basis over the lesser of the remaining term of the related lease or the estimated useful lives of the assets. Repairs and maintenance costs are charged to expense as incurred and improvements and betterments are capitalized. When assets are retired or otherwise disposed of, the cost and accumulated depreciation are removed from the consolidated balance sheets and any resulting gain or loss is reflected in the consolidated statements of operations in the period realized.

Impairment of Long-lived Assets

The Company reviews property and equipment for impairment on an annual basis and whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. An impairment loss would be recognized when estimated future undiscounted cash flows relating to the asset or asset group are less than its carrying amount. An impairment loss is measured as the amount by which the carrying amount of an asset or asset group exceeds its fair value. While the Company's current and historical operating losses and negative cash flows are possible indicators of impairment, management believes that future cash flows to be generated by these assets support the carrying value of its long-lived assets and, accordingly, did not recognize any impairment losses during the years ended December 31, 2020 and 2019.

Research and Development

Research and development costs are charged to expense as incurred and consist primarily of contract research fees, contract manufacturing costs, consultant fees, preclinical studies, clinical trials and related costs, compensation and related benefits, and non-cash stock-based compensation. At the end of each reporting period, the Company compares the payments made to its vendors, clinical research organizations and consultants to the estimated progress towards completion of the related project. Factors that the Company considers in preparing these estimates include the number of patients enrolled in clinical trials, milestones achieved, and other criteria related to the efforts of its vendors. These estimates will be subject to change as additional information becomes available. Depending on the timing of payments to vendors and estimated services provided, the Company will record net prepaid or accrued expenses related to these costs. Research and development expenses are recorded net of expected refunds of eligible research and development costs paid pursuant to the Australian research and development tax incentive program and GST incurred on services provided by Australian vendors.

Income Taxes

The Company has incurred net operating losses from inception through December 31, 2020. Therefore, no United States federal, state, or foreign income taxes are expected to be paid for 2020 or 2019 and no amounts payable have been recorded as of December 31, 2020 and 2019.

Due to the Company's history of losses since inception, there is not enough evidence at this time to support the conclusion that it will generate future income of a sufficient amount and nature to utilize the benefits of the Company's net deferred tax assets. Accordingly, the Company fully reduced its net deferred tax assets by a valuation allowance, since it has been determined that it is more likely than not that all of the deferred tax assets will not be realized.

The Tax Reform Act of 1986 contains provisions which limit the ability to utilize the net operating loss carryforwards in the case of certain events including significant changes in ownership interests. If the Company's net operating loss carryforwards are limited, and the Company has taxable income which exceeds the permissible yearly net operating loss carryforwards, the Company would incur a federal income tax liability even though net operating loss carryforwards would be available in future years.

Fair Value Measurements

The Company does not have any financial assets and liabilities reported at fair value on a recurring basis. The carrying amounts of the Company's financial instruments including cash and cash equivalents, restricted cash, incentive and other tax receivables, other current assets, property and equipment, net, accounts payable, accrued expenses, and deposits held in escrow, approximate fair value due to the short-term nature of those instruments. The Company's related party loan and the associated accrued interest payable is carried at amortized cost. Due to the related party nature of these advances with the controlling shareholder, management has concluded that its fair value is not reasonably determinable (see Note 3).

The Company determines fair value based upon the exit price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants, as determined by either the principal market or the most advantageous market. Inputs used in the valuation techniques to derive fair values are classified based on a three-level hierarchy. These levels are:

Level 1—Quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities. The fair value hierarchy gives the highest priority to Level 1 inputs.

Level 2—Observable prices that are based on inputs not quoted on active markets but corroborated by market data.

Level 3—Unobservable inputs are used when little or no market data is available. The fair value hierarchy gives the lowest priority to Level 3 inputs.

As of December 31, 2020 and 2019 the carrying amount of the Company's cash and cash equivalents and restricted cash were determined using Level 1 inputs.

Business Segments

The Company operates within the United States, Europe, and Australia, in one business segment, which is dedicated to research of drug candidates based on patented synthetic new chemical entities (NCEs) derived from non-psychoactive cannabinoid molecules.

Stock-Based Compensation

The Company accounts for stock option awards in accordance with Financial Accounting Standards Board Accounting Standards Codification (ASC) Topic No. 718, Compensation-Stock Compensation. Under FASB ASC Topic No. 718, compensation expense related to stock-based payments is recorded over the requisite service period based on the grant date fair value of the awards. Compensation previously recorded for unvested stock options that are forfeited is reversed upon forfeiture. The Company uses the Black-Scholes option pricing model for determining the estimated fair value for stock-based awards. The Black-Scholes model requires the use of assumptions which determine the fair value of stock-based awards, including the option's expected term and the price volatility of the underlying stock. See Note 5.

Net Loss per Share

The Company computes basic net loss per common share by dividing the applicable net loss by the weighted average number of common shares outstanding during the period. Diluted earnings per share is computed using the weighted average number of common shares outstanding during the period, plus additional shares to account for the dilutive effect of potential future issuances of common stock relating to stock options and other potentially dilutive securities using the treasury stock method. For the years ended December 31, 2020 and 2019, 2,892,500 and 2,080,800 options, respectively, were excluded from the computation of diluted earnings per share, as the effect would be anti-dilutive.

Comprehensive Loss

Comprehensive loss includes foreign currency translation adjustments related to the Company's subsidiaries in Australia and Spain.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842) (ASU No. 2016-02), which changes the presentation of assets and liabilities relating to leases. The core principle of ASU No. 2016-02 is that a lessee should recognize the assets and liabilities that arise from leases. All leases create an asset and a liability for the lessee in accordance with FASB Concepts Statement No. 6, Elements of Financial Statements, and, therefore, recognition of those lease assets and lease liabilities represents an improvement over previous GAAP, which did not require lease assets and lease liabilities to be recognized for most leases.

In November 2019, the FASB issued ASU No. 2019-10, Financial Instruments - Credit Losses (Topic 326), Derivatives and Hedging (Topic 815), and Leases (Topic 842) (ASU No. 2019-10), which deferred the effective date of ASU No. 2016-02 for the Company from January 1, 2020 to January 1, 2021.

In June 2020, the FASB issued ASU No. 2020-05, Revenue from Contracts with Customers (Topic 606) and Leases (Topic 842) (ASU No. 2020-05), which further deferred the effective date of ASU No. 2016-02 for the Company from January 1, 2021 to January 1, 2022. The Company is currently evaluating the impact of this new standard on its financial statements.

In October 2018, the FASB issued ASU No. 2018-17, Consolidation (Topic 810) (ASU No. 2018-17), which adds an elective private-company scope exception to the variable interest entity (VIE) guidance for entities under common control. ASU No. 2018-17 will be effective for the Company beginning January 1, 2021, with early adoption permitted. The Company does not expect this new standard to have a material impact on its financial statements.

3. Related Party Transactions

Related Party Loan and Beneficial Conversion Feature

Since inception, the Company has received advances from EHS to fund its operations. In September 2017, the Company and EHS entered a revolving loan agreement (Related Party Loan), which was amended in January 2018. Borrowings under the loan, which EHP may draw down from time to time in one or more advances, are evidenced by a demand grid promissory note (the Note). The Note is revised to reflect the aggregate principal amount of the loan outstanding as of the date of each advance or repayment. In November 2019, the Related Party Loan was further amended to reduce the interest rate from 12% to 10%, compounded semiannually. The loan may be repaid by the Company or converted by EHS into shares of EHP at $2.00 per share or at a price to be equally agreed to between EHS and the Company (Conversion Feature). The Note is payable upon demand and has no expiration date.

In April 2019, the Company received written notice of demand (Notice) from EHS for payment of all accrued interest on the Related Party Loan as of March 31, 2019, which resulted in a cash payment of $1,044,901 to EHS. Also in April 2019, the Company received a second Notice from EHS that called for the following, upon qualification by the SEC of the Company's Form 1-A Post-Qualification Offering Circular Amendment: (1) repayment of $2,000,000 of the unpaid principal balance under the loan, and (2) the conversion of an additional $2,500,000 of the unpaid principal balance under the loan at a conversion price of $2.00 per share. The Company's Form 1-A Post-Qualification Offering Circular Amendment was qualified by the SEC on June 7, 2019 and the repayment of the $2,000,000 of unpaid principal was transacted as a cashless discharge and offset between the Related Party Loan and the Related Party Note Receivable (as defined below). Concurrently, 1,250,000 shares of EHP common stock were issued to EHS at a conversion price of $2.00 per share, further reducing the principal balance of the Related Party Loan by $2,500,000.

In November 2019, the Company received Notice from EHS for payment of $3,000,000 of unpaid principal balance and $178,933 of accrued interest on the Related Party Loan, which was transacted as a cashless discharge and offset between the Related Party Loan and the remaining unpaid principal and accrued interest balances under the Related Party Note Receivable (as defined below) as of November 15, 2019.

During the year ended December 31, 2020, the Company received Notice from EHS for payments of $750,000 of the unpaid principal balance and a total of $822,524 of accrued interest on the Related Party Loan. Additionally, in December 2020, $180,930 of the unpaid principal balance was offset against amounts due from EHS to EHP for reimbursements of expenses related to office expenses, including space allocated to EHS affiliates. As of December 31, 2020 and 2019, $2,819,771 and $3,750,701, respectively, of principal, and $95,478 and $505,289, respectively, of accrued interest is due to EHS under the Related Party Loan.

In February 2021, the Company received Notice from EHS, for payment of $500,000 of the unpaid principal balance on the Related Party Loan.

In March 2021, the Company received Notice from EHS, for payment of $1,819,771 of the unpaid principal balance and $161,415 of accrued interest on the Related Party Loan.

In April 2021, the Company received Notice from EHS for conversion of the remaining unpaid principal balance under the Related Party Loan of $500,000 at a conversion price of $2.00 per share into 250,000 shares of EHP common stock. Following the issuance of the shares of common stock to EHS, the Related Party Loan was fully settled and there are no further obligations to EHS under the Related Party Loan.

The Conversion Feature of the loan agreement is not considered an embedded derivative under FASB Accounting Standards Codification (ASC) Topic 815, *Derivatives and Hedging*, since there are no provisions for net settlement nor is there a means for EHS to receive an asset that puts EHS in a position not substantially different from net settlement. The Company recorded a debt discount on the Related Party Loan of $1.4 million related to the beneficial conversion feature on advances under the loan during the year ended December 31, 2019. Subsequent to the recognition of the discount, due to the on-demand nature of the loan, during the year ended December 31, 2019, the Company recognized $1.4 million in accretion of the discount which is included in related party interest expense. There were no such transactions recorded during the year ended December 31, 2020, as there were no additional advances received under the loan during the period.

Related Party Note Receivable

In May 2019, the Company's Board of Directors authorized a funding arrangement with EHS (Related Party Note Receivable), which was amended in August 2019 and September 2019 to extend the repayment dates, whereby EHP may advance funds to EHS in the form of interest bearing (12%) short term notes, up to an aggregate principal amount of $6,000,000 under a Promissory Note between EHS and EHP (the Promissory Note). Advances under the Promissory Note were originally due for repayment with accrued and unpaid interest three months from the date of the advance. During the year ended December 31, 2019, a total of $5,000,000 was advanced and $178,933 accrued as interest receivable under the Related Party Note Receivable, all of which was offset through cashless discharges against the unpaid principal and accrued interest payable balances, respectively, under the existing Related Party Loan with EHS. As of December 31, 2020 and 2019, there were no outstanding principal or accrued interest receivable balances remaining under the Related Party Note Receivable, and all principal advances and related discharges have been recorded as equity transactions.

Shared Services with EHS

In June 2019, the Company entered into an Independent Contractor Agreement (the Independent Contractor Agreement) effective April 1, 2019, with EHS, pursuant to which EHS agreed to provide such services as are mutually agreed between the Company and EHS, including reimbursements for reasonable expenses incurred in the performance of the Independent Contractor Agreement. These services included, but were not limited to, corporate advisory services and technical expertise in the areas of business development, marketing, investor relations, information technology and product development. The Independent Contractor Agreement had an initial term of ten years. On November 15, 2019, the Board of Directors approved the termination of this agreement, effective as of December 31, 2019. During the year ended December 31, 2019, the Company recorded expenses totaling $339,627 for such services performed by EHS on behalf of the Company. See Note 8.

The Company allocated certain operating expenses to entities which are subsidiaries of EHS for their share of facilities and office expenses. During the years ended December 31, 2020 and 2019, these allocations totaled $82,003 and $183,091, respectively.

Dr. Avtar Dhillon

On November 15, 2019, Dr. Avtar Dhillon resigned as Chairman of the Board of Directors. The Company and EHS concurrently entered into a Board Observer Agreement, whereby the Company granted to EHS the right to designate an observer on the Board of Directors for so long as EHS maintains ownership of any securities of the Company. Dr. Avtar Dhillon was appointed as the initial Board Observer pursuant to the Board Observer Agreement.

On December 5, 2019, the Board of Directors approved an Independent Contractor Services Agreement, effective as of December 1, 2019, between the Company and Dr. Dhillon, pursuant to which Dr. Dhillon will provide ongoing corporate finance and strategic business advisory services to the Company. In exchange for his services,, Dr. Dhillon receives a monthly fee of $10,000. The Board of Directors will review the monthly rate paid to Dr. Dhillon within 90 days of the end of each fiscal year. The Independent Contractor Services Agreement had an initial term of one year and renews automatically thereafter unless terminated earlier by either party. The Independent Contractor Services Agreement may be terminated by either party for cause upon written notice to the other party if the other party defaults in the performance of the agreement in any material respect or materially breaches the terms of the agreement, or without cause upon 30 days' prior written notice to the other party. During the year ended December 31, 2020, the Company paid $130,000 to Dr. Dhillon under this agreement.

4. Common Stock

On March 2, 2017, the Company issued 9,000,000 shares of common stock at $0.0001 per share to EHS for proceeds of $900. An additional 1,000,000 shares were issued to the founders of the Company for total proceeds of $100. The shares issued to founders vested 25% on the date of issuance and vested 25% annually thereafter until fully vested.

In January 2018, the Company filed a Certificate of Amendment of the Certificate of Incorporation which increased the number of authorized shares that the Company can issue from 20,000,000 to 100,000,000 shares of common stock with a par value of $0.0001 per share.

In October 2018, the Company exercised its option to repurchase 75,000 unvested shares from a founding member, which are currently held by the Company as treasury stock.

In June 2019, the Company issued 1,250,000 additional shares of common stock to EHS in accordance with a written notice received from EHS in April 2019, for the conversion of $2,500,000 of the unpaid principal balance under the Related Party Loan at a conversion price of $2.00 per share. See Note 3.

During the year ended December 31, 2019, the Company also sold 65,700 shares of common stock for proceeds of $328,500, less issuance costs of $51,776, in an exempt offshore offering under Regulation S under the Securities Act.

The Company's initial Offering Statement on Form 1-A was qualified by the SEC in March 2018 and its Form 1-A Post-Qualification Offering Circular Amendments were subsequently qualified by the SEC on June 7, 2019, July 14, 2020 and November 24, 2020. The Offering terminated on March 28, 2021. During the years ended December 31, 2020 and 2019, the Company sold 4,972,944 and 3,176,385 shares of common stock under the Offering, for gross proceeds of $29.8 million and $16.5 million, less issuance costs of $2.3 million and $0.8 million, respectively.

In June 2019, the Company entered into a Broker-Dealer Agreement with Dalmore Group, LLC (Dalmore), a broker-dealer registered with the SEC and a member of FINRA, to perform administrative, compliance and placement agent related functions in connection with the Offering. Pursuant to this agreement, the Company paid Dalmore $28,000 in one-time set up fees, consisting of a $20,000 agreement fee and $8,000 for fees paid to FINRA, plus 1.0% commission on the sale of common stock under the Offering, commencing with sales following regulatory approval by FINRA, which occurred on July 25, 2019. During the years ended December 31, 2020 and 2019, the Company incurred $298,658 and $25,440, respectively, under this agreement, related to commission on the sale of common stock under the Offering, of which $35,848 and $8,872 remains within accounts payable and accrued liabilities at the end of each period, respectively.

In July 2019, the Company entered into an Escrow Services Agreement with Prime Trust, LLC. Under this agreement, the proceeds received from the Offering are deposited into an escrow account prior to distribution to the Company. As of December 31, 2020, the balance of the escrow account was $2.8 million consisting of deposits received from prospective investors towards purchases of common stock under the Offering, which are still in process. The balance has been recorded as restricted cash, offset by deposits held in escrow liability.

In June 2020, the Company issued 100,000 shares of common stock to a consultant as payment for services. At the time of issuance, the Company recognized $600,000 of stock-based compensation expense, of which $300,000 was for research and development and $300,000 was for general and administrative services.

During the year ended December 31, 2020, the Company also issued 20,000 shares of restricted common stock under the Plan (as defined below), to consultants as payment for services.

In July 2020, the Company entered into a consulting agreement with a third party to provide business advisory services in connection with strategic development and private financing matters. Pursuant to this agreement, during the year ended December 31, 2020, the Company incurred and paid a consulting fee of $1.2 million, which was recorded as a stock issuance cost within equity. The term of the agreement was extended to March 31, 2021 by mutual consent of both parties.

5. Equity Incentive Plan

In January 2018, the Company adopted the 2018 Equity Incentive Plan, which was amended on December 13, 2018 and August 12, 2020 (the Plan). On August 12, 2020, the Company adopted an amendment to the Plan which increased the number of shares of Common Stock authorized to be issued under the 2018 Plan to equal 18% of the number of issued and outstanding shares of common stock of the Company as of the applicable date of issuance. As of December 31, 2020, there were 3,511,805 shares of Common Stock reserved for issuance pursuant to awards under the Plan.

The Plan provides incentives to eligible employees, consultants, officers, and directors in the form of incentive stock options and non-qualified stock options, stock appreciation rights, restricted stock, restricted stock units and other rights or benefits. Recipients of stock options are eligible to purchase shares of the Company's common stock at an exercise price equal to no less than the estimated fair market value of such stock on the date of grant. The maximum term of options granted under the Plan is ten years. Vesting schedules are determined by the Board of Directors. As of December 31, 2020, there were 599,305 shares available to grant under the Plan.

The following table summarizes stock-based compensation expense related to stock options granted to employees and non-employees included in the consolidated statements of operations as follows:

	Years Ended December 31,	
	2020	2019
Research and development	$ 758,669	$ 227,273
General and administrative	1,219,260	1,868,497
Total	$ 1,857,929	$ 2,095,770

Stock-based compensation for the years ended December 31, 2020 and 2019, includes expense of $534,926 and $1,651,345, respectively, related to option grants issued to non-employees.

Stock Options

The following table summarizes stock option activity:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in Years)	Aggregate Intrinsic Value (1)
Outstanding at December 31, 2019	2,080,800	$ 2.89		
Granted	817,500	$ 6.00		
Exercised	-			
Forfeited/Expired	(5,800)	$ 3.92		
Outstanding at December 31, 2020	2,892,500	$ 3.77	8.38	$ 6,452,500
Options Vested and Exercisable as of December 31, 2020	1,933,374	$ 3.15	8.10	$ 5,514,625

(1) As of December 31, 2020, the fair value of the Company's common shares as determined by its Board of Directors, based upon the Company's Regulation A offering price, was $6.00 per share.

The following table summarizes certain information regarding stock options for the years ended December 31, 2020 and 2019:

	2020	2019
Weighted average grant date fair value per share of options granted during the period	$ 4.33	$ 4.40
Fair value per share of options vested during the period	$ 2.80	$ 1.81
Cash received from options exercised during the period	$ -	$ -
Intrinsic value of options exercised during the period	$ -	$ -

As of December 31, 2020, unrecognized stock-based compensation expense for employee and non-employee stock options was approximately $2.8 million, which the Company expects to recognize over a weighted-average remaining period of 2.2 years, assuming all unvested options become fully vested.

The Company uses a Black-Scholes option-pricing model to value the Company's option awards. Using this option-pricing model, the fair value of each employee and non-employee award is estimated on the grant date. The fair value is expensed on a straight-line basis over the vesting period. In general, the option awards vest partially upfront and then pro-rata annually thereafter. The expected volatility assumption is based on the volatility of the share price of comparable public companies. The expected life is determined using the "simplified method" permitted by Staff Accounting Bulletin Number 107 and 110. The risk-free interest rate is based on the implied yield on a U.S. Treasury security at a constant maturity with a remaining term equal to the expected term of the option granted. The dividend yield is zero, as the Company has never declared a cash dividend.

The fair value of the stock options granted was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions for the periods indicated:

	Years Ended December 31,	
	2020	2019
Expected term (in years)	5.71	5.75
Stock price volatility	90%	90%
Risk-free interest rate	0.40%	1.77%
Dividend yield	0%	0%

Restricted Stock

During the year ended December 31, 2020, 20,000 shares of restricted common stock were issued under the Plan to non-employees, with vesting periods ranging from 3 to 6 months. The Company recognized $120,000 of stock-based compensation expense for the restricted stock during the year ended December 31, 2020.

6. Commitments and Contingencies

On May 1, 2018, the Company entered into a two-year non-cancelable building lease for its corporate headquarters in San Diego, California. Effective August 15, 2019, the lease was amended to include additional space at the existing premises and to extend the term of the original lease through August 31, 2022. Under the lease, the Company pays a base rent of $21,238 per month through August 31, 2021, after which time the base rent will increase by approximately 3% per year. The Company has paid a $41,503 security deposit related to the lease, which is recorded within other current assets. Rent expense for the years ended December 31, 2020 and 2019, was $197,128 and $81,968, respectively.

Future minimum payments under the non-cancelable operating lease as of December 31, 2020 were as follows:

2021	257,312
2022	174,818
Total	$ 432,130

In July 2020, the company entered into an agreement to sublease a portion of its existing non-cancelable building lease to a tenant, effective August 1, 2020, and continuing through August 31, 2022. The Company paid commissions of $7,000 related to the execution of the sublease and was expected to incur future losses of approximately $55,000 in conjunction with the sublease. EHS agreed to reimburse the Company for the commission fee and future expected losses, which were offset against the Related Party Loan as of December 31, 2020.

Loans payable

In January 2020, EHP Australia entered into a loan agreement with Rocking Horse Nominees Pty Ltd (Rocking Horse), whereby Rocking Horse advanced $AU1.2 million (approximately $0.8 million) to EHP Australia. The loan was secured by the tax incentive refund anticipated to be received during 2020 for eligible spending incurred under the Australian research and development tax incentive program during 2019. The loan had an upfront establishment fee of 1.2%, bearing interest at 1.25% per month compounded daily. Approximately $53,000 in interest expense was incurred under this loan during the year ended December 31, 2020, and the loan was repaid in June 2020.

On April 22, 2020, The Company received loan proceeds of $292,152 from Silicon Valley Bank pursuant to the Paycheck Protection Program established as part of the Coronavirus Aid, Relief and Economic Security Act (PPP Loan). The PPP Loan, which is evidenced by a note dated April 21, 2020, bore interest at a rate of 1% per annum, and was expected to mature on April 21, 2022. On February 18, 2021, the PPP Loan principal and accrued interest were forgiven by the lender. As of December 31, 2020, the PPP loan is classified as a long-term liability within loans payable on the balance sheet, and $2,053 of interest was accrued within accrued interest payable.

7. Intellectual Property Transfer and Research Agreements

In June 2017, upon the execution of the Intellectual Property Transfer Agreement (IPTA), EHP paid EHBE approximately $112,000 for the purchase of three United States patents, two Japanese patents, one European patent and fourteen pending patent applications covering two series of molecules containing derivatives of CBD and CBG. Future payments of up to 2.7 million Euro (approximately $3.3 million, based upon the exchange rate at December 31, 2020) per product are due upon completion of certain development milestones. As further consideration, the Company will pay EHBE a 2.5% royalty on all net revenues of any drug developed from the transferred compounds. During the year ended December 31, 2020, the Company paid approximately $0.4 million related to the first milestone payments due to EHBE for the Company's completion of a Phase I clinical study for MS and SSc.

Concurrent with the execution of the IPTA, the Company signed a Research Agreement with EHBE for an initial term of 5 years. Under the terms of the Research Agreement, EHBE is providing research services under the Company's direction for consideration of cost plus a standard mark-up. Thereafter, the agreement will renew for successive one-year terms and may be terminated by either party on the expiration of the original term or any renewal term by delivering written notice at least 90 days prior to expiration. During the years ended December 31, 2020 and 2019, the Company recorded $192,469 and $152,133, respectively, in research and development expense for services performed by EHBE under the Research Agreement. As of December 31, 2020 and 2019, $14,876 and $58,300, respectively, are included in accrued expenses, for amounts due to EHBE under the Research Agreement.

The Company performed a qualitative analysis to determine whether a variable interest in another entity represents a controlling financial interest in a variable interest entity. A controlling financial interest in a variable interest entity is characterized by having both the power to direct the most significant activities of the entity and the obligation to absorb losses or the right to receive benefits of the entity. Since EHP does not have voting control or other forms of control over the operations and decision making at EHBE, the Company determined that it does not have a variable interest in EHBE. This guidance requires on-going reassessments of variable interests based on changes in facts and circumstances. The Company continues to assess its variable interests and has determined that no significant changes have occurred as of April 30, 2021.

8. Balance Sheet Details

Other current assets consisted of the following:

	December 31,	
	2020	**2019**
Prepaid contracts, expenses and deferred costs	$ 644,876	$ 468,232
Related party receivables	-	37,260
Other	49,569	42,788
Total	**$ 694,445**	**$ 548,280**

Property and equipment consisted of the following:

	December 31,	
	2020	**2019**
Furniture and fixtures	$ 62,228	$ 57,195
Office equipment	19,480	19,480
Leasehold improvements	20,638	20,638
Property and equipment, gross	102,346	97,313
Accumulated depreciation	(67,277)	(44,855)
Property and equipment, net	**$ 35,069**	**$ 52,458**

Depreciation expense for the years ended December 31, 2020 and 2019 was $24,596 and $28,545, respectively.

Accrued expenses are comprised of the following:

	December 31,	
	2020	**2019**
Research and development liabilities	$ 49,290	$ 355,942
Clinical trial related liabilities	941,993	205,884
Accrued payroll liabilities	1,180,751	807,662
Related party liabilities	14,876	536,505
Other liabilities	156,229	71,634
Total	**$ 2,343,139**	**$ 1,977,627**

9. Defined Contribution Plan

Effective January 1, 2018, the Company adopted a defined contribution savings plan pursuant to Section 401(k) of the Internal Revenue Code. The plan is for the benefit of all qualifying employees and permits voluntary contributions by employees up to 100% of eligible compensation, subject to the Internal Revenue Service imposed maximum limits. The terms of the plan allow for discretionary employer contributions.

On January 1, 2020, the Company commenced a safe harbor contribution of 3% of each eligible employee's gross earnings, subject to Internal Revenue Service limitations. Employer safe harbor contributions vest immediately.

10. Income Taxes

The Company has incurred net operating losses from inception through December 31, 2020. Therefore, no United States federal, state, or foreign income taxes are expected to be paid for 2020 or 2019 and no amounts payable have been recorded as of December 31, 2020 and 2019.

The Company's loss before income taxes for the years ended December 31, 2020 and 2019, respectively, was generated in the following jurisdictions:

(amounts in thousands)	Years Ended December 31, 2020	2019
Domestic	$ (9,968,009)	$ (14,157,884)
Foreign	(2,456,613)	(2,211,026)
Worldwide	$ (12,424,622)	$ (16,368,910)

A reconciliation of income tax expense (benefit) to the amount computed by applying the statutory federal income tax rate to the loss from operations is summarized for the years ended December 31, 2020 and 2019, respectively, as follows:

	Years Ended December 31, 2020	2019
Expected income tax benefit at U.S. federal statutory rate	$ (2,609,171)	$ (3,437,471)
State income tax benefit, net of federal benefit	(597,772)	(750,286)
Tax effect of:		
Change in valuation allowance	2,233,775	2,874,738
Uncertain tax positions	537,386	731,462
Australian tax incentive	149,752	470,027
Stock-based compensation	209,196	110,817
Foreign rate differential	(132,784)	-
Other	209,618	713
Provision for income taxes	$ -	$ -

The Company's net deferred tax assets are comprised of the following as of December 31, 2020 and 2019, respectively:

	As of December 31, 2020	2019
Deferred tax assets:		
Tax loss carryforwards	$ 6,217,722	$ 4,129,060
Stock-based compensation	759,549	423,768
Accrued expenses	37,411	273,740
Intangible assets	118,010	22,991
Other	6,192	2,478
Gross deferred tax assets	7,138,884	4,852,037
Less: valuation allowance	(7,138,884)	(4,852,037)
Total deferred tax assets	-	-
Deferred tax liabilities:		
	-	-
Net deferred tax assets	$ -	$ -

At December 31, 2020, the Company had federal, state, and foreign net operating loss (NOL) carryforwards of approximately $27.2 million, $28.2 million and $1.8 million, respectively. The federal and certain state loss carryforwards generated in 2018 onwards of $25.2 million and $1.2 million, respectively, will carry forward indefinitely and can be used to offset up to 80% of future annual taxable income. Federal loss carryforwards generated prior to 2018 begin expiring in 2037, unless previously utilized. State loss carryforwards begin expiring in 2037, unless previously utilized, while the Company's foreign loss carryforwards do not expire.

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Management assesses the available positive and negative evidence to estimate if sufficient future taxable income will be generated to use existing deferred tax assets. Based on the weight of evidence, including a history of operating losses, management has determined that it is more likely than not that the Company's net deferred tax assets will not be realized. Accordingly, a valuation allowance of $7.1 million and $4.9 million has been established by the Company to fully offset these net deferred tax assets as of December 31, 2020 and 2019, respectively. The valuation allowance increased by $2.3 million during the year ended December 31, 2020.

Future utilization of the Company's NOL carryforwards to offset taxable income may be subject to a substantial annual limitation as a result of ownership changes that may have occurred or that could occur in the future pursuant to Internal Revenue Code Sections 382 and 383. These ownership changes may limit the amount of NOL carryforwards that can be utilized to offset future taxable income and tax, respectively. In general, an ownership change, as defined by the tax code, results from a transaction or series of transactions over a three-year period resulting in an ownership change of more than 50 percent of the outstanding stock of a company by certain stockholders or public groups. The Company has not completed an analysis regarding the limitation of NOL carryforwards.

The Company applies the two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount, which is more than 50% likely of being realized upon ultimate settlement. Income tax positions must meet a more likely than not recognition threshold at the effective date to be recognized upon the adoption of ASC 740 and in subsequent periods. This interpretation also provides guidance on measurement, derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The following table summarizes the activity related to the Company's gross unrecognized tax benefits for the years ended December 31, 2020 and 2019:

	Years Ended December 31,	
	2020	**2019**
Balance at beginning of year	$ 1,698,488	$ 772,589
Increases/(decreases) related to prior year tax positions	(55,939)	-
Increases related to current year tax positions	736,174	925,899
Balance at end of year	$ 2,378,723	$ 1,698,488

At December 31, 2020 and 2019, the amount of unrecognized tax benefits that would affect the effective tax rate was $0. The Company's policy is to recognize interest and penalties related to uncertain tax positions in income tax expense. The Company has not accrued any interest or penalties related to uncertain tax positions since inception. The Company does not anticipate that there will be a significant change in the amount of unrecognized tax benefits over the next twelve months.

The Company is subject to tax in the U.S. federal jurisdiction as well as various state and foreign jurisdictions. The Company's federal, state and foreign income tax returns beginning in 2017 are subject to examination by tax authorities; however, no such examinations have taken place.

CARES Act & Consolidated Appropriations Act

On March 27, 2020, the CARES Act was enacted in response to the COVID-19 pandemic. The CARES Act, among other things, permits NOL carryovers and carrybacks to offset 100% of taxable income for taxable years beginning before 2021. In addition, the CARES Act allows NOLs incurred in 2018, 2019, and 2020 to be carried back to each of the five preceding taxable years to generate a refund of previously paid income taxes. Due to the Company's history of net operating losses, the CARES Act is not expected to have a material impact on the Company's financial statements.

In accordance with the Consolidated Appropriations Act, 2021 enacted on December 27, 2020, certain qualified expenses used with the funds of the PPP Loan are fully deductible for Federal income tax purposes. Forgiveness of the PPP loan is not considered taxable for Federal income tax purposes.

California NOL Suspension

On June 29, 2020, the State of California enacted Assembly Bill No. 85 ("AB 85") suspending California net operating loss utilization and imposing a cap on the amount of business incentive tax credits companies can utilize, effective for tax years 2020, 2021 and 2022. There was no material impact from the provisions of AB 85 in 2020.

11. Subsequent Events

The Company closed and terminated its Regulation A Offering effective March 28, 2021. As of April 30, 2021, the Company has completed the sale of 2,115,991 additional shares of common stock at $6.00 per share under its Regulation A Offering, for additional gross proceeds of approximately $12.7 million, since December 31, 2020. The Company has also received subscription agreements under the Offering for the purchase of up to 280,153 shares of common stock for an estimated $1.7 million, which are still in process as of April 30, 2021. In total, as of April 30, 2021, since the commencement of the Offering in March 2019, the Company has received commitments for the sale of 10,545,473 shares of common stock pursuant to the Offering for estimated total gross proceeds of $60.7 million (inclusive of both completed sales and subscriptions in process).

As stated in Note 6, on February 18, 2021, the PPP Loan principal and accrued interest were forgiven by the lender.

As stated in Note 3, the Company paid $2,319,771 in outstanding principal and $161,415 in outstanding accrued interest on the Related Party Loan in the period after December 31, 2020. In addition, the remaining unpaid principal balance of $500,000 was converted into 250,000 shares of EHP common stock at a conversion price of $2.00 per share, and there are currently no outstanding obligations to EHS under the Related Party Loan.

Item 8. Exhibits

Exhibit No.	Description
EX1K-2.1#	Certificate of Incorporation of Emerald Health Pharmaceuticals Inc.
EX1K-2.2#	Certificate of Amendment of the Certificate of Incorporation of Emerald Health Pharmaceuticals Inc.
EX1K-2.3†	Amended and Restated Bylaws of Emerald Health Pharmaceuticals Inc.
EX1K-3.1+	Loan Agreement dated September 1, 2017 between the Company and Emerald Health Sciences Inc.
EX1K-3.2+	Amendment Agreement dated January 26, 2018 between the Company and Emerald Health Sciences Inc.
EX1K-3.3^	Amendment Agreement No. 2 dated November 15, 2019 between the Company and Emerald Health Sciences Inc.
EX1K-4.1€	Form of Subscription Agreement
EX1K-6.1+‡	Intellectual Property Transfer Agreement dated June 15, 2017, between the Company and VivaCell Biotechnology España S.L.
EX1K-6.2+‡	Collaborative Research Agreement dated June 15, 2017, between the Company and VivaCell Biotechnology España S.L.
EX1K-6.3+	Consulting Agreement dated June 15, 2017, between the Company and University of Cordoba, Eduardo Muñoz Blanco
EX1K-6.4+	Form of Indemnification Agreement for officers and directors
EX1K-6.5*	2018 Equity Incentive Plan (as Amended and Restated)
EX1K-6.6α	Form of Executive Employment Agreement
EX1K-6.7α	Broker-Dealer Agreement Dated June 20, 2019 between the Company and The Dalmore Group, LLC
EX1K-6.8^	Board Observer Agreement Dated November 15, 2019 between the Company and Emerald Health Sciences Inc.
EX1K-6.9∞	Independent Contractor Services Agreement Dated December 1, 2019 between the Company and Dr. Avtar Dhillon
EX1K-6.10±	Loan Agreement between the Company and Rocking Horse Nominee Pty Ltd
EX1K-6.11π	Consulting Agreement dated June 3, 2020 between the Company and Sahil Beri
EX1K-6.12π	Consulting Agreement dated June 15, 2020 between the Company and William Dreyer
EX1K-6.13€	Lease Agreement dated April 18, 2019
EX1K-6.14β	First Amendment to Lease Agreement dated July 14, 2019
EX1K-6.15β	Amendment No. 2 to Emerald Health Pharmaceuticals Inc. 2018 Equity Incentive Plan
EX1K-6.16β	Consulting Agreement dated July 31, 2020 between the Company and Beri Holdings
EX1K-6.17€	Consulting Agreement dated August 1, 2020 between the Company and Mark Wegenka
EX1K- 8.1±	Escrow Services Agreement dated July 26, 2019 between the Company and Prime Trust, LLC
EX1K-11.1†	Consent of Deloitte & Touche LLP

† Filed herewith.

Filed as an exhibit to the Emerald Health Pharmaceuticals Inc. Regulation A Offering Statement on Form 1-A filed with the United States Securities and Exchange Commission (Commission) (Commission File No. 024-10810) on January 29, 2018 and incorporated herein by reference.

+ Filed as an exhibit to the Emerald Health Pharmaceuticals Inc. Regulation A Offering Statement on Form 1-A filed with the United States Securities and Exchange Commission (Commission) (Commission File No. 024-10810) on March 5, 2018, and incorporated herein by reference.

* Filed as an exhibit to the Emerald Health Pharmaceuticals Inc. Post-Qualification Offering Circular Amendment No. 1 filed with the United States Securities and Exchange Commission (Commission) (Commission File No. 024-10810) on March 29, 2019 and incorporated herein by reference.

α Filed as an exhibit to the Emerald Health Pharmaceuticals Inc. Semiannual Report on Form 1-SA filed with the United States Securities and Exchange Commission (Commission) (Commission File No. 024-10810) on September 30, 2019 and incorporated herein by reference.

^ Filed as an exhibit to the Emerald Health Pharmaceuticals Inc. Current Report on Form 1-U filed with the United States Securities and Exchange Commission on November 21, 2019 and incorporated herein by reference.

∞ Filed as an exhibit to the Emerald Health Pharmaceuticals Inc. Current Report on Form 1-U filed with the United States Securities and Exchange Commission on December 9, 2019 and incorporated herein by reference.

± Filed as an exhibit to the Emerald Health Pharmaceuticals Inc. Annual Report on Form 1-K filed with the SEC on April 28, 2020 and incorporated herein by reference.

π Filed as an exhibit to the Emerald Health Pharmaceuticals Inc. Regulation A Post-Qualification Offering Circular Amendment on Form 1-A filed with the SEC (Commission File No. 024-10810) on July 10, 2020 and incorporated herein by reference.

β Filed as an exhibit to the Emerald Health Pharmaceuticals Inc. Semiannual Report on Form 1-SA filed with the SEC on September 28, 2020 and incorporated herein by reference.

€ Filed as an exhibit to the Emerald Health Pharmaceuticals Inc. Regulation A Post-Qualification Offering Circular Amendment on Form 1-A filed with the SEC (Commission File No. 024-10810) on November 6, 2020 and incorporated herein by reference

‡ Portions of this exhibit containing confidential information have been omitted pursuant to a request for confidential treatment filed with the SEC pursuant to Rule 406 under the Securities Act. Confidential information has been omitted from the exhibit in places marked "[*****]" and has been filed separately with the SEC.

SIGNATURES

Pursuant to the requirements of Regulation A, the issuer had duly caused this Annual Report on Form 1-K to be signed on its behalf by the undersigned, thereunto duly authorized on April 30, 2021.

Emerald Health Pharmaceuticals Inc.

By: */s/ James M. DeMesa*
Name: James M. DeMesa, M.D.
Title: President & Chief Executive Officer

Pursuant to the requirements of Regulation A, this report has been signed below by the following persons on behalf of the issuer and in the capacities and on the dates indicated.

/s/ James M. DeMesa Date: April 30, 2021
Name: James M. DeMesa, M.D.
Title: President & Chief Executive Officer
(Principal Executive Officer)

/s/ Lisa Sanford Date: April 30, 2021
Name: Lisa Sanford
Title: Chief Financial Officer
(Principal Financial Officer and
Principal Accounting Officer)

/s/ James L. Heppell Date: April 30, 2021
Name: James L. Heppell, LLB
Title: Director and Chairman of the Board

/s/ Gaetano A. Morello Date: April 30, 2021
Name: Gaetano A. Morello, ND
Title: Director

/s/ Punit S. Dhillon Date: April 30, 2021
Name: Punit S. Dhillon
Title: Director