



MOUNTAIN VALLEY MD HOLDINGS INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE YEAR ENDED MARCH 31, 2021

CAUTIONARY STATEMENT ON FORWARD-LOOKING INFORMATION

The information presented in this Management's Discussion and Analysis ("MD&A") contains statements with respect to Mountain Valley MD Holdings Inc. ("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 the Company's intellectual property assets. Such forward-looking statements include but are not limited to those with respect to: the ability to advance the Company's business plan effectively generally and in particular during the COVID-19 pandemic; the impact of short selling activity on the Company's ability to advance its objectives, attract and retain directors, officers, advisors and other personnel, and the ability to complete financing as and when need for general working capital and to satisfy the Company's objectives; 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.

The Company is not making any express or implied claims that its product(s) or intended product(s) has or have the ability to eliminate, cure or contain any virus, ailment or other medical condition, including but not limited to the COVID-19 (or SARS-2 Coronavirus).

MANAGEMENTS DISCUSSION AND ANALYSIS

July 28, 2021

This MD&A is intended to help the reader understand the Company's financial statements. The statements are provided for the purpose of reviewing the fourth quarter of fiscal 2021, as well as the 2021 fiscal year, 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, 2021 and 2020. Information contained herein is presented as at July 28, 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

The Company was incorporated in British Columbia under the laws of the Business Corporations Act on March 8, 2005. The Company was listed for trading on the TSX Venture Exchange (TSX.V) as a Capital Pool Company on September 18, 2006. The Company delisted from the TSX.V and began trading on the Canadian Securities Exchange (CSE) under the symbol “MAY.CN” on or about March 2, 2018. Following completion of a reverse takeover transaction completed on February 21, 2021 (and a resulting change of business), the Company began trading on March 2, 2020 and currently trades on the CSE under the symbol “MVMD.CN”.

The Company has one subsidiary, Mountain Valley MD Inc. Mountain Valley MD Inc. 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., 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 is a publicly traded health and wellness company engaged, through its wholly owned subsidiary Mountain Valley MD Inc, in building a world-class organization centered around the implementation and licensing of its key technologies to global pharmaceutical, vaccine and nutraceutical third parties:

- patented Quicksome™ oral drug formulation and delivery technologies,
- patented Quicksol™ solubility formulation technology, and
- patent-pending dose sparing adjuvant.

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, if successfully commercialized, could be capable of delivering vaccines, drugs and nutraceuticals into the body faster, with greater impact, efficiency and accuracy.

The Company’s patented Quicksol™ technology covers all highly solubilized macrocyclic lactones that, if successfully commercialized, could be effectively applied in multiple viral applications that could positively impact human and animal health globally.

The Company’s Patent-Pending Porous Aluminum Nanostructure Adjuvant (“PANA”) has high surface area for vaccine-antigen binding that the Company believes may provide dose sparing advantages with long-term stability in aqueous media, and greater stability in harsh environments.

Key Acquisition:

The Company's key acquisition has been the focus of the Company's business development and project pipeline (as further described below). On December 20, 2019, the Company entered into an intellectual property asset purchase agreement (the "IP Asset Purchase Agreement") with Smartek International LLC ("Smartek") to acquire its Quicksome™ IP portfolio of patents, trademarks and related intellectual property (the "Quicksome™ IP Assets"), which related to desiccated liposomes. On the closing date (February 10, 2020), the Quicksome™ IP Assets were sold, transferred and assigned to the Company, with a portion of the Quicksome™ IP Assets comprising the related intellectual property to be delivered at a later date (*delivery complete on March 9, 2020 and July 17, 2020 respectively*). The consideration comprised of \$575,344 and the issuance of 10,000,000 Class B Common shares. 2,400,000 in shares were issued as finder's fees in relation to this acquisition.

In addition, in connection with the IP Asset Purchase Agreement, the Company entered into a consulting agreement with Smartek, whereby Smartek provides product formulation development work with respect to the development of the Quicksome™ IP Assets.

Up to two years from signing the agreement (expiring December 20, 2021), Smartek will be entitled to receive additional cash bonus payments in the event of the delivery of a specified product (the "Specified Product"), plus the issuance of 2,500,000 warrants at the market price at the date of issuance in the event that the Company achieves gross revenues of CAD \$50,000,000 or greater arising directly from the Specified Product less direct, external costs. Additional cash bonus payments will be paid when other deliverables have been achieved. As at the date of this MD&A, these additional milestones have not been achieved.

Research and Development

The Company has focused 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.

Macrocyclic Lactone Solubilization

PROGRAM	TECH	MARKET	VALUE PROPOSITION					
			Significant improvement over current oral form ivermectin drug – waterless oral dissolve, dramatically quicker onset; zero decline over extended periods in the body, less variability, requires a fraction of the Ivermectin API, uses strictly excipients that are currently approved by the US Food and Drug Administration (FDA), leading candidate for human injection and sublingual applications, broader husbandry and companion animal applications based on low viscosity. Implications for COVID-19 viral clearance, prophylactic, and broader applications for the elimination of malaria and dengue.					
			2021				2022	
			Q1	Q2	Q3	Q4	Q1 - Q4	
	Macrocyclic Lactone Solubilization	Quicksome™ Quicksol™	Drug, Human Therapeutic, Animal Parasitic					
			STATUS					
	Formulation lab work on solubilization of Ivermectin		COMPLETED					
	Patent filing for macrocyclic lactone drugs. Accelerated application examination requested.		COMPLETED					
Ⓢ	Pre-clinical trials for solubilized rapid dissolve and intramuscular delivery		COMPLETED					
	API sourcing / supply contracting		COMPLETED					
Ⓢ	BSL-4 COVID-19 clearance trial		COMPLETED					
	Sourcing husbandry animal pre-clinical applications		COMPLETED					
	Conducting husbandry clinical trials: Cattle, Swine, Goat, and Poultry		IN PROGRESS					
	GMP production of solubilized ivermectin for rapid dissolve and intramuscular formats		IN PROGRESS					
	505(b)(2) pathway with the U.S. Food and Drug Administration (FDA)		IN PROGRESS					
	Human clearance trial		PENDING					
	Partnering licenses / ivermectin production evaluation		IN PROGRESS					
	Targeted first revenues		IN PROGRESS					

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.

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 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, especially those with severe pulmonary involvement, 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

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/). The ICON Study noted randomized controlled trials were needed to confirm the findings.

medicine and its uses are being broadened to include such potential 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 US Food and Drug Administration (“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 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.

The Company filed a trademark application for its solubilized ivermectin invention under the name Quicksol™, which as of June 24, 2021 has passed through the examination phase at the U.S. Trademark Office, and has been approved by the examining attorney. It is anticipated that the trademark Quicksol™ will be formally awarded after the “external” review process in the coming weeks, as at the date of this MD&A.

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 tuberculosis⁴ 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 Organization⁵, tuberculosis is one of the top 10 causes of death and the leading cause from a single infectious agent globally.

On December 10, 2020, 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.

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 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3553693/>

⁵ WHO – Tuberculosis Fact Sheet <https://www.who.int/news-room/fact-sheets/detail/tuberculosis>

- 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.

Both of 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.

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 is not making any express or implied claims that its technology or product has the ability to eliminate, treat or cure any medical ailments, conditions or diseases at this time.

Ivectosol™- BSL-4 Level Study

On January 27, 2021, the Company announced that it had executed an agreement to conduct its Bio Safety Level 4 ("BSL-4") lab study of COVID-19 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. The agreement was signed January 26, 2021.

There are less than thirty BSL-4 facilities in the world capable of performing this study and it is management's understanding that it is not unusual for projects to take up to three years to schedule. The Company was able to demonstrate the significance of its patented solubilized Ivermectin technology through its presentation of the superior pharmacokinetic data documented from two previously completed pre-clinical trials and was granted approval by the BSL-4 facility to commence this trial in late February 2021.

To management's knowledge, the BSL-4 study was the first of its kind conducted with human grade solubilized Ivermectin anywhere in the world and its design was led by the Company's key scientific advisor, Dr. John Clements. This was also the world's first to study to conduct in vitro replication on all three COVID-19 variants studied at the time. The study was conducted in a Bio Safety Level 4 facility where laboratories are designed for diagnostic work and research on easily acquired respiratory viruses that can often cause severe or fatal disease. To assess the Company's Ivectosol™ performance, transgenic mice were modified with human ACE2 receptors and then dosed by aerosolization with COVID-19. After five days, the subject mice were dosed with ascending therapeutic doses of Ivectosol™ as intramuscular injection.

On May 18, 2021, the Company announced that it had received the study results, as follows:

- A single dose of 2.5 milligrams per kilogram of Ivectosol™ was effective at interfering with viral replication and driving viral clearance of the B.1.1.7 COVID-19 variant.
- Tests done in vitro showed the same antiviral effect at 5uM Ivectosol™ concentration after 24 hours and again after 48 hours against all three COVID-19 variants tested - the original B.1.1.7 variant, the South African B.1.351 variant, and the P.1 Brazil variant.

The Company is currently evaluating the timing and budget implications for a combined pharmacokinetic and phase one human trial to verify the efficacy of Ivectosol™ sublingual wafers in COVID-19 infected patients. The new human studies are anticipated to determine overall efficacy, speed of viral clearance and safety levels of the Ivermectin drug in the Company's Ivectosol™ formulation as applied to COVID-19 as a prophylaxis and broad therapeutic. If the Company chooses to proceed with phase I human trials, the trials will likely commence later in 2021.

The Company is not making any express or implied claims that its technology or product has the ability to eliminate, cure or contain the COVID-19 (or SARS-2 Coronavirus) at this time.

Pursuit of FDA 505(b)(2) Ivectosol™ Approval

On March 3, 2021, the Company announced that it had contracted Camargo Pharmaceutical Services, LLC ("Camargo") to provide regulatory consulting services to support the Company's pursuit of U.S. Food and Drug Administration (FDA) approval of its novel Ivectosol™ rapid dissolve oral format. Camargo is recognized as a leading global organization who specializes in drug and combination device product development and approval utilizing the regulatory pathway provided for in Section 505(b)(2) of the US Federal Food, Drug, and Cosmetic Act. Over the last decade, Camargo has established a leading track record with 505(b)(2) investigational new drug ("IND") and new drug applications ("NDA" preparations and submissions, including participation in more than 1100 Agency meetings and more than 200 FDA NDA and ANDA (Abbreviated New Drug Applications) approvals.

The 505(b)(2) new drug application is one of three U.S. Food and Drug Administration drug approval pathways and represents an appealing regulatory strategy by way of helping to avoid unnecessary duplication of studies already performed on a previously approved drug. The Company believes the 505(b)(2) pathway will result in a much less expensive and much faster route to approval, compared with a traditional development pathway, while creating a new, differentiated Ivermectin product with meaningful commercial value.

Quicksol™ GMP Production

On June 24, 2021, the Company announced that its GMP production partner had reported positive results from the initial manufacturing assessment of Ivectosol™. Management believes this confirms the Company's ability to supply the GMP production quantities necessary for planned oncology and COVID-19 phased human trials and support the 505(b)(2) pathway application with the FDA.

Husbandry Animal

On May 11, 2021, the Company announced that it had commenced husbandry animal trials to validate its injectable solubilized Ivermectin technology, Ivectosol™ 1%, versus current commercially available forms to treat a broad category of animal parasites. The trials commenced in Canada to study poultry, swine, and cattle, and in Bangladesh to study poultry, goat, and cattle. Given the high viscosity of the Company's Ivectosol™ 1% product, trials included administration of the Ivectosol™ 1% by way of a needleless applicator that "injects" the solution into the animal by way of compressed air force. Initial feedback was that the trial dosing was easily accomplished in the animals with the needleless applicator with no adverse reactions across poultry, goat, swine, and cattle applications. The poultry trials were the first to be completed of the broader husbandry group and the Company has received indication from the Quality Control Lead that the trials were successful. The Company is anticipating the formal trial report on poultry in August 2021. It was originally anticipated before the end of July 2021, however has been slightly delayed due to COVID-19 lockdowns in Bangladesh that have impacted staffing and facility access.

The trials were conducted under supervision of The People's Republic of Bangladesh's Ministry of Fisheries & Livestock and the Ministry of Agriculture to support key approvals and near-term commercialization steps inside Bangladesh.

Successful husbandry animal trial results are necessary for the Company to proceed with its next phase of the project, which includes Bangladesh government approval of Ivectosol™ for use in husbandry animals inside the country, coordinating the production of animal grade Ivectosol™ and the commencement of the business development steps to pursue commercialization opportunities inside Bangladesh and more broadly to look at global sales and licensing opportunities. The business model for this next phase of commercialization to pursue the husbandry animal market will require less than \$250,000 CDN for capital expenditures and is anticipated to be moving forward over the third and fourth quarters of 2021.

Oncology

PROGRAM	TECH	MARKET	VALUE PROPOSITION				
Oncology	<ul style="list-style-type: none"> Quicksome™ Quicksol™ 	Oncology	Ivectosol™ being tested to target certain cancers to pursue novel human intratumoral injection and intravenous infusion.				
			2021				2022
		STATUS	Q1	Q2	Q3	Q4	Q1 - Q4
	Initial Ivermectin Oncology Research	COMPLETED					
	Patent filing for cancer adjuvant, Novel Injectable, Infusable, Instillable Ivermectin Adjuvant for Cancer Therapies for its solubilized Ivermectin (Ivectosol™).	COMPLETED					
①	Triple-negative breast cancer	IN PROGRESS		[Progress Bar]			
	Estimated initial readouts/analysis	IN PROGRESS			[Progress Bar]		
	Complete readout with flow cytometry and statistical evaluation	IN PROGRESS			[Progress Bar]		
②	Metastatic melanoma	IN PROGRESS		[Progress Bar]			
	Estimated initial readouts/analysis	IN PROGRESS			[Progress Bar]		
	Complete readout with flow cytometry and statistical evaluation	IN PROGRESS			[Progress Bar]		
③	Lewis lung carcinoma as a proxy for non-small cell lung carcinoma	IN PROGRESS		[Progress Bar]			
	Estimated initial readouts/analysis	IN PROGRESS			[Progress Bar]		
	Complete readout with flow cytometry and statistical evaluation	IN PROGRESS			[Progress Bar]		

On May 3, 2021, the Company announced that it had filed a novel cancer adjuvant patent for direct intratumoral injection, intravenously, infusions or instillations as adjuvants for broad chemotherapeutic to immunotherapeutic cancer regimens. The Company also announced that it was proceeding with three separate pre-clinical trials with specialized third-party cancer CROs: (1) triple-negative breast cancer; (2) metastatic melanoma; and (3) Lewis Lung Carcinoma as a proxy for non-small cell lung carcinoma.

Leading up to the implementation of pre-clinical trial cancer research, the Company had been extensively researching the drug ivermectin, including its impact on cancer, and had included numerous abstracts at the end of this media release. All the research articles reviewed by the Company involve either existing oral ivermectin in a murine model or the in-vitro testing of ivermectin utilizing organic solvents for solubilization that would be prohibited in a human intravenous or intratumoral administration.

As cited by Pharmacological Research in January 2021⁶, Ivermectin has demonstrated antitumor effects in preclinical studies in a variety of cancer cells and promotes programmed cancer cell death, including apoptosis, autophagy, and necrosis. The research also identifies how ivermectin has been shown to inhibit tumor stem cells and reverse multidrug resistance.

The Company filed its cancer adjuvant patent application on March 22, 2021, Novel Injectable, Infusable,

⁶ January 2021 - Ivermectin, a potential anticancer drug derived from an antiparasitic drug <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7505114/>

Instillable Ivermectin Adjuvant for Cancer Therapies for its solubilized ivermectin (Ivectosol™). The patent-pending adjuvant utilizes the Company's advances in macrocyclic lactone solubility to consider Ivectosol™ as a viable adjuvant for numerous cancer therapies. As 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 FDA, management believes it's a leading candidate for human injection or intravenous infusion.

The pre-clinical trials that are being conducted are designed to prove the utility of Ivectosol™ to synergize and improve various cancer regimens currently in use and as a potent enhancer of current immunotherapies and chemotherapies for difficult to treat cancers.

Study One: Triple-negative breast cancer

Study Two: Metastatic melanoma

Study Three: Lewis lung carcinoma as a proxy for non-small cell lung carcinoma

All three studies will assess tumor growth and metastases through bioluminescence imaging, a non-invasive optical imaging modality designed to visualize and quantify bioluminescent signal in tissues. Complete readout with flow cytometry and statistical evaluation of study results is estimated to be completed in the third quarter of 2021.

According to the World Health Organization, cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths in 2020⁷. The World Cancer Day foundation estimates the total annual economic cost of cancer at approximately US\$1.16 trillion⁸.

The Company believes the research will have near-immediate application to direct human trials based on safety and efficacy of ivermectin. As at the date of this MD&A, the Company had been advised that the contract research organization engaged to perform the pre-clinical trials has successfully implanted melanoma, small lung and triple-negative breast tumor cells, with no toxicity of the initial treatment. The Company plans to pursue human phase trials if current pre-clinical trials are successful and has been developing a detailed project plan that includes staff resourcing, funding, trial protocol, targeted contract research organizations, and overall timelines. An oncology phase one human trial could take 12 to 18 months to complete and cost up to \$10 million USD depending on final scope and patient trial size.

⁷ World Health Organization – Cancer <https://www.who.int/news-room/fact-sheets/detail/cancer>

⁸ World Cancer Day Foundation - Global and national economic impact <https://www.worldcancerday.org/financial-and-economic-impact>

Dose Sparing Adjuvant

PROGRAM	TECH	MARKET	VALUE PROPOSITION				
Dose Sparing Adjuvant	<ul style="list-style-type: none"> Ⓒ Quicksome™ Ⓒ Adjuvant 	Vaccine	Use less vaccine per dose, cost reduction, increase vaccine output, facilitate mucosal and herd immunity, long-term stability in aqueous media, promote greater stability in harsh environments, inform significant dose sparing applications across hundreds of vaccines, key to global disease eradication				
			2021				2022
		STATUS	Q1	Q2	Q3	Q4	Q1 - Q4
	Formulation Lab Work	COMPLETED					
	Electron Micrograph Quantification	COMPLETED					
	Porous Aluminum Nano-Structured Adjuvant Patent filing / Acceleration Review Request	COMPLETED					
Ⓒ	Tulane Trials – Dose Sparing and Mucosal Immunity	IN PROGRESS	[Progress bar: Q1 to Q3]				
	Partnering Licenses	IN PROGRESS				[Progress bar: Q3 to Q4]	
	Human Trials	PENDING					[Progress bar: Q4]
	Expanded Spectrum Vaccine Dose Sparing Evaluations	PENDING			[Progress bar: Q3 to Q4]		

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 compared 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 was 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 May 11, 2021, the Company announced that it had filed the Porous Aluminum Nano-Structured Adjuvant patent application to support its advanced vaccine dose sparing work. On June 24, 2021, the Company announced the results of the Dose Sparing Adjuvant study. The evaluation of the Company's novel aluminum nanoparticle adjuvant from this study demonstrated no toxicity or adverse reactions when combined with tIPV in intramuscular or intradermal injection. However, the initial results were not satisfactory in terms of producing a robust response or desired elevation in the immune response over IPV alone.

Dr. Clements and Dr. Norton confirmed their support for the scientific rationale of the Company's technology and the team postulated that a change in dose, surface charge or dosing interval may support a positive research outcome. The Company will continue its work with Tulane University to evaluate the impact of applying key changes, both with respect to the IPV and an additional vaccine, in several animal models of interest from both a scientific and commercialization standpoint. The next phase of formulation rework and testing is expected to be completed within the 2021 calendar year and total expenditures are anticipated to be less than \$100,000 CDN.

Cold Chain

PROGRAM	TECH	MARKET	VALUE PROPOSITION				
Cold Chain	<ul style="list-style-type: none"> Ⓢ Quicksome™ Ⓢ Adjuvant 	Vaccine	Enable distribution outside of cold chain, use less vaccine per dose, cost reduction, increase vaccine output, key to global disease eradication				
			2021				2022
		STATUS	Q1	Q2	Q3	Q4	Q1 - Q4
Formulation Lab Work		COMPLETED					
FDA confirmation of stabilization and preservation of Polio D Antigen via Quicksome™		COMPLETED					
Preliminary cold chain testing: 25°C		COMPLETED					
Optimization work, vial embed, rapid dry		COMPLETED					
FDA collaborative research agreement		COMPLETED					
FDA cold chain testing on novel desiccated vial format		IN PROGRESS	[Progress bar from Q1 2021 to Q4 2021]				
Manufacturing Application / Elisa validation		PENDING					
Quicksome™ sublingual vaccine pre-clinical / clinical trials		PENDING					

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.

If successful, the Company believes its proprietary Quicksome™ manufacturing technology will 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 June 24, 2021, The Company announced results of a recent cold chain ELISA evaluation and that it had formally entered into a two-year collaborative research agreement with the FDA, which will govern the Company's cold chain project going forward. The collaborative research agreement will support the continuation of research, development, and evaluation of the Company's Quicksome™ controlled cold chain technology.

The cold chain ELISA data from the FDA Polio Research Lab was based on an evaluation of the Company's work with its Quicksome™ desiccated liposome technology. The controlled cold chain evaluation was the Company's first attempt at assessing the ability of a thin Quicksome™ desiccated liposome layer of Trivalent Inactivated Poliovirus Vaccine (tIPV), using a method of preservation in a vial

for five days of exposure at 40 degrees Celsius and then reconstituted for injection at the point of administration. The trivalent IPV stability evaluation was conducted to assess the preservation application of the Company's Quicksome™ technology after 5 days exposure to 40 degrees Celsius. Trivalent IPV is composed of three serotypes of inactivated polioviruses.

IPV serotype two – achieved 100% preservation and stability at 40 degrees Celsius.
 IPV serotypes one and three - achieved 50% preservation and stability at 40 degrees Celsius .

The 100% preservation and stability of IPV serotype two exceeds the World Health Organization's (WHO) guideline temperature requirements for all three defined vaccine management categories⁹ 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.

All three tIPV serotypes achieved 100% preservation and stability at 30 degrees Celsius, building on previous attainment of 25 degrees Celsius by the FDA Polio Lab.

IPV serotypes one and three will be the focus of the next phase of evaluation the Company will conduct by focusing on lowering residual moisture content, achieving more robust liposomal protection, and faster drying of the mixture within the vial. The Company's objective is to achieve full CTC compliance at 40°C for tIPV polio vaccines in a vial format that can be reconstituted at the point of administration for injection and is immediately commencing this work. The next phase of formulation rework and testing is expected to be completed within the 2021 calendar year and total expenditures are anticipated to be less than \$50,000 CDN.

Expanded Ivermectin Applications

Expanded Ivermectin Applications		© Quicksome™		Human Parasitic, Therapeutic, Animal Parasitic		Enhanced treatment options and effectiveness across broad ectoparasitic applications.	
		© Quicksol™					
STATUS		2021				2022	
		Q1	Q2	Q3	Q4	Q1 - Q4	
Invitro testing for targeted ectoparasites control - lice, ticks, bedbugs	PENDING			[Progress bar from Q3 to Q4]			
Pre-clinical to test liquid shampoos, drenches for both animal and human health applications	PENDING				[Progress bar from Q3 to Q4]		
Partner licensing	PENDING				[Progress bar from Q3 to Q4]		

The Company is currently finalizing a research agreement with a university for the purposes of conducting invitro tests of its Ivectosol™ 1% solution to determine commercial applications to treat ectoparasites such as lice, ticks and bedbugs. This testing phase is expected to be completed by the end of the 2021 calendar year and total expenditures are anticipated to be less than \$20,000 CDN.

⁹ WHO - The controlled temperature chain - https://www.who.int/immunization/programmes_systems/supply_chain/resources/CTC_FAQ_English_November_2016.pdf

Tuberculosis – Selamectin

PROGRAM	TECH	MARKET	VALUE PROPOSITION				
Selamectin	<ul style="list-style-type: none"> Ⓢ Quicksome™ Ⓢ Quicksol™ 	Human Parasitic, Therapeutic, Animal Parasitic	No current human forms – solubilized pursuit would open up applications similar to MVMD's work with ivermectin – waterless oral dissolve, inhalable, or injectable, dramatically quicker onset, zero decline over extended periods in the body, less variability, requires a fraction of the API, uses strictly excipients that are currently approved by the US Food and Drug Administration (FDA), leading candidate for human injection and sublingual applications, broader husbandry and companion animal applications based on low viscosity. Pursuing implications for Tuberculosis treatment.				
			2021				2022
		STATUS	Q1	Q2	Q3	Q4	Q1 - Q4
	Solubilization and formulation work on Selamectin	COMPLETED					
	Pre-clinical trials for solubilized rapid dissolve and intramuscular delivery	PENDING					
	Phase I trial	PENDING					
	Human partnering licenses / production evaluation	PENDING					
	Animal solubilization pre-clinical	PENDING					
	Animal partnering licenses / MVMD production evaluation	PENDING					

The Company announced on March 10, 2021 that it had successfully applied its Quicksol™ solubilization science to a macrocyclic lactone drug, Selamectin. Selamectin is largely considered a molecule that's virtually insoluble in water. The Company is finalizing a study framework to apply its novel Selactosol™ for preclinical evaluation trials targeting mycobacterium-based infections, namely Tuberculosis.

Tuberculosis affects roughly 25% of the world's population and is the leading infectious disease killer in the world, claiming approximately 1.5 million lives each year¹⁰. Tuberculosis also affects a large number of husbandry animals and will be targeted equally in the Company's evaluation studies.

The Company is currently exploring a research agreement and corresponding budget to conduct a phase I human trial of its Selactosol™ solution to determine efficacy in treating Tuberculosis. The phase I trial requires GMP production of Selactosol™ and the Company is currently working with its external partner to complete the batch size necessary for the trials.

¹⁰ <https://www.cdc.gov/globalhealth/newsroom/topics/tb/index.html>

Sublingual Pharmaceutical and Nutraceutical

PROGRAM	TECH	MARKET	VALUE PROPOSITION				
Sublingual Nutraceutical	© Quicksome™	Applications across human nutraceutical	Stable delivery, waterless oral dissolve, quicker onset, precise dosing, reduced variability, dose sparing, needleless administration, easy to use formats.				
			2021				2022
		STATUS	Q1	Q2	Q3	Q4	Q1 - Q4
Formulation work on rapid dissolve loads across oral powder, chews, wafers and thin strips		COMPLETED					
Applications samples developed across Weight loss, Energy, Pre-workout, Recovery, Sleep, Focus, Libido, Smokeless Nicotine and a variety of natural mushroom molecules.		COMPLETED					
Quicksome™ partner licensing contracting		IN PROGRESS	[Progress bar: Q1 to Q4]				
Targeted First Revenues		COMPLETED		[Progress bar: Q2]			

The Company has conducted extensive molecule assessment of its Quicksome™ sublingual technology focused on delivering nutraceutical formulations that have a superior efficacy over comparative products that are consumed orally. These include exploration and sampling with key partners for business development exploration across weight loss, energy, per-workout, workout recovery, sleep, focus libido, smokeless nicotine and a variety of mushroom molecules.

Insulin

PROGRAM	TECH	MARKET	VALUE PROPOSITION				
Insulin	© Quicksome™	Human insulin drug	Stable sublingual delivery, waterless oral dissolve, rapid onset, precise dosing, reduced variability, needleless administration, easy to use format.				
			2021				2022
		STATUS	Q1	Q2	Q3	Q4	Q1 - Q4
Initial stability and formulation work on rapid dissolve oral application of Humilin R & Humalog		COMPLETED					
Pre-clinical trial on efficacy of Humilin R & Humalog molecule		COMPLETED					
Enhanced absorption and more rapid tmax		IN PROGRESS	[Progress bar: Q1 to Q3]				
Pre-clinical trial		PENDING				[Progress bar: Q4]	
Phase I trial		PENDING					[Progress bar: Q1 - Q4]
Partner licensing		PENDING					[Progress bar: Q1 - Q4]

The Company has been exploring stability and efficacy of sublingual applications of Humilin R and Humalog for insulin applications to control diabetes. The value proposition the Company is exploring includes the ability for patients to administer insulin applications sublingually instead of requiring needle injection. Currently work is being done at a formulation stage to drive enhanced absorption and tmax (the amount of time that it takes for the drug to present itself at the maximum concentration in serum).

The successful completion of the current formulation work will determine the next steps, timing and research and development budget for this project.

Sublingual Cannabis

PROGRAM	TECH	MARKET	VALUE PROPOSITION			
Sublingual Cannabis	© Quicksome™	Applications across cannabis	Stable delivery, waterless oral dissolve, quicker onset, precise dosing, reduced variability, dose sparing.			
			2021			2022
		STATUS	Q1	Q2	Q3	Q4
Formulation work on rapid dissolve oral application with THC, CBD		COMPLETED				
Quicksome™ partner licensing contracting		IN PROGRESS	[Progress bar spanning Q1-Q4]			
Targeted First Revenues		IN PROGRESS			[Progress bar spanning Q3-Q4]	

The Company is currently working through CBD and THC product formulations for a North American cannabis company. The current product prototype work includes a THC recreational product, THC sleep product, and CBD pain relief cream. Upon successful acceptance of the product formulations, the Company anticipates entering into a license agreement with the partner and commencing retail production.

Intellectual Property:

The Company's Quicksome™ technology is protected by its trade secrets, 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. 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.

On January 14, 2021, the Company confirmed it had received approval from the Canadian Intellectual Property Office for the patent filing around its Quicksome™ technology. The patent approval is the first for the Company 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.

On June 24, 2021, the Company announced that the United States Patent Trademark Office (USPTO) had approved the Company's patent application related to its invention of Water Dissolvable Macrocyclic Lactone Cyclodextrin Complexes. The original patent request was filed on November 10, 2020, and an accelerated patent examination request was filed in late December 2020. The accelerated review was supported by data which provided additional formulation analyses of different diluted concentrations of its Quicksol™ ivermectin in solution. This data was fast-tracked by the Company for completion and validation by a third-party CRO.

Additionally, the Company's Quicksol™ trademark application has passed through the examination phase at the U.S. Trademark Office and has been approved by the examining attorney. The trademark is in its final 30 day "external" review process as at the date of this MD&A.

The Company extensively protects its trade secrets and formulations, maintains its patent portfolio, and 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.

Patent No.	Patent Name	Patent Filing Date	Granted	Published	Expiry
US9622971B2	Preparation of desiccated liposomes for use in compressible delivery systems	2013-08-16	2017-04-18	2017-04-18	Aug-2033
CA2878624A1	Preparation of desiccated liposomes for use in compressible delivery systems	2013-08-16	2021-03-02	2021-03-02	Aug-2033
EP2884962B1	Preparation of desiccated liposomes for use in compressible delivery systems	2013-08-16	2019-05-01	2019-05-01	Aug-2033
EA035868B1	Preparation of desiccated liposomes for use in compressible delivery systems	2013-08-17	2020-08-24	2020-08-24	Aug-2033
US20200101017A1	Preparation of desiccated liposomes for use in compressible delivery systems	2018-12-20	2020-04-21	2020-04-21	Aug-2033
US20150216799A1	Preparation of desiccated liposomes for use in compressible delivery systems	2013-08-16	2017-04-18	2017-04-18	Aug-2033
US10195146B1	Preparation of desiccated liposomes for use in compressible delivery systems	2017-02-03	2019-02-05	2019-02-05	Aug-2033
US10624853B1	Preparation of desiccated liposomes for use in compressible delivery systems	2018-12-20	2020-04-21	2020-04-21	Aug-2033
US10500190B1	Sublingual or buccal administration of melatonin and/or valerian	2019-04-19	2019-12-10	2019-12-10	Apr-2039
GRANTED / # PENDING	Water Dissolvable Macrocylic Lactone Cyclodextrin Complexes	2020-11-10	2021-06-23	2021-06-23	Jun-2041
GRANTED / # PENDING	Water Dissolvable Macrocylic Lactone Cyclodextrin Complexes	2021-02-08	2021-06-23	2021-06-23	Jun-2041
PENDING	Poliovirus Stabilized Aqueous Vaccine Composition and Method of Preparation	pending	pending to file		
PENDING	Porous Aluminum Nanostructure Adjuvant	2021-01-19	waiting for examination		
PENDING	Novel Injectable, Infusable, Instillable Ivermectin Adjuvant for Cancer Therapies	2021-03-22	waiting for examination		
PENDING	Topical Solubilized Ivermectin for Inflammatory Skin Conditions	2021-04-13	waiting for examination		

Ancillary Business Development:

In addition to the Company's focus on the development of its delivery, solubility and adjuvant technologies, the Company has additional, ancillary projects in development that are intended to contribute to the Company's overall business strategy and mandate as health and wellness company but do not relate to its core biotechnologies.

CannaBloom™:

The Company entered into a supply and licence agreement (the "AR Agreement") with Agroresults Inc. ("Agroresults"), a private Ontario corporation, on August 7, 2020. Agroresults' 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.. Pursuant to the terms of the AR Agreement, Agroresults will manufacture all CannaBloom™ products to the specifications outlined by the Company across a variety of agricultural crops for global distribution.

The Company worked with Agroresults to complete the necessary product registration requirements in early 2021 for global distribution. The Company has also worked through the evaluation of the key steps required to commence sales of CannaBloom™ and has been providing product test samples to key target customers for evaluation purposes.

Circadian Wellness:

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 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 framework included a binding letter of intent and \$250,000 CAD advance payment to the Company to enter into a commercial license agreement that provides Circadian with exclusive use of the Company's technology for use on its mushroom infused products, The \$250,000 CAD advance payment was provided as advanced compensation towards product formulation work undertaken by the Company for the purpose of creating commercially viable products and is based on applying the Company's Quicksome™ technology to mushroom nutraceutical products. Circadian plans on bringing a broad line of naturally derived mushroom products to the global marketplace.

Trends and Risks

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 product formulation work, 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.

Anonymous Short Attack

The Company has ongoing unknown exposure as a result of what management believes to be a "short and distort" attack that it believes was orchestrated against the Company.

On March 25, 2021, the Company was named in an anonymous report with anonymous references that management believes to be a short seller "short and distort" attack on the Company. At no time did the authors of the report contact the Company. The report contained false and misleading statements, innuendoes, inaccuracies, distortions, and fabrications, all of which appeared to be an attempt to generate panic selling and drive the share price of the Company lower. Simultaneously with the anonymous report, many anonymous social accounts started what management believes to be a negative posting campaign against the Company, with unfounded and slanderous statements about the Company and its senior management.

The Company has filed a complaint with the Ontario Securities Commission (OSC) and the Investment Industry Regulatory Organization of Canada (IIROC), who are conducting an investigation into the short attack. The Company is also pursuing legal avenues to obtain the personal information where possible for the users who are posting defamatory statements about the Company on online social boards.

The Company has been provided with tips from external sources that implicate an asset management company who may have directed the authoring of the anonymous short report, in whole or in part, while capitalizing on a short position against the Company. This information has been submitted to the OSC and IIROC.

The impact of the ongoing short attack on the business during the investigation period is unknown and may be significant, including but not limited with respect to: management's uncertainty of the duration of the "short and distort" campaign; the impact on shareholder sentiment; the ability of the Company to attract new investors, directors, officers, consultants, personnel and business development opportunities.

Dispositions:

On November 24, 2020, the Company entered into a share purchase and exchange agreement (the "SPA") with Circadian (see section entitled "Ancillary Business Development") for the sale of the Company's subsidiaries (Mountain Valley Medicinals Inc. "MVM", and 0987182 BC Ltd.) and their respective assets, including the property in Qualicum Beach, British Columbia (Note 13), for a purchase price of \$400,000 cash plus additional consideration for prepaid assets, 1,037,037 common shares of CW at \$0.27 per share (representing an approximate 9.17% equity interest in CW) with a value of \$280,000, and the assumption of the mortgage on the property in the amount of \$320,000.

The Company recorded a loss of \$493,719 on the sale of these non-core business assets.

Summary and Outlook

Stock Exchange Listing

The Company had announced on April 20, 2021 that it was proceeding with an application for the listing of its shares for trading on the TSX Venture Exchange (“TSXV”). Since the announcement, the Company has been evaluating the benefits of listing its common shares on each nationally recognized stock exchange in Canada and will make a determination in due course as to the best strategy for the Company.

Financings

On December 20, 2020, the Company announced that it had completed a strategic, non-brokered private placement offering (the “Offering”) of units (“Units”), oversubscribing with gross proceeds of \$4,323,199, issuing 19,650,908 Units. Each Unit is comprised of one common share (“Common Share”) and one half of one share purchase warrant (each full warrant a “Warrant”), each Warrant exercisable for 24 months at an exercise price of \$0.45 per share. The net proceeds of the Offering were for the advancement of formulation research and development, pre-clinical trials, patent management and general working capital purposes. In connection with the non-brokered Offering, the Company paid finder fees equal to 6% of the funds introduced by such finders, being \$243,528, paid by the issuance of 1,106,945 Units at \$0.22 per Unit.

In November 2020, management determined that it was in the best interest of the Company to settle certain debt by way of share issuance (the “Unit(s)”) to offset the risk of spending its low cash reserves. The issuance price of the Units was reserved with the Canadian Securities Exchange in early November 2020 at \$0.071 per share, for accounts payable to settle indebtedness of \$469,820. The terms of the debt settlement concluded in early December 2020, when the common shares of the Company were trading at approximately \$0.09. The completion of the paperwork took several weeks to complete and ultimately the 6,617,185 Units were formally issued on December 18, 2020. Each Unit consists of one common share and one half of one share purchase warrant, each warrant exercisable at \$0.13 for 2 years from the issuance date. The fair value of the shares issued in the settlement was determined to be \$0.49 based on the closing trading price as at the date of issuance (*December 18, 2020*) which created a loss for the company based on the process starting in November of 2020. The loss on debt settlement attributed to the common shares was \$2,772,600. The fair value of the warrants issued was determined to be \$1,264,222. The Company recorded a loss on debt settlement in the amount of \$4,036,822 related to this transaction.

SELECTED ANNUAL INFORMATION

	Year ended March 31, 2021 \$	Year ended March 31, 2020 \$ (Restated)	Year ended March 31, 2019 \$
Total revenues	-	-	-
Net loss for the year	(8,142,745)	(18,724,764)	(897,032)
Net loss per share, basic and diluted	(0.03)	(0.09)	(0.01)
Total assets	31,608,332	12,233,884	11,488,283
Total working capital	20,010,365	1,425,093	9,563,946
Shareholder's equity	30,497,674	11,068,794	10,953,946

RESULTS OF OPERATIONS

Consulting fees for the year ended March 31, 2021 was \$987,985 compared to \$977,041 for the year ended March 31, 2020. The Company entered into various consulting agreements to assist with product development and public relations during the year.

Stock based compensation for the year ended March 31, 2021 was \$840,445 compared to \$322,084 for the year ended March 31, 2020. This was a result of several option grants throughout the 2021 fiscal year, which vest in 2021 and 2022.

Professional fees for the year ended March 31, 2021 was \$492,261 compared to \$759,445 for the year ended March 31, 2020. This decrease was due to legal fees in the prior year relating to the Company's various acquisitions, reverse take-over transaction and compliance with relevant securities laws.

Advertising and promotion for the year ended March 31, 2021 was \$440,787 compared to \$570,829 for the year ended March 31, 2020. The decrease was due to the Company completing two (2) marketing/advertising campaigns during the prior year.

Research and development for the year ended March 31, 2021 was \$1,181,589 compared to \$52,159 for the year ended March 31, 2020. The increase relates to research work and pre-clinical trials the Company has commenced related to development of its technology as more fully described in this MD&A.

(continued on next page)

Loss from debt settlement was \$4,036,822 for the year ended March 31, 2021 compared to \$Nil for the year ended March 31, 2020. In November 2020, management determined that it was in the best interest of the Company to settle certain debt by way of share issuance (the "Unit(s)") to offset the risk of spending its low cash reserves. The issuance price of the Units was reserved with the Canadian Securities Exchange in early November 2020 at \$0.071 per share, for accounts payable to settle indebtedness of \$469,820. The terms of the debt settlement concluded in early December 2020, when the common shares of the Company were trading at approximately \$0.09. The completion of the paperwork took several weeks to complete and ultimately the 6,617,185 Units were formally issued on December 18, 2020. The fair value of the shares issued in the settlement was determined to be \$0.49 based on the closing trading price as at the date of issuance (December 18, 2020) which created a loss for the company based on the process starting in November of 2020. The loss on debt settlement attributed to the common shares was \$2,772,600. The fair value of the warrants issued was determined to be \$1,264,222. The Company recorded a loss on debt settlement in the amount of \$4,036,822 related to this transaction as, due to the foregoing, the share price at the date of issue was higher than the share price initially agreed upon.

Business development and travel for the year ended March 31, 2021 was \$240,298 compared to \$303,094 for the year ended March 31, 2020.

Impairment in associates for the year ended March 31, 2021 was \$197,806 compared to \$7,842,297 for the year ended March 31, 2020. In the prior year, management impaired its investments in CCJC Holdings Inc. of \$1,642,573 and Sativa Nativa MD SAS of \$6,199,724. The impairment was related to a downturn in the cannabis market. In the current year, the further impairment of \$197,806 relates to the Company's 25% investment in Sativa Nativa MD SAS.

Impairment of licences for the year ended March 31, 2021 was \$300,000 compared to \$1,438,750 for the year ended March 31, 2020. In the prior year, management impaired its cannabis licences in Colverde. In the current year, management further impaired the licences to \$Nil as management has strategically chosen to no longer pursue this asset at this time.

Listing expense for the year ended March 31, 2021, was \$Nil compared to \$6,178,692 for the year ended March 31, 2020. This relates to the reverse takeover transaction the Company completed during the prior fiscal year. The purchase consideration was primarily related to shares issued as consideration. Of the \$6,178,692 expense, the actual cash component paid was \$614,411. The remaining expense consists of non-cash, share based compensation in the amount of \$5,564,281.

SUMMARY OF QUARTERLY RESULTS

The following is a summary of the period's March 31, 2020 to March 31, 2021, which have been derived from the financial statements of the Company. This summary should be read in conjunction with the March 31, 2021 audited consolidated financial statements and the interim consolidated statements of the Company for the same periods.

	March 31, 2021 \$	December 31, 2020 \$ (Restated)	September 30, 2020 \$ (Restated)	June 30, 2020 \$ (Restated)
Total assets	31,608,332	15,268,328	10,775,762	11,542,944
Working capital	20,010,365	5,940,234	174,462	971,529
Non-current financial liabilities	44,364	57,789	73,844	319,896
Revenue	\$Nil	\$Nil	\$Nil	\$Nil
Net income (loss)	(5,304,214)	(1,209,816)	(862,572)	(766,143)
Earnings (loss) per share	(0.02)	(0.00)	(0.00)	(0.00)
Weighted average common shares outstanding	263,510,981	252,831,065	249,117,933	246,010,266

	March 31, 2020 \$ (Restated)	December 31, 2019 \$	September 30, 2019 \$	June 30, 2019 \$
Total assets	12,233,884	17,050,541	4,493,760	15,200,743
Working capital	1,425,903	2,591,743	3,884,646	4,245,963
Non-current financial liabilities	226,672	\$Nil	\$Nil	\$Nil
Revenue	\$Nil	\$Nil	\$Nil	\$Nil
Net income (loss)	(16,965,676)	(882,752)	(510,384)	(365,952)
Earnings (loss) per share	(0.08)	(0.00)	(0.00)	(0.00)
Weighted average common shares outstanding	208,414,518	204,568,933	202,963,194	193,949,552

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

For the quarter ended March 31, 2021, the Company incurred a loss of \$5,302,041 which consisted of the following:

- The Company incurred \$1,181,589 in research and development costs relating to its pre-clinical trials and research.
- The Company has impaired its cannabis licences in Colverde in the amount of \$300,000. Management has strategically chosen not to pursue this asset at this time.
- The Company recorded additional stock-based compensation of \$784,044 in relation to an additional grant of stock options in the fourth quarter.
- The Company incurred \$1,236,012 in general and administrative costs in the fourth quarter relating to increased public relations costs, legal fees related to warrant exercises during the fourth quarter, and consulting fees in the normal course of business.
- The Company incurred a loss from debt settlement of \$4,036,822.

LIQUIDITY AND CAPITAL RESOURCES

As at March 31, 2021, the Company has cash of \$19,510,286 compared to \$1,741,563 as at March 31, 2020. The Company has working capital of \$20,010,366 as at March 31, 2021 compared to working capital of \$1,425,093 as at March 31, 2020. Working capital increased mainly due to shareholders exercising 48,879,052 warrants for gross proceeds of \$17,256,874.

The Company has total debt of \$1,066,294 at March 31, 2021 (\$938,428 as at March 31, 2020). Cash consumed by operating activities after changes in non-cash working capital during the year ended March 31, 2021, was \$3,858,233, compared to cash consumed of \$2,966,070 at March 31, 2020. The Company paid out considerably more fees to consultants, lawyers and other professionals in relation to developing its proprietary technology.

For the year ended March 31, 2021, investing activities consumed cash of \$149,317 compared to the comparable period March 31, 2020, in which investing activities consumed cash of \$6,012,294. In the prior year, the Company paid cash for its various cannabis investments of approximately \$5 million, \$434,958 to acquire equity investments in private companies, as well as \$585,454 to acquire its intellectual property relating to its portfolio of patents.

For the year ended March 31, 2021, financing activities provided cash of \$21,776,273 from the exercise of options, exercise of warrants, and subscriptions received from a private placement compared to the comparable period March 31, 2020, in which financing activities provided cash of \$1,633,265.

See the year ended, March 31, 2021, consolidated financial statements for a breakdown of share transactions during the year 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. It is management's belief that the substantial progress made during the year 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 results from the FDA Polio Lab, should 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.

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 year ended March 31, 2021 and 2020:

Year ended March 31,	2021	2020
	\$	\$
Short-term benefits	440,000	733,643
Stock based compensation	434,692	201,760
Business development	-	59,200
	874,692	994,603

2021 transactions:

\$440,000 in consulting fees paid as follows: \$90,000 paid to a Company controlled by the CFO; \$10,000 paid to a Company controlled by the former CFO; \$240,000 paid to a Company controlled by the CEO; and \$100,000 paid to a Company controlled by the Vice President of Product Development.

2020 transactions:

- \$733,643 in consulting fees paid as follows: \$6,893 paid to a former director of MVM; \$100,000 paid to a Company controlled by a common director; \$120,000 to a Company controlled by the former CFO and director; and \$506,750 to a Company controlled by the CEO by way of issuance of 1,686,750 shares.
- \$59,200 in business development fees paid as follows: \$10,000 to the former CFO and \$49,200 to a former director.
- \$Nil (2019: \$44,750) paid to a Company controlled by the president of MVM.

Included in accounts payable and accrued liabilities as at March 31, 2020 was \$174,095 owing to related parties, of which \$161,095 was owing to the former CFO and CEO of the Company (at the time it was Meadow Bay Gold Corporation). The payment terms are similar to the payment terms of non-related party trade payables.

The Company was owed \$98,492 from the former CFO as at March 31, 2020; the amount was received subsequent to year end.

On June 10, 2019, the Company entered into a consulting agreement for President and CEO services with a company controlled by the CEO for his consulting services. Pursuant to the agreement:

- the consultant received the following compensation:
 - in and for any part of the period from June 10, 2019 and concluding on August 30, 2019 (the "initial term"), the Company will pay the consultant \$40,000 for the period from June 10, 2019 to June 30, 2019 and \$57,500 for each of July and August, payable by the issuance of an aggregate of 775,000 Class B Common shares of the Company at a valued price of \$0.20 per share on or about the termination date of the initial term; and
 - thereafter, in and for any part of each contract year in which the services are provided, such compensation as approved by the board of directors and as agreed between the consultant and the Company; and
- the agreement will continue until either party gives the other 60 days written notice of termination.

Effective October 15, 2019, the Company agreed to an amendment to the consulting agreement with the President and CEO of the Company to extend the initial term of the agreement until February 28, 2020, or such earlier or later date as agreed by the parties, for the same monthly compensation, payable by the issuance of Class B Common shares of the Company at a fair value price of \$0.40 per share. Attached to each Class B Common share is a half warrant, each full warrant exercisable at \$0.60 per share for 2 years from the issuance date, subject to acceleration provisions.

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, 2021.

FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The Company's financial instruments include cash and cash equivalents, note receivable, equity investments, accounts payable and accrued liabilities, and lease liability. The carrying amounts of these financial instruments not measured at fair value are a reasonable estimate of their fair values based on their current nature and current market rates for similar financial instruments.

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.

As at March 31, 2021, 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 year ended March 31, 2021, other than the investment in Nevada King Mining, which transferred from Level 1 to Level 2 as a result of becoming publicly listed.

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 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 large Canadian bank. The Company obtains financial information from the creditor to determine the carrying amount of the note receivable.

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 March 31, 2021, 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	776,161	-	-
Lease liability	40,133	44,364	-
Total	816,294	44,364	-

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

The Company has completed a sensitivity analysis to estimate the impact on comprehensive earnings which a change in the equity investments would have on the Company during the year ended March 31, 2021. As a result, a 10% change in the equity investments will translate to a \$505,397 (March 31, 2020, \$287,022) 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	329,222,591
Class B (non-voting) shares	50,056,229
Stock options	16,023,500
<u>Warrants</u>	<u>15,307,441</u>

SUBSEQUENT EVENTS

Subsequent to March 31, 2021:

- The Company issued 500,000 shares in regard to the exercise of stock options at \$0.07. The Company received \$35,000 in gross proceeds.
- The Company issued 885,000 shares in regard to the exercise of warrants. The Company received \$349,750 in gross proceeds.
- The Company granted 3,690,000 stock options at \$0.27 to certain directors, officers, and consultants in accordance with the Company's stock option plan. The stock options are exercisable for a period of 5 years and must meet certain vesting terms.

ADDITIONAL INFORMATION

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