



MOUNTAIN VALLEY MD HOLDINGS INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS (QUARTERLY HIGHLIGHTS)

FOR THE NINE-MONTH PERIOD ENDED DECEMBER 31, 2020

CAUTIONARY STATEMENT ON FORWARD-LOOKING INFORMATION

The information presented in this Management's Discussion and Analysis – Quarterly Highlights ("MD&A") contains statements with respect to Mountain Valley MD Holdings Inc. (the "Company") concerning future results, future performance, intentions, objectives, plans and expectations that are, or may be deemed to be, "forward-looking statements" or "forward-looking information" (collectively "forward-looking statements") as those terms are used in securities laws applicable in Canada

These forward-looking statements include, but are not limited to, factors that may affect our ability to achieve our objectives and to successfully develop and commercialize our assets, including but not limited to our intellectual property assets. Such forward-looking statements, include but are not limited to those with respect to: the ability to advance its business plan effectively during the COVID-19 pandemic; the ability to keep pace with developments in similar industries and remain competitive; the reliance on third party suppliers; the ability to protect and enforce intellectual property and related rights; the ability to manage human resources effectively and the retention of skilled personnel; the ability to manage key suppliers effectively; the ability to test and implement its proprietary technologies, the variety of health and wellness applications, and impact thereof; the ability to navigate regulatory requirements and regimes in a timely and cost-effective manner or at all; and events described in this MD&A, which involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements.

The reader should verify all claims and do their own due diligence before investing in any securities mentioned or implied in this document. Investing in securities is speculative and carries a high degree of risk.

These statements are based on management's current expectations and are subject to a number of uncertainties and risks that could cause actual results to differ materially from those described in the forward-looking statements. Forward-looking statements are based on management's current plans, estimates, projections, beliefs, and opinions and we do not undertake any obligation to update forward-looking statements should the assumptions related to these plans, estimates, projections, beliefs and opinions change, except as required by law.

MANAGEMENTS DISCUSSION AND ANALYSIS – QUARTERLY HIGHLIGHTS

March 1, 2021

This Management Discussion and Analysis – Quarterly Highlights (“MD&A”) have been prepared in compliance with the requirements of section 2.2.1 of Form 51-102F1 – *Management Discussion and Analysis*, in accordance with National Instrument 51-102 – *Continuous Disclosure Obligations*. is intended to help the reader understand the Company’s financial statements. The statements are provided for the purpose of reviewing the interim financial statements for the three and nine months ended December 31, 2020 and comparing results to the previous period. The MD&A should be read in conjunction with the Company’s audited consolidated financial statements and corresponding notes for the fiscal years ending March 31, 2020 and 2019 and the unaudited interim consolidated financial statements for the three and nine months ended December 31, 2020. The results for the three and nine month periods ended December 31, 2020 are not necessarily indicative of the results that may be expected for any future period. Information contained herein is presented as at March 1, 2021 unless otherwise indicated.

The financial statements are prepared in accordance with International Financial Reporting Standards (“IFRS”) and all monetary amounts are expressed in Canadian dollars. The following comments may contain management estimates of anticipated future trends, activities, or results. These are not a guarantee of future performance, since actual results could change based on other factors and variables beyond management control.

The management of the Company is responsible for the preparation and integrity of the financial statements, including the maintenance of appropriate information systems, procedures, and internal controls and to ensure that information used internally or disclosed externally, including the financial statements and MD&A, is complete and reliable. The board of directors of the Company follow recommended corporate governance guidelines for public companies to ensure transparency and accountability to shareholders.

The audit committee of the Company meets with management quarterly to review the financial statements including the MD&A and to discuss other financial, operating and internal control matters.

The reader is encouraged to review the Company’s statutory filings on www.sedar.com.

DESCRIPTION OF BUSINESS

MVMD is a publicly traded health and wellness company engaged, through its wholly owned subsidiary Mountain Valley MD Inc. (“MVMD OpCo”), in building a world-class organization centered around the implementation of its patented Quicksome™ oral drug formulation and delivery technologies, its patent-pending Quicksol™ solubility formulation technology, and its patent-pending dose sparing adjuvant with the intention of licensing to global pharmaceutical, vaccine and nutraceutical third parties.

The Company's patented Quicksome™ desiccation technology utilizes advanced liposomes and other stabilizing molecules to encapsulate and formulate active ingredients into highly efficient product formats that are consumed orally. The result is a new generation of product formulations that, when successfully commercialized, would be capable of delivering vaccines, drugs and nutraceuticals into the body faster, with greater impact, efficiency and accuracy. Management believes partners who license the Company's technology would have unprecedented market advantages, including significant production and distribution efficiencies, stronger product value propositions, dealing with generic product and counterfeit pressures, softening the impact of patent cliffs, and reducing overall product costs while increasing product margins.

The Company's patent-pending Quicksol™ technology covers all highly solubilized macrocyclic lactones that, when successfully commercialized, could be effectively applied in multiple viral applications that could positively impact human and animal health globally. When successfully implemented, the Quicksol™ technology is believed to improve the effectiveness and application options for numerous drugs on the market while also supporting the invention of novel drugs that are not limited based on their solubility.

The Company's Patent-Pending Porous Aluminum Nanostructure Adjuvant (“PANA”) has high surface area for vaccine-antigen binding that the Company believes will provide dose sparing advantages with long-term stability in aqueous media, and greater stability in harsh environments. When successfully implemented, the PANA technology is believed to dose sparing advantages for numerous vaccines on the market.

MVMD OpCo has two wholly owned subsidiaries: Colverde MD S.A.S, a corporation incorporated under the laws of Colombia on February 20, 2018; and MVMD (Colombia) Inc. (“MVMDC”), a corporation incorporated under the laws of the province of Ontario on April 11, 2019.

The address of the Company's registered and records office is 610 – 475 West Georgia Street, Vancouver, BC V6B 4M9 and the principal place of business and head office is 260 Edgeley Boulevard, Unit 4, Concord, Ontario, Canada, L4K 3Y4

OVERALL PERFORMANCE AND BUSINESS OUTLOOK

The Company continued to focus its efforts on the development of its delivery, solubility and adjuvant technologies across a variety of drug, vaccine and nutraceutical molecules while advancing preparation and discussions for the licensing of the technologies to third parties.

In addition, the Company entered into a binding letter of intent regarding the licence of its proprietary Quicksome™ rapid dissolve technology.

Technology and Business Advancement

On July 31, 2020, the Company announced its results from a U.S. Food and Drug Administration (FDA) Polio Vaccine Lab evaluation that confirmed the Company had successfully preserved Polio D Antigen in its proprietary Quicksome™ rapid dissolve oral technology. Using the Company's proprietary 3-step low temperature Quicksome™ manufacturing process, the Company was able to stabilize and preserve Polio D Antigen in a sublingual application at levels comparable to traditional commercial vaccines,

however without the need for cold chain preservation (refrigeration) to prevent degradation. The Company is working with the FDA's Polio Lab to conduct advanced cold chain stability tests on the Inactivated Poliovirus Vaccine (IPV) embedded with the Quicksome™ technology. Cold chain tests are planned across the World Health Organization's (WHO) guideline temperature requirements for all three defined vaccine management categories including traditional cold chain between +2°C and +8°C, Extended Controlled Temperature Conditions (ECTC) above +8°C for a specified number of days to support vaccine distribution, and Controlled Temperature Chain (CTC) where the vaccine must be able to tolerate ambient temperatures of at least +40°C for a minimum of 3 days.

Cold chain is a temperature-controlled supply chain that prescribes necessary conditions during the transport, storage, and handling of vaccines to preserve a temperature range between +2°C and +8°C from the time the vaccine is produced until it is administered.

The Company believes its proprietary Quicksome™ manufacturing technology will quickly enable partners to commence large-scale production of numerous vaccines and proteins at temperatures that maintain and preserve their biological action, which would allow for long term stability and ease of global distribution, appropriate for pandemic preparedness, stockpiling with other administration and distribution advantages. The Company also believes this technology would allow the development of work to achieve needleless administration when necessary or required by its partners, with no pain, reducing risk of infection and common site injection reactions, as well as reducing the complexities associated with medically supervised patient injections.

On January 20, 2021, the Company announced the filing of a POROUS ALUMINUM NANO-STRUCTURED ADJUVANT ("PANA") patent to protect the Company's advanced work on vaccine dose sparing. The PANA patent includes a novel adjuvant that was invented with the objective to be fully compatible with current vaccine manufacturing methods, a critical element of the Company's strategy to introduce technologies that offer simplicity for partner adoption and enable cost effective solutions that can be quickly brought to market.

Adjuvants are well known pharmacological or immunological agents that improve the immune response of a vaccine. Adjuvants are added to a vaccine to boost the immune response to produce more antibodies and longer-lasting immunity, thus minimizing the dose of antigen needed.

The Company's newly invented PANA process produces a stable nano-particulate adjuvant that does not agglomerate during repeated freeze-thaw cycles, avoiding negative effects on the vaccine strength, and requires only sterile filtration versus damaging high temperature autoclaving processes (sterilization method that uses high-pressure steam) associated with micro-particulate gel-based adjuvants.

Long standing aluminum adjuvants found in the marketplace today have proven dose-sparing characteristics with vaccines such as Inactivated Polio Vaccine ("IPV") but have numerous disadvantages in both manufacturing and stability, thus limiting their relative usefulness. The Company believes its patented PANA process overcomes the limitations of traditional aluminum-based adjuvants while significantly enhancing dose sparing stability and ease of use.

The Company has worked with its key vaccinology advisor, Dr. John Clements, PHD, Emeritus Professor of Microbiology and Immunology at Tulane University School of Medicine, to design an adjuvant IPV study to determine the exact dose sparing achievement of its patented approach. Dr. Clements has over 35 years of experience in vaccine, immunology and infectious diseases research and development.

On February 2, 2021, the Company announced that it had contracted Tulane University School of Medicine in New Orleans, Louisiana, United States, as its Contract Research Organization ("CRO") to conduct its adjuvant Inactivated Polio Vaccine ("IPV") study, commencing in February, 2021.

The study will compare existing Alhydrogel adjuvant to the Company's recently invented stable nano-particulate adjuvant by both intramuscular injection and intradermal injection immunization, evaluating the antibody responses following vaccination with fractional doses of IPV comparing delivery types with

IPV alone or adjuvanted.

The study is anticipated to take sixty days and will be led by Dr. Elizabeth Norton, PhD, Assistant Professor, Department of Microbiology and Immunology at Tulane University School of Medicine. Dr. Norton's research focus is mucosal immunity and immunologic mechanisms of vaccination, with a particular concentration on how infection or vaccination can target specific cell populations involved in antigen transport and processing, enhance Th17 cell development and induce IgA production.

Dr. Norton was supported by the Company's key scientific advisor, Dr. John Clements in the development and design of the adjuvant IPV study that would effectively determine the exact dose sparing achievement of its patent-pending approach.

The Company has developed porous aluminum nanostructures for use as adjuvants in vaccines against various infectious diseases, including polio. These porous aluminum nanostructures have a high surface area for vaccine-antigen binding, which the Company believes will provide long-term stability in aqueous media and promote greater stability in harsh environments.

Polio is a highly infectious disease with no reservoir outside of its human host. Polio virus spreads through contaminated food and water and person-to-person contact, infecting susceptible populations where intestinal virus replication and shedding occur over a period of weeks.

On August 6, 2020, the Company announced the commencement of two pre-clinical trials designed to demonstrate the efficacy of its proprietary Quicksome™ technology in overcoming key absorption limitations of the oral drug Ivermectin plus provide data on the pharmacokinetics of the Quicksome™ oral sublingual technology. In preparation for these clinical trials, the Company has successfully complexed ivermectin into its proprietary Quicksome™ rapid dissolve oral technology.

Ivermectin is an antiparasitic drug that is administered to billions of livestock and companion animals annually and to humans to treat various parasitic infestations including development of broader applications for the control of malaria. During a review of interim reporting of progress in the ivermectin pre-clinical trial, it was determined that enhanced ivermectin solubility could have a significant impact on the efficacy of the Quicksome™ technology and internal lab work was completed that led to a new solubility invention and the related patent filings. The Company anticipates pre-clinical results for both pre-clinical trials in December.

Management believes there are many additional drugs whose absorption profiles can be vastly improved through the Company's Quicksome™ technology. The Company's objective is to target the multiple billions of dollars of drugs currently in use and approved globally and work with pharmaceutical partners to reformulate for improved efficacy and onset with the Quicksome™ technology.

On August 25, 2020, the Company announced the appointment of Dr. John D. Clements to its Advisory Board. Dr. John Clements is Emeritus Professor of Microbiology and Immunology at Tulane University School of Medicine. With over 35 years of experience in vaccine, immunology and infectious diseases research and development, Dr. Clements brings invaluable expertise and advisory capacity to help advance Mountain Valley MD's ongoing Quicksome™ sublingual polio vaccine development activities.

On October 2, 2020, the Company announced the successful dosing (administration) of its Quicksome™ rapid dissolve oral technology and its microparticle technology to subjects in its third-party pre-clinical trial for the drug ivermectin.

The Company had achieved the successful complexation of ivermectin into a cyclodextrin and its inclusion in the liposomal technology that is the basis of the Company's proprietary Quicksome™ technology. Ivermectin was then fabricated in two dosage forms: an enteric coated microparticle and a mucoadhesive oral form for sublingual dosing. This enabled the formal scheduling and commencement of the pre-clinical ivermectin trial.

The successful ivermectin dosing was completed without the use of needles on canines for both of the foregoing Quicksome™ technology applications with no adverse events.

Billions of worldwide ivermectin doses annually are utilized in developed countries to protect most domestic and husbandry animals from parasites including poultry, pigs, cattle and horses¹. The Company believes that the potential cost reductions and ease of administration of a microencapsulated form of ivermectin in animal feed supply offers licensing partners with significant benefits in the competitive generic drug space.

The Company believes that successful ivermectin dosing in the pre-clinical trial environment demonstrates the ability for the Quicksome™ platform to be adapted to commercially viable delivery products for both veterinary and human medical applications.

On November 11, 2020, the Company announced that it confirmed the ability to make the drug ivermectin water-soluble without the use of organic solvents, which may enable the drug to be dosed by injection or inhalation in humans. The Company believes the implications of this achievement will allow for significantly improved dosing by injection, orally consumed enteric coated capsules, and/or inhalation and, based on a recent ICON² study (the "ICON Study"), may offer a potentially significant therapeutic in the fight against COVID-19. The ICON Study confirmed that the use of ivermectin is associated with a lower mortality in hospitalized COVID-19 patients despite being limited to an orally dosed tablet with poor bioavailability, an issue that the Company believes would be directly addressed with the Company's discovery.

Ivermectin is a well-documented anti parasitic drug being used globally in both veterinary and human medicine and its uses are being broadened to include such applications as an anti-malarial. Billions of world-wide doses annually are utilized in underdeveloped countries to protect most domestic and husbandry animals from parasites including poultry, pigs, cattle and horses. Ivermectin has documented limitations due to its poor solubility in water (.005 mg/ml), thereby requiring the use of toxic organic solvents such as glycerol formal and ethanol, eliminating the possibility of FDA approval for a human injectable form or a more bio-available oral solution.

The Company's scientists, while working on improving the inclusion of ivermectin into the Company's patented Quicksome™ delivery system, made the discovery that they were able to make ivermectin highly water-soluble without the use of organic solvents, improving its water solubility by nearly 5,000 times³. The Company believes that this result would eliminate the main limiter of the drug ivermectin to achieve stronger pharmacokinetics and better overall efficacy.

Further, the new discovery uses only excipients that are currently approved by the US Food and Drug Administration (FDA). As the Company's strategy is to license its intellectual property to global pharmaceutical, vaccine and nutraceutical third parties, the Company believes this discovery provides additional advantages to potential licensees as it may enable them to obtain FDA approvals more quickly based on there being fewer approval steps required for immediate applications in human and animal dosing.

According to The National Center for Biotechnology Information abstract dated October 7, 2020 (Ivermectin: an award-winning drug with expected antiviral activity against COVID-19⁴), the potential for ivermectin to be an antiviral agent for COVID-19 and other emerging viral diseases is based on the ability to overcome its property of poor water solubility and consequential low oral bioavailability. Appropriate

¹ Ivermectin, 'Wonder drug' from Japan (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3043740/>)

² ICON - Use of Ivermectin Is Associated With Lower Mortality in Hospitalized Patients With Coronavirus Disease – [https://journal.chestnet.org/article/S0012-3692\(20\)34898-4/fulltext](https://journal.chestnet.org/article/S0012-3692(20)34898-4/fulltext)

³ The Company had previously engaged the services of a third-party preclinical contract research organization ("CRO") in connection with its Quicksome™ technology. The CRO confirmed the solubility through a preliminary evaluation.

⁴ October 7, 2020 - Ivermectin: an award-winning drug with expected antiviral activity against COVID-19 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7539925/>

drug formulations must address the poor water-solubility of ivermectin and the difficulty in delivering the drug to desired target areas, notably the pulmonary environment.

According to Fior Market Research's (FMR) Global Ivermectin Medication Market Insights research report⁴, the COVID-19 virus has been found to impact the lungs of patients directly and cause inflammation to several organs. Ivermectin medication has been used for treatment in various viruses such as RNA, Influenza A, Zika Virus, dengue, yellow fever, equine herpesvirus, new castle and others, which had similar symptoms on the human body as that of COVID-19. It has antiviral effects, which provides relief to slow down the effect of symptoms on the body. With several studies and research conducted on the potential contribution of ivermectin, it has been termed as an inhibitor of the SARS-COV-2 virus. The FRM report confirms ivermectin is a potential drug for the treatment of viruses, as only a single dose of it affects a 5000-fold reduction of viral RNA.

Additionally, FRM reports⁵ that a recent study has revealed that the use of ivermectin collectively with doxycycline effects the entry of viral in the body and clears a load of the virus by targeting the functional proteins. In the United States and certain other countries, an apparent high success rate of the patients who were given ivermectin medication was found. The recovery duration was also found to be shortened in some cases, along with relief in symptoms.

The Company filed a patent application to cover all highly solubilized macrocyclic lactones, including ivermectin and selamectin, which have also been shown to be effective in the treatment of tuberculosis even with limited solubility. The Company believes its solubility technology can dramatically enhance the efficacy of both inhaled and injected selamectin or ivermectin providing a novel effective therapeutic for tuberculosis. According to the World Health Organization⁶, tuberculosis is one of the top 10 causes of death and the leading cause from a single infectious agent globally.

On December 10, 2021, the Company announced that it had successfully completed its initial safety pre-clinical validation of its solubilized Ivermectin technology. The trial was conducted to demonstrate the safety and efficacy of the Company's recent invention which enables Ivermectin (among other drugs) to become water-soluble without the use of harmful organic solvents, improving its water solubility by nearly 5,000 times. The Company had previously engaged the services of a third-party preclinical contract research organization ("CRO") in connection with its Quicksome™ technology. The CRO confirmed the solubility through a preliminary evaluation.

The pre-clinical canine trial was conducted by the CRO and tested the solubilized Ivermectin via both an intramuscular injection and applied to rapid dissolve oral technology with the Company's patented Quicksome™ desiccated liposome technology compared to existing oral and subcutaneous injection solutions. The results demonstrated a significant improvement in the pharmacokinetic performance of the soluble ivermectin technology with no adverse side effects as described below.

Key findings:

- The Company's solubility technology delivered 800% increase in bio availability through intramuscular (IM) injection and 500% increase in bio availability through sublingual technology compared to oral tablets.
- The Company's IM injection reaches TMAX (the time to reach the maximum concentration of Ivermectin in the body) at 15 minutes compared to current commercial oral and subcutaneous forms which take between 6 and 36 hours and is well documented.
- The Company's sublingual technology had a TMAX of 1 hour, a 600% increase over oral tablets.
- Both the Company's applications showed zero decline in CMAX (peak serum concentration that a drug achieves) over the entire 6-hour period investigated which the Company considers a very favourable indication over oral and subcutaneous forms.

⁵ Fior Market Research - Global Ivermectin Medication Market Insights research report
www.fiormarkets.com

⁶ WHO – Tuberculosis Fact Sheet <https://www.who.int/news-room/fact-sheets/detail/tuberculosis>

Both the Company's applications show minimal pharmacokinetic variability, with IM injection at zero percent variability and sublingual technology at 5% variability compared to 40% variability for oral tablets. Variability contributes to the potential for adverse effects or not achieving the required therapeutic index. The Company's solubility technology applied to the Ivermectin drug is the only form in the world that uses strictly excipients that are currently approved by the US Food and Drug Administration (FDA), making it a leading candidate for human injection and sublingual applications as well as significantly broader husbandry and companion animal treatments based on its low viscosity.

The Company proceeded immediately with an extended trial in an effort to document the relative half-life drug data over a longer period of time. As previously reported, the Company's patent application covers all highly solubilized macrocyclic lactones, including Ivermectin and Selamectin, which have also been shown to be effective in the treatment of tuberculosis even with limited solubility. The Company believes its solubility technology can dramatically enhance the efficacy of both inhaled and injected Selamectin or Ivermectin providing a novel effective therapeutic for tuberculosis.

On December 24, 2020, the Company announced that it had filed for an accelerated review of its macrocyclic lactone solubilization patent with the United States Patent and Trademark Office ("USPTO").

To support the accelerated patent examination request, the Company had provided the USPTO with new formulation analyses of different diluted concentrations of its Quicksol™ Ivermectin in solution, data that the Company had fast-tracked for completion and validation by a third-party CRO.

The Company's solubility technology applied to the Ivermectin drug is the only form in the world that uses strictly excipients that are currently approved by the US Food and Drug Administration (FDA), making it a leading candidate for human injection and sublingual applications as well as significantly broader husbandry and companion animal treatments based on its low viscosity.

The Company has been closely monitoring the global studies and reports that demonstrate the efficacy of the drug Ivermectin as a therapeutic for COVID-19, including the ongoing work from the Front Line COVID-19 Critical Care Alliance ("FLCCC Alliance")⁷ and its recent publication outlining the evidence base supporting the efficacy of Ivermectin as a therapeutic to fight COVID-19, including data from 7,825 patients across 24 trials. Additionally, according to a meta-analysis recently performed by an independent research consortium, it was calculated that the chances that Ivermectin is ineffective in COVID-19 to be 1 in 67 million⁸.

The Company also notes recent advancements in Belize⁹, where the Ministry of Health and Wellness formally approved Ivermectin as a prescribed treatment option for persons with COVID-19. According to the Acting Director of Health Services, Dr Melissa Diaz-Musa, Belize's medical response team along with the Ministry of Health extensively reviewed supporting research on Ivermectin and its use in protocols in other countries and found significant evidence that Ivermectin has been beneficial in reducing viral replication and helping with prophylaxis against COVID-19.

License Letter of Intent:

On November 25, 2020, the Company announced that the Company had entered into a multi-prong strategic agreement with Circadian Wellness Corp. ("Circadian"), a privately held Ontario corporation that is focused on the rapidly emerging global mushroom space.

The framework included a binding letter of intent (the "LOI") and \$250,000 CAD advance payment to the

⁷ One Page Summary of the Clinical Trials Evidence for Ivermectin in COVID-19
<https://covid19criticalcare.com/wp-content/uploads/2020/12/One-Page-Summary-of-the-Clinical-Trials-Evidence-for-Ivermectin-in-COVID-19.pdf>

⁸ Ivermectin is Effective for COVID-19: Meta Analysis of 26 Studies (<https://ivmmeta.com/>)

⁹ Ministry of Health and Wellness approves Ivermectin as a COVID-19 Treatment
<https://lovefm.com/ministry-of-health-and-wellness-approves-ivermectin-as-a-covid-19-treatment/>

Company to enter into a commercial licence agreement based on applying the Company's Quicksome™ technology to mushroom nutraceutical products, and a share purchase and exchange agreement (the "SPA") to sell its wholly owned subsidiary, Mountain Valley Medicinals Inc. ("MVM") and its related assets which include the company's property on Vancouver Island in British Columbia, Canada (the "MVM Property"), for the amount of \$1,000,000 CAD, made up of cash and a 9% equity stake in Circadian.

For the past several months, the Company had been working closely with Circadian on proprietary formulations for mushroom-infused products that achieved a significant increase in overall molecule efficacy with the Company's Quicksome™ desiccated liposome technology applied across a variety of rapid dissolve oral products. Circadian plans on bringing a broad line of naturally derived mushroom products to the global marketplace, with many of the extracts coming from the old growth forests found on the MVM Property.

To support the MVM Property sale and related investment in Circadian, the Company contracted the International Society of Arboriculture and BC Forest Safety Council certified VI Tree Service to conduct an audit of the property ecosystem, including an extensive cataloguing of the numerous rare Douglas Fir trees located throughout the property. Douglas Fir trees growing in the unique micro-climate on Vancouver Island are a known host for Agarikon mushroom which may be the longest living mushroom in the world* and is commonly associated with significant anti-viral properties. Circadian plans on inoculating the property with thousands of mushroom spores across numerous species as the foundation for its naturally derived mushroom health and wellness products, while planning for the property to become the cornerstone of a wellness retreat vision to capitalize on the land's unique zoning.

Circadian is a privately held Ontario corporation in the business of mushroom cultivation, extraction, clinical research and development, and end-user consumer health and wellness products and retreats (www.circadianwellness.com).

The LOI sets out the material terms and conditions of the licence agreement (the "Licence Agreement") to be entered into with Circadian, including the payment of the Advance. The Company is in the process of completing the Licence Agreement as at the date of this MD&A.

Intellectual Property:

The Company's Quicksome™ technology is protected by its principal process patents and the ongoing formulation patents as new molecules and products are developed. The Company's recent Quicksol™ solubility technology, encompassing all highly solubilized macrocyclic lactones, and its PANA dose sparing adjuvant has also been filed for patent protection. The Company maintains 15 patents in its patent portfolio, plus 12 extensions, and anticipates ongoing filings to continue to protect its intellectual property which it believes is the core of its value proposition for future licensing agreements. One of the principal patent applications, titled *Preparation of Desiccated Liposomes for Use in Compressible Delivery Systems*, has been renewed recently for an additional four years.

Additionally, on January 14, 2021, the Company confirmed it received approval from the Canadian Intellectual Property Office for the patent filing around its Quicksome™ technology. The patent approval is the first for MVMD in the Canadian marketplace to pass formal allowance stage, formally protecting the process in Canada for Preparation of Desiccated Liposomes for Use in Compressible Delivery Systems.

CannaBloom™:

The Company entered into a supply and licence agreement (the "AR Agreement") with Agrogen Inc. ("Agrogen"), a private Ontario corporation, on August 7, 2020. Agrogen's Nano Max 1000 technology is 100 percent organic and applied to agricultural crops to increase plant yields by activating the plants' "anti-stress defense mechanisms" at the cellular level, without the actual stress factor. According to studies conducted by Agrogen, treated plants grow deeper roots and open up their foliage to optimize the effect of photosynthesis, thus increasing growth hormones, plant efficiency for water use and nutrients, and increasing overall resistance to diseases and stressed climate conditions. Pursuant to the terms of the AR Agreement, Agrogen will manufacture all CannaBloom™ products to

the specifications outlined by the Company across a variety of agricultural crops for global distribution, including providing the Nano Max 1000 technology exclusively for a unique organic formulation for hemp and cannabis crops.

The Company worked with Agroresults to complete the necessary product registration requirements as of early February and the Company is finalizing plans to commence sales of CannaBloom™ in March, 2021 coinciding with the finalization of packaging, sales collateral and the launch of the e-commerce website.

The Company believes CannaBloom™ presents a significant opportunity given the dramatically changing global agricultural landscape, where population growth is driving need for more agricultural output while also limiting available farmlands due to urban sprawl.

Trends and Risks; COVID 19

The most significant trends and uncertainties which management expects could impact its business and financial condition continue to focus on the global spread of the COVID-19 virus. The current climate of uncertainty around the spread, speed and fatality of this virus globally is a potential threat to general business development activities, the raw material supply chain for the company's products, employee engagement on key business activities, and the overall capitalization of the business.

The health of the team has not to date been impacted and the Company has been able to continue to work effectively on many key business priorities.

Additionally, although deemed a more minor part of the overall company's health and wellness strategy and current activities, the cannabis vertical of the organization could be impacted beyond the COVID-19 implications referenced above through (i) the changing legal and regulatory regime which regulates the production, sale and export of cannabis and cannabis related products in each territory in which it intends to operate in some capacity, including but not limited to Canada and Colombia; (ii) the ability of companies who may receive funds from the sale of cannabis and cannabis related products to adequately track and legally transfer such funds; and (iii) the ability of companies to raise adequate capital to carry out their business objectives.

SUMMARY OF QUARTERLY RESULTS

The following is a summary of the period's March 31, 2019 to December 31, 2020, which have been derived from the financial statements of the Company. This summary should be read in conjunction with the March 31, 2020 audited consolidated financial statements and the interim consolidated statements of the Company for the same periods.

	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020
	\$	\$	\$	\$
Total assets	15,268,328	10,775,762	11,542,944	12,233,884
Working capital	5,940,234	174,462	971,529	1,425,903
Non-current financial liabilities	2,990,528	3,287,686	2,838,496	2,745,272
Revenue	\$Nil	\$Nil	\$Nil	\$Nil
Net income (loss)	(1,209,816)	(862,572)	(766,143)	(17,085,526)
Earnings (loss) per share	(0.00)	(0.00)	(0.00)	(0.08)
Weighted average common shares outstanding	252,831,065	249,117,933	246,010,266	208,414,518

	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	\$	\$	\$	\$
Total assets	17,050,541	4,493,760	15,200,743	11,488,283
Working capital	2,591,743	3,884,646	4,245,963	9,563,946
Non-current financial liabilities	\$Nil	\$Nil	\$Nil	\$Nil
Revenue	\$Nil	\$Nil	\$Nil	\$Nil
Net income (loss)	(882,752)	(510,384)	(365,952)	(868,026)
Earnings (loss) per share	(0.00)	(0.00)	(0.00)	(0.01)
Weighted average common shares outstanding	204,568,933	202,963,194	193,949,552	93,720,659

Significant variations in the most recent eight quarters are discussed below:

For the quarter ended December 31, 2020, the Company incurred a loss of \$1,024,858 which mainly consisted of the following:

- The Company incurred a \$455,195 loss from the sale of its wholly owned subsidiary Mountain Valley Medicinals Inc. See Note 12 in the financial statements.
- General and administrative decreased from \$873,862 for the quarter ended December 31, 2019 to \$431,115 for the quarter ended December 31, 2020 as the Company performed additional consulting and legal work related to ongoing acquisitions in its 3rd quarter of 2019.
- The Company has written down the equity investment in Winchester MD Inc., a UK Company, in the amount of \$184,958. Based on information that became available management deemed the Company to be impaired.

LIQUIDITY AND CAPITAL RESOURCES

As at December 31, 2020, the Company had cash of \$5,862,635 compared to \$3,441,430 as at December 31, 2019. The Company had working capital of \$5,940,234 as at December 31, 2020 compared to working capital of \$5,941,015 as at December 31, 2019. Working capital decreased as the Company paid consulting fees, legal fees, cash for acquisitions, and paid cash in relation to the reverse takeover transaction that was completed in February 2020 by way of three-cornered amalgamation.

The Company has total debt of \$2,990,528 at December 31, 2020 (\$1,018,116 as at December 31, 2019). Cash consumed by operating activities after changes in non-cash working capital during the year ended December 31, 2020, was \$1,506,926, compared to cash consumed of \$1,759,088 at December 31, 2019. The Company was paid out considerably more fees to consultants, lawyers and other professionals in relation to its acquisitions in the previous year.

For the nine months ended December 31, 2020, investing activities consumed cash of \$540,902 compared to the comparable period December 31, 2019, where investing activities consumed cash of \$5,464,957. The Company paid cash for its shares in investments and associates in the comparable quarter. The Company spent \$249,178 (2019: \$Nil) on its laboratory facilities and upgrades. In addition, the Company spent \$277,216 (2019: \$Nil), on its maintenance and development of its intellectual property.

For the nine months ended December 31, 2020, financing activities provided cash of \$6,168,900 from the exercise of options, exercise of warrants, sale of a subsidiary, and subscriptions received from a private placement compared to the comparable period December 31, 2019, where financing activities provided cash of \$895,367.

See the related three months ended, December 31, 2020 consolidated financial statements for a breakdown of share transactions during the quarter and comparable period.

At present, the Company's operations do not generate cash flow and its business plan and focus is on developing and licensing its intellectual property technology assets, including commencing sales under the CannaBloom™ brand. It is management's belief that the substantial progress made in the third quarter with pre-clinical proof of its technology and increased market awareness, combined with the current pre-clinical trials that are underway for both polio and ivermectin, and the cold chain tests being conducted by the FDA Polio Lab, will provide the Company with the data necessary to accelerate focused licensing discussions with leading drug and vaccine partners. In the nutraceutical space, the Company is in advanced product development cycles against contracted specifications and in current negotiations with distributors and more broadly, potential partners. Management anticipates revenues in the nutraceutical space in the first half of calendar year 2021. Additionally, the Company's CannaBloom™ product is anticipated to start generating initial revenues in the first half of the calendar year 2021.

OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements.

RELATED PARTY TRANSACTIONS

The aggregate value of transactions and outstanding balances relating to key management personnel and entities over which they have control or significant influence for the period ended December 31, 2020 and 2019:

Period ended December 31,	2020	2019
	\$	\$
Short-term benefits	337,500	444,893
Business development	-	59,200
	337,500	504,093

Included in accounts payable and accrued liabilities as at December 31, 2020, was \$Nil (2019: \$230,000) owing to related parties. The payment terms are similar to the payment terms of non-related party trade payables.

CRITICAL ACCOUNTING ESTIMATES

The preparation of the consolidated financial statements in conformity with IFRS requires the use of judgments and/or estimates that affect the amounts reported and disclosed in the consolidated financial statements and related notes. These judgments and estimates are based on management's best knowledge of the relevant facts and circumstances, having regard to previous experience, but actual results may differ materially from the amounts included in the consolidated financial statements. For significant estimates and judgements refer to the audited consolidated financial statements for the year ended March 31, 2020.

FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The fair value of the Company's financial assets and liabilities approximate the carrying amount due to their short-term nature and capacity for prompt liquidation.

Financial instruments measured at fair value are classified into one of three levels in the fair value hierarchy according to the relative reliability of inputs used to estimate the fair values. The three levels of the fair value hierarchy are:

Level 1 – Unadjusted quoted prices in active markets for identical assets and liabilities;

Level 2 – Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and

Level 3 – Inputs that are not based on observable market data.

The Company did not have any transfers between levels during the year.

As at December 31, 2020, the Company did not have any financial assets and liabilities which are measured at fair value, other than Equity Investments. There were no transfers between Level 1, 2 or 3 during the period ended December 31, 2020.

a) Credit risk

Credit risk is the risk that the financial benefits of contracts with a specific counterparty will be lost if a counterparty defaults on its obligations under the contract. Credit risk arises from cash, deposits and note receivable. The amount of credit risk related to cash and cash equivalents is considered insignificant as the Company's funds are held with a Schedule I bank.

The credit risk for both the cash and cash equivalent and note receivable is monitored quarterly, and any change is reflected as an adjustment through expected credit loss.

b) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due.

The Company manages liquidity risk through the management of its capital structure. The Company monitors and reviews current and future cash requirements and matches the maturity profile of financial assets and liabilities. As at December 31, 2020, the Company had cash of \$5,862,635 to meet current financial liabilities of \$414,139.

As at December 31, 2020, the Company's financial liabilities have contractual maturities as summarized below:

	Due within		
	0-12 months	1-2 years	2-3 years
	\$	\$	\$
Accounts payable and accrued liabilities	373,518	-	-
Lease liability	40,621	57,789	-
Total	414,139	57,789	-

As at December 31, 2019, the Company liabilities of \$1,018,116 are all due within twelve (12) months. (See Subsequent Events regarding the anticipated sale of the property subject to the mortgage and the resulting elimination of the mortgage payable.)

c) **Market risk**

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices and is comprised of currency risk, interest rate risk, and other price risk.

Sensitivity analysis

Based on management's knowledge and experience of the financial markets, the Company does not expect any material movements in the underlying market risk variables over a one-year period. However, a 10% change in the equity investments will translate to a \$279,355 gain or loss from equity investments.

OUTSTANDING SHARE DATA

The Company had the following common shares, preferred shares, stock options and warrants outstanding as at the date of this report:

Issued and Outstanding Common shares	317,877,208
Stock options	14,798,500
Warrants	20,420,044

SUBSEQUENT EVENTS

- a) Subsequent to the period end, pursuant to exercising of warrants, the Company issued 41,626,520 common shares for gross proceeds of approximately \$14,700,000.
- b) On January 26, 2021, the Company entered into an agreement to conduct its Bio Safety Level 4 lab study of COVID19 viral clearance in transgenic mice designed to prove the superiority of the Company's solubilized Ivermectin technology versus commercially available oral form in speed and efficacy of viral clearance.

- c) On February 16, 2021, the Company granted 2,625,000 stock options to officers, directors and consultants of the Company at an exercise price of \$2.04. The options vest in stages over a period of one year and expire in five years.
- d) On February 25, 2021, the Company entered into a commercial license agreement with a privately held Ontario corporation. The license agreement is based on applying MVMD's Quicksome™ technology to mushroom nutraceutical products in consideration of ongoing product royalties and an initial payment in the amount of \$250,000, made up of \$200,000 cash and \$50,000 of equity shares of the privately held corporation.

ADDITIONAL INFORMATION

Additional information concerning the Company and its operations is available on SEDAR at www.sedar.com.