

#### MOUNTAIN VALLEY MD HOLDINGS INC.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

#### **QUARTERLY HIGHLIGHTS**

### FOR THE THREE AND NINE MONTHS ENDED DECEMBER 31, 2023

#### 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. ("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 are based on certain assumptions and 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 three (3) lines of business; the commercialization plans and strategy related to the three (3) lines of business; applications of the Company's patented technologies; the continued research and development or the ceasing of continued research and development of certain projects, as applicable: the application(s) of its patented technologies: the uses of the Company's capital resources; timelines, milestones and/or next steps and estimated costs therefor with respect to the three (3) lines of business, including estimated product dates, for both the Company and its licensee(s); the effect of working with one Lead Manufacturer; the intended use and purpose of the "Mountains Of... " brand and the related trademarks and the value thereof; Circadian Wellness activities, operations, business development and products, and associated costs of the Company; business development efforts and results arising from the Company's relationship with the Lead Manufacturer; planning efforts, development, strategies, processes, planned operations, structure, timing and matters related to the commercialization of the business and operations related to the Agrarius product, including anticipated territories and engagement of personnel; the terms of the License Agreement (Bangladesh), including payments to be received by the Company and the timing of commercialization in the first guarter of the 2024 calendar year; the anticipated expansion of licensing efforts of the Company's Quicksol™ technology outside of Bangladesh and the impact of government approval in Bangladesh thereon: the Company's plans and intentions with respect to its investments and its ability to execute on such plans; the impact of the strategy to engage one or minimal third parties with respect to manufacturing on the business of the Company; the type and timing of products to be brought to market by MVMD's licensees; registration procedures and timing related to the Agrarius product in the LATAM region and in the USA and the ability to successfully secure registration in each jurisdiction where application is made; the intention and timing of the Company to seek legal and other professional advice with respect to its planned activities; and are based on assumptions including but not limited to: the ability to advance the Company's business plan effectively: the ability to finance the Company's projects; the development and commercialization of, and the focus of resources on, the 3 identified lines of business; the ability of the selected three (3) lines of business to provide viable revenue streams: the ability of the Company to commercialize its Quicksome™ technology and the result and impact thereof; the ability of the Company to commercialize its Quicksol™ technology, including moving forward with anti-parasitic application and the result and impact thereof; the effect of the Agrarius product; the ability of the Lead Manufacturer to support and continue to support the business of MVMD, including its licensees; the ability to manage and continue relationships and agreements with third party licensees, licensors, suppliers and service providers on existing or other terms that are favourable to the Company, and that such third parties are able to and do perform their obligations as required pursuant to applicable respective agreements; the ability to protect and enforce intellectual property and related rights, including but not limited to patents, trademarks and trade secrets; the ability to manage human resources effectively and the retention of skilled management and personnel; the ability to test and implement MVMD's proprietary and licensed technologies and products; the ability to navigate regulatory requirements and regimes in a timely and cost-effective manner or at all; the information provided by licenses and other third parties being true, accurate and complete; and all events described in this MD&A 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.

## **Management Discussion and Analysis**

This MD&A has 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. It is intended to help the reader understand the Company's financial statements. The statements are provided for the purpose of reviewing the third quarter of fiscal 2024, as well as the 2023 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, 2023 and 2022, and the unaudited interim consolidated financial statements for the three, and nine months ended December 31, 2023.

The results for the period ended December 31, 2023 are not necessarily indicative of the results that may be expected for any future period. Information contained herein is presented as at February 28, 2024 unless otherwise indicated.

The interim condensed consolidated financial statements have been prepared in accordance with International Accounting Standard 34, Interim Financial Reporting using accounting policies consistent with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS").

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 reader is encouraged to review the Company's statutory filings on SEDAR+ at www.sedarplus.ca.

## **BUSINESS OVERVIEW**

**Company Purpose:** The Company operates under the overarching purpose of "More Life", with the foundational belief that the Company can help people live a better life, a life with the necessary energy to achieve more in their day, or have a great night's sleep, or support personal weight loss goals, or reduce pain that might be limiting someone from living a better life. MVMD fundamentally believes in the symbiotic nature of healthy humans related to global agricultural supply and husbandry farming, and as such, invests in and works to advance innovative biotechnologies that can impact the human health and wellness landscape, drive sustainable increases in plant yields and agricultural farming practices, and broadly support husbandry animal health.

Lines of Business (Significant Projects): There are three primary areas MVMD is advancing toward commercialization: (1) novel innovations that improve the administration and efficacy of nutraceutical health and wellness products; (2) agricultural plant signaling technology that organically drives increases in crop yields and supports the reduction of fertilizer usage; and (3) the application of solubilized drugs to positively impact husbandry animal health. The Company currently has two wholly owned technologies to support its efforts: a) patented Quicksome™ drug formulation and delivery technology; and b) patented Quicksol™ solubility formulation and delivery technology. In addition, MVMD holds a license from Agrarius Corp. for the rights to distribute its Agrarius plant signaling technology. These are each further described below.

Company Information: The Company is a publicly traded health and wellness company that commenced trading on the CSE under the symbol "MVMD.CN" in March 2020 and on the OTCQX Best Market ("OTCQX") under the symbol "MVMDF." The Company operates through its wholly-owned subsidiary, Mountain Valley MD Inc, which in turn has four (4) active wholly-owned subsidiaries in Panama, Brazil and Uruguay formed for the Company's proposed agricultural operations in Mexico, Central America and South America (LATAM). The address of the Company's registered and records office is 1100 – 1111 Melville Street, Vancouver, BC V6E 3V6 is the address of the Company's head office and principal place of business is 260 Edgeley Boulevard, Unit 4, Concord, Ontario, Canada, L4K 3Y4.

**Intellectual Property:** The Company has a portfolio of intellectual property assets, including patents, trademarks, formulations and trade secrets, and works to extensively protect its portfolio through the maintenance of its patent portfolio, and extensions, and anticipates ongoing filings to continue to protect its intellectual property.

## **Patented Technologies**

The Company's primary technologies are used or intended to be used in or for applications that seek to improve the administration, efficacy and safety of new and existing medicines, therapies, and nutraceuticals.

- The Company's patented Quicksome™ technology utilizes proprietary formulations and stabilizing molecules to encapsulate and formulate active ingredients into highly efficient product formats that, if successfully commercialized, could enhance the efficacy of molecule delivery across a variety of nutraceutical product applications.
- Quicksol™ is the Company's patented solubilization technology, which has been developed to provide solubilized drug delivery options. Currently and to date, the Company has applied the Quicksol™ solubilization technology to the macrocyclic lactone class of anti-parasitic drugs, where the Company's proprietary solubilization techniques, which use no harmful organic solvents, have been initially applied to the drugs ivermectin and Selamectin. MVMD is moving forward with an anti-parasitic application that will be applied with the aim to positively impact animal health.

## **Licensed Technologies**

The Company has licensed Agrarius, an agricultural plant signaling technology, from Agrarius Corp., a private US corporation. The Agrarius product is designed to be applied to agricultural crops to naturally increase yields, reduce fertilizer usage, and increase general resilience to pests and climate change.

Agrarius works by activating the plants' "defense mechanisms" at the cellular level, without the actual stress factor. The intended effect of Agrarius is that 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, decreasing the requirement of fertilizer where used, and increasing overall resistance to diseases and stressed climate conditions.

## **Research and Development**

Since the Company commenced trading in March of 2020, it spent time and financial resources investing in various research and development projects with the intention of researching, evaluating, and where feasible upon sufficient results, developing with the intention to license and commercialize, various applications for its owned and/or licensed technologies.

Management believes that it had obtained sufficient learnings, taken into consideration a variety of relevant factors (such as market conditions, inflationary environment, capitalization requirements, timing, competitors, pathways to commercialization) with respect to its various proposed projects, and decided to focus on those initiatives it believes will best support the growth transition and long-term viability of the Company, namely (1) Nutraceuticals, (2) Agricultural, and (3) Husbandry Animals. In line with its focus on revenue and commercialization, management has paused most of its broad R&D expenditures and shifted to a more traditional use of capital aligned to revenue growth activities. The Company will continue to assess the ability, viability and desire to continue to develop its other projects and pre-clinical R&D work, however R&D expenditures are anticipated to be more narrowly focused on business expansion within these three focus areas of the business and halted or reduced otherwise in the near term, until and unless the Company recommences development on its other projects.

#### **Investments**

The Company currently owns interests (non-controlling and with no significant influence) in certain publicly traded and privately held corporations, both in and outside of Canada. See section entitled "Financial Overview - Investments" for more information.

## OPERATIONAL OVERVIEW - THIRD QUARTER ENDED DECEMBER 31, 2023 AND SUBSEQUENT

Management is focusing effort and resources on the development and commercialization of its three key business areas: (1) Nutraceuticals, (2) Agricultural, and (3) Husbandry Animals.

#### **Nutraceuticals**

In line with MVMD's nutraceutical GMP manufacturing product strategy, the Company entered into a license agreement with its selected third-party lead production partner in the United States (the "Lead Manufacturer"). The Company's strategy was to secure the Lead Manufacturer as a licensee, who will in turn produce nutraceutical products based on or embodying MVMD's proprietary technologies for third parties approved by and who have an agreement with MVMD (such as Circadian, as defined and further discussed below) and/or for MVMD's own brand(s). The Company believes this strategy of working with the one Lead Manufacturer will help to ensure product quality, support the ability to scale production, streamline the audit process for royalty agreements, and provide the necessary protection of its technology and trade secrets versus having numerous licensees and manufacturers each replicating the manufacturing process for their own products.

The Lead Manufacturer has invested in the expansion of its GMP manufacturing facility, including capability for OTC drug manufacturing to accommodate the Company's future product planning options, and has installed specialized equipment that MVMD requires to manufacture nutraceutical products that embody the Company's Quicksome™ technologies. As of the end of December 2023, the manufacturing facility is fully operational and currently supporting Quicksome™ related manufacturing requirements.

The Lead Manufacturer has worked closely with the Company to complete the initial product and production elements necessary to support the license agreement between the Company and Circadian

Wellness Corp. ("Circadian"), an MVMD licensee, as well as for MVMD's proprietary product line, "Mountains Of ...".

Circadian's license from MVMD supports the desire to achieve an increase in overall molecule efficacy with the Company's Quicksome™ technology applied across a variety of rapid dissolve sublingual and dermal products in the functional mushroom space. The initial product formulation work and dissolution testing has been completed and accepted by Circadian for its Eons branded for sleep, energy and immunity products. As per the licensing framework with Circadian, the Company received fees from Circadian for the proprietary formulation work that has been completed and accepted as final formulations.

Circadian introduced its mushroom-infused sublingual sleep product that embodies MVMD's technology in February of 2024, and although outside of MVMD's control, it is anticipated that a variety of consumer products that embody MVMD's technology under its Eons brand will be available for sale in the United States ongoing through the 2024 calendar year and beyond.

MVMD has commenced its business development planning with its Lead Manufacturer, who has a broad list of clientele who currently purchase "white label" and proprietary products from the Lead Manufacturer. It is anticipated that increased business development efforts with final GMP manufactured products will support the Company's plans to secure additional nutraceutical licensing partnerships.

## Mountains Of... Proprietary Brand

In the fall of 2022 calendar year, the Company applied for, and successfully received, trademark protection from the United States Patent and Trademark Office ("USTPO") for "MOUNTAINS OF" SLEEP, ENERGY, RELIEF, LIBIDO, and LEAN, for its initial GMP product sample development. The "MOUNTAINS OF ..." brand will be used for business development activities focused on securing additional nutraceutical distribution partners that can choose to use the "MOUNTAINS OF" product line or produce proprietary versions with their company's own branding and packaging requirements.

SMR036 Serial Number 97/266,875: MOUNTAINS OF SLEEP SMR037 Serial Number 97/266,876: MOUNTAINS OF ENERGY SMR038 Serial Number 97/266,877: MOUNTAINS OF RELIEF SMR039 Serial Number 97/266,878: MOUNTAINS OF LIBIDO SMR040 Serial Number 97/266,879: MOUNTAINS OF LEAN

In the spring of 2023, the Company filed for Trademark protection with the USTPO for "MOUNTAINS OF ..." in the effort to more broadly protect the "Mountains Of" brand and create unlimited future product applications. The USTPO provided notice of allowance on September 12, 2023 for the "MOUNTAINS OF ..." trademark – US Serial Number 97571014. The Company believes this will be valuable in its future business development efforts and broad growth plans for its nutraceutical line of business.

The Company's Lead Manufacturer has confirmed full production readiness for "Mountains Of" products and will support manufacturing of initial products for sleep, energy, appetite suppressant and pain relief in line with business development plans for the 2024 calendar year.

The Company is supporting the product launch of Circadian's Eons sleep brand that embodies the Company's licensed technology and GMP "MOUNTAINS OF" sampling business development with current public relations, and marketing support. It is anticipated that related expenditures will be approximately CDN \$100,000 overall.

## **Agriculture**

By virtue of a license arrangement with Agrarius Corp. ("AC"), a private US corporation and owner of Agrarius technology and related products, MVMD is an authorized reseller of Agrarius, a certified organic product owned by AC. The Agrarius product is delivered in a liquid concentrate form that gets mixed with water at the point of application and then applied via sprayer to agricultural crops at ideal times during a plant's lifecycle. Agrarius has been tested across numerous major agricultural crops, and has demonstrated its ability to naturally increase crop yields from approximately ten to fifty percent or more

depending on crop type, reduce fertilizer usage where used by more than thirty percent, and increase general resilience to pests and climate change forces such as drought.

The Agrarius product works by activating the plants' "defense mechanisms" at the cellular level, without the actual stress factor. The intended effect of Agrarius is that 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, decreasing the requirement of fertilizer where used, and increasing overall resistance to diseases and stressed climate conditions. Agrarius technology enables direct plant communication by mimicking naturally occurring organic molecules that correspond to various plant survival instincts, which improves the natural defense mechanisms of the plant to overcome environmental stresses. Agrarius works by sending signals that a plant understands and propagates through its roots and mycelial networks, allowing nearby plants to benefit from the signals naturally while reducing the actual amount of product that is used on a field. These signals literally send information that stimulates plant growth, subsequently increasing yields, volatility resistance, and growth speeds.

Agrarius received organic certification through the Organic Materials Review Institute (OMRI). According to its website (omri.org), OMRI is a non-profit organization that provides an independent review of products, such as fertilizers, pest controls, livestock health care products, and numerous other inputs that are intended for use in certified organic production and processing, against organic standards and once approved, acceptable products appear on the OMRI Products Lists© on their company website.

MVMD believes Agrarius presents a significant opportunity to support its growth objectives given the rapidly changing global agricultural landscape due to mass fertilizer shortages, population growth, and urban sprawl limiting available farmlands and has focused its recent resources on the development of this line of business. MVMD is currently conducting business development activity in Mexico, Central America, South America, and the United States of America. The focus of the current business development activities has been to target large scale farming operations to induce trial activity on crops that would demonstrate the benefit to improving crop yields and the corresponding reduction in fertilizer usage where used in the specific farming operation. There are currently more than 30 active crop trials being conducted by targeted large scale farming operations, which would represent a potential multimillion dollar field coverage pipeline if the clients were to purchase Agrarius product from the Company after successful trial completion. It is management's view that the business development effort has been well received by the initial large scale farming operations the Company has been targeting and working with for trialing. Additionally, the Company is working through a strategy of targeting large food supply businesses where significant purchasing power of agricultural products exists. The Company anticipates revenue from Agrarius sales activity in the first half of the 2024 calendar year based on the timing registration approval and logic of the crop trialing cycle, whereby farming organizations would personally validate the anticipated positive impact on their crop yields and/or fertilizer reduction after it has been trialed on their farm. Revenue and the related ramp-up of sales growth in many cases is anticipated to take one full crop cycle and is dependent on the successful registration of the Agrarius product in the key trial markets (see further information on registrations below). The Company had anticipated sales activity to occur by the end of the calendar year 2023, however the Company is subject to the timelines associated with the registration process in each jurisdiction. Management has been responding to registration inquiries in a timely manner and believes that the success of each registration application is a matter of time.

The Company currently facilitates Agrarius product information and product order flow through its corporate website that is designed to geofence certain target territories and present native languages for business development, including Spanish and Portuguese. The website presents intended product benefits, case studies, enables clients or potential clients to calculate crop-specific ROI, and facilitate product trialing and purchase processes.

MVMD has hired key team members in South America to support its agriculture line of business objectives in Mexico, Central America and South America (LATAM), including in the areas of finance, operations, business development, and agronomy. MVMD has been working with both AC and its local team members, who are familiar with local language, customs and requirements, and report directly to MVMD regularly, to determine and facilitate the structure of its operations in LATAM, including with respect to minimizing risks which may be related to operating an agricultural business, including the distributing of

the Agrarius product, in LATAM. MVMD's management and consultants have and intend to continue to travel regularly to LATAM to support ongoing team management requirements, business development and sales efforts

The Company plans to operate its LATAM sales operations primarily through a wholly owned subsidiary in Panama, which was formed along with three (3) additional wholly owned subsidiaries to facilitate the registration of the Agrarius product in certain territories throughout LATAM and to facilitate sales. The Company has contracted the services of a Panamanian distribution company in the Pana Park duty free zone inside Panama to support product shipping and logistics based on its geographical location, which provides for certain tax advantages related to operating in a duty free zone. The Company has coordinated the delivery of Agrarius product inventory to its Panamanian distribution supplier to support anticipated sales fulfilment requirement for LATAM. The initial business development and Agrarius product registration processes were initially focused on Colombia, Brazil, Uruquay, Panama and Mexico, and have been expanding accordingly to meet the demand from interested parties in Costa Rica, Argentina, Bolivia, and more. The Company is establishing a broader registration strategy to address all of Central and South America in line with anticipated demand in line with initial focus markets ordering initial product inventory. The registration process and timeline varies throughout the territories and it is anticipated as at the date of this MD&A that registration timing will be achieved at various times throughout the LATAM territories over the coming months. The Company believes that it has interested customers who have trialed the product and would be likely to proceed with product orders once registrations allow Agrarius to be broadly applied on their crops. Agrarius is currently registered for sale in 41 states in the USA (registered directly by AC), with additional state approvals anticipated through the calendar year (2024). As the LATAM registration process has been taking longer than anticipated by the Company, the Company has started a more concentrated effort on targeted sales activities in the USA in states in which registrations have already been obtained by AC. The Company has budgeted approximately \$1 million dollars CDN to achieve its initial Agrarius business development and sales objectives for the 2024 fiscal year from available funds. A new budget will be updated as part of the 2025 fiscal year planning process.

Legal counsel in LATAM was engaged to form the Company's subsidiaries in the region and is advising on ongoing requirements as needed. Additional legal, financial and other experts are anticipated to be engaged as needed. The Company anticipates providing ongoing disclosure, that is not otherwise included in this MD&A, commensurate with its commercialization progress as required in accordance with OSC Staff Notice 51-270 — Issuer Guide for Companies Operating in Emerging Markets, including regulatory requirements as applicable. To date, AC has been navigating and providing guidance to MVMD on the relevant registration processes in target territories in order to provide an idea of timing and other requirements.

See section entitled "Financial Overview – Investments" for information regarding investments made by MVMD in AC, including its wholly-owned subsidiary, Agroresults Inc.

# **Husbandry Animals / Aquatic Species**

The Company has applied its Quicksol™ solubilization technology to the drug Ivermectin to create its Soluvec™ 1% product formulation, which was designed to provide a safer and more effective solution that can be administered broadly across the husbandry animal and aquatic species marketplace.

The Company's overall husbandry and aquatic species strategy was to develop its scientific assets with a view to licensing to third parties. In April 2023, the Company entered into a license agreement (the "License Agreement (Bangladesh)") with a privately held Ontario corporation (the "Licensee") for its Soluvec™1% animal husbandry applications for the territory of the People's Republic of Bangladesh. The Company has worked closely with the Licensee and its partners inside Bangladesh on the previously disclosed animal pharmacokinetic trials that were conducted under the supervision of The People's Republic of Bangladesh's Ministry of Fisheries & Livestock for the injectable Soluvec™ 1% solubilized Ivermectin technology, and Soluvec™ 1% coated standard fish feed across farmed fish species. The agreement provides the Licensee with the exclusive rights, within Bangladesh, to work through its partners inside the territory to coordinate Soluvec™ 1% manufacturing and distribution of related Soluvec™ 1% products, both in injectable and food coating applications. In consideration, the Licensee will pay to the Company a royalty percentage against net sales in the region.

Related to the License Agreement (Bangladesh)and necessary government approvals, the pharmacokinetic trials conducted inside Bangladesh across husbandry and aquatic species categories were completed by a third-party Contract Research Organization (CRO) and MVMD believes the results of these trials positively supported the value proposition necessary to secure requisite government approvals to commercialize inside Bangladesh. The pharmacokinetic trials for Soluvec™ 1% involved administering the drug through intramuscular (IM) and subcutaneous (SC) injection, as well as orally with commercially available branded Ivermectin. The trials also included comparative studies of growth performance, toxicity, and blood hematological observation for Soluvec 1% coated standard fish feed among various farmed fish species. The trials demonstrated that Soluvec™ 1% has a solubility approximately 2,500 times greater than free Ivermectin. Additionally, IM and SC Soluvec™ 1% administration increased Ivermectin drug exposure, peak levels, and extended the duration of Ivermectin exposure in husbandry animals when compared to commercially available Ivermectin in SC, IM, and oral forms. Farmed fish trials were conducted on Indian Catfish, Pangas, Common Carp, Tilapia, and Rui (Ruho) fish species. One group received Soluvec™ 1% coated standard fish feed, while the control group was given non-Soluvec™ 1% standard fish feed. The results showed an increase in average daily growth and a reduction in mortality, leading to an overall net average increase in net production of 145%. The feed conversion ratio also improved by an average of 16% for all fish species treated with Soluvec™ 1% coated fish feed compared to those receiving non-Soluvec™ 1% coated fish feed, indicating that the former group required less feed to produce higher units of biomass.

The Company has made a significant time and financial investment to optimize a final formulation approach to ensure its Soluvec<sup>™</sup> 1% product has the desired stability at both room temperature and standard refrigeration temperature. The Company believes that product stability is a critical element for broader commercialization applications to provide manufacturing flexibility, reduce costs, simplify transportation and storage, and ensure overall product efficacy at the point of administration. The Company has successfully worked with its consultants and third-party Contract Manufacturing Operator ("CMO") in the United States to create its final formulation for its Soluvec<sup>™</sup> 1% that has achieved the nine-month stability target of greater than 95% IVM purity. This formula was the basis of the License Agreement (Bangladesh)and is the formula that will be manufactured in Bangladesh initially.

Table 1. Ivermectin-HPBCD Vials, Formulation A100: API Stability Data at Room Temperature

| Parameter                            | Specification           | Timepoint |         |         |  |
|--------------------------------------|-------------------------|-----------|---------|---------|--|
|                                      |                         | Initial   | 1 Month | 9 Month |  |
| Concentration of Ivermectin in mg/mL | 10 mg/mL ± 1.5<br>mg/mL | 10.22     | 10.01   | 10.13   |  |
|                                      | Verified Purity         | 96.1%     | 95.8%   | 95.4%   |  |

Table 2. Ivermectin-HPBCD Vials, Formulation A100: API Stability Data, Refrigerated

| Parameter                            | Specification           | Timepoint |         |         |  |
|--------------------------------------|-------------------------|-----------|---------|---------|--|
|                                      |                         | Initial   | 1 Month | 9 Month |  |
| Concentration of Ivermectin in mg/mL | 10 mg/mL ± 1.5<br>mg/mL | 10.22     | 10.25   | 10.34   |  |
|                                      | Verified Purity         | 96.1%     | 96.0%   | 95.9%   |  |

Management has been advised by the Licensee that the Licensee has received necessary government approvals and completed the manufacturing agreements that enable the Licensee to commence manufacturing of the Soluvec<sup>™</sup> 1% coated standard fish feed for farmed fish species within Bangladesh. The Licensee has confirmed it is working with its manufacturing partner to commence production and

finalizing plans to introduce the product for sale to key prospects in the farmed fishing industry. The Licensee has communicated to the Company that it anticipates the salability of its Soluvec<sup>™</sup> 1% coated standard fish feed in Bangladesh by May of 2024. Approximately CAD \$300,000 has been budgeted to support the commercialization launch of the husbandry and aquatic species (initially targeted at farmed fish) inside Bangladesh.

The Company continues to evaluate the opportunity to license its Soluvec<sup>™</sup> 1% product in territories outside of Bangladesh. The government product approval from Bangladesh granted to the Licensee for farmed fisheries enables the Company to look at strategic business development initiatives in line with anticipated product production in Bangladesh in the 2024 calendar year. The Company believes that sending commercially manufactured samples of the Soluvec<sup>™</sup> 1% product will reduce costs and enable several independent evaluation trials to happen simultaneously with potential key partners in a variety of territories. To safeguard its intellectual property and the Company's licensing royalty model, the Company has initially filed for Quicksol<sup>™</sup> patent protection in key markets it has deemed strategically important at this time for expansion outside of Bangladesh. Following the year ended March 31, 2023, MVMD has filed for Soluvec<sup>™</sup> protection in 12 additional markets outside of the United States, including Canada, China, India, Mexico, Sri Lanka, Thailand, Philippines, Malaysia, Brazil, Peru, Argentina, and Chile.

The Company announced on August 9, 2023, the peer-reviewed publication of its Soluvec<sup>™</sup> study data in the journal, Therapeutic Delivery. The published study highlights the benefits of the Company's patented Soluvec<sup>™</sup> formulation, a novel, solvent-free aqueous Ivermectin invention. The study confirmed that parenteral administration of Soluvec<sup>™</sup> led to an Ivermectin drug exposure approximately seven times higher than traditional oral drug dosing, with greater bioavailability, offering potential for enhanced therapeutic effectiveness.

Key Findings from the Study:

- Improved Solubility with Soluvec™: In the resolubilized product, Soluvec™, Ivermectin was present as a mix of 28.0 nm particles and polysorbate-solubilized free Ivermectin. The total concentration was approximately 2,500 times greater than that of free Ivermectin in water.
- IVM Exposure Seven Times Higher: In beagle dogs treated parenterally with Soluvec (subcutaneous or intramuscular dosing), total exposure of Ivermectin was ~seven-times higher than in dogs receiving a non-solubilized Ivermectin tablet of the same dose orally.
- Increased Duration of Exposure: Peak levels were higher and, most importantly for ease of treatment, duration of exposure was reliably greater with parenteral dosing; all Soluvec-treated animals had detectable IVM at 48 h, versus none of the non-solublized Ivermectin orally dosed animals.
- Lower Doses Possible: Enhanced bioavailability of IVM in Soluvec<sup>™</sup> suggests that a lower dose
  may achieve the desired therapeutic effects, potentially leading to reduced treatment costs and
  fewer side effects.
- Safety Profile: Research underscores favourable safety profile of Soluvec™, with minimal side effects generally observed in test subjects.
- Potential Human and Livestock Applications: The results point to the possibility of easier treatment regimens and improved therapeutic outcomes not just for livestock but potentially for humans as well.

The article, titled "Physical and Pharmacokinetic Characterization of Soluvec™, a novel, solvent-free aqueous Ivermectin formulation" can be accessed at https://www.future-science.com/doi/10.4155/tde-2023-0021.

## **FINANCIAL OVERVIEW**

The following summarizes the Company's investments at December 31, 2023 and March 31, 2023:

|                                 | March 31, |           |           | Change in  | December |
|---------------------------------|-----------|-----------|-----------|------------|----------|
|                                 | 2023      | Additions | Disposals | fair value | 31 2023  |
|                                 | \$        | \$        | \$        | \$         | \$       |
| Sixth Wave Innovations Inc. (a) | 5         | -         | -         | (5)        | -        |
|                                 |           |           |           |            | -        |
| Circadian Wellness Corp. (b)    | 1,222     | -         | -         | -          | 1,222    |
|                                 |           |           |           |            | -        |
| Agrarius Corp. (c)              | 203       | -         | -         | -          | 203      |
| Agranaulta Ina (d)              | 115       |           |           |            | 115      |
| Agroresults Inc. (d)            | 115       | -         | -         | -          | 115      |
|                                 | 1,545     | -         | -         | (5)        | 1,540    |

#### Agroresults, Inc./Agrarius Corp.

Agroresults Inc. owns a controlling interest of Agrarius Corp, both private companies. See section entitled "Business Overview – Agricultural" for additional information on the Agrarius.

In November 2019, MVMD had made an early investment of \$100 into Agroresults Inc. in the form of a convertible debenture. During the quarter ended December 31, 2022, MVMD made a further investment of \$203 into Agrarius Corp. common shares (being the parent company of Agroresults Inc.). In addition, the convertible debenture was converted into common shares of Agroresults Inc.

## Sixth Wave Innovations Inc.

In December 2023, Sixth Wave announced that it had entered into an agreement with a secured lender pursuant to which such secured lender would exercise its right to foreclose on Sixth Wave's assets. Accordingly, the Company wrote-down the fair value of this investment to be nil.

#### Circadian Wellness Corp.

The main driver behind Circadian Wellness is the market acceptance and effectiveness of its functional mushroom product lines, which has yet to be proven. There has been no evidence of a change in the value of this investment for the three months ended December 31, 2023.

#### Investment Strategy

It is the current investment strategy of the Company to hold the shares of Sixth Wave Innovations Inc., Agroresults Inc., Agrarius Corp., and Circadian Wellness Corp. for the foreseeable future.

#### **QUALITY MANAGEMENT**

As the Company's business model and nature of operations requires work with multiple third parties, MVMD engaged the services of a qualified third-party regulatory affairs and quality assurance service provider to design and oversee the implementation of the Company's quality management system. This included the audit and management of select key third-party vendors who provide GxP services to MVMD. GxP was established by the Food and Drug Administration (FDA) and ensures that regulated organizations comply with specific and secure manufacturing and storage processes and procedures that determine effective research standards for nonclinical laboratory trials and safe human-subject clinical trials.

The processes and related SOPs implemented with the support of the service provider are in place within the Company to support the selection, assessment, and management of suppliers to ensure compliance with external regulations or guidance documents for GxP-related services/materials.

#### **RESULTS OF OPERATIONS**

Nine month period ended December 31, 2023 and 2022

The net loss for the nine months ended December 31, 2023, was \$6,017 compared to a net loss of \$6,042 for the nine months ended December 31, 2022. The change in net loss was due to the following:

- 1. Revenue increased \$60 from the comparable period due to formulation work delivered during the period.
- 2. The general and administrative expenses decreased \$673 from the comparable period. The Company reduced consulting fees and did not renew certain consulting agreements that were in place in the comparable period.
- An impairment loss of \$3,818 was recognized in relation to intangible assets.
- 4. Fair value loss on equity investments decreased \$1,993 from the comparable period. During the quarter ended December 31, 2023, there was a write-off of \$5 in the fair market value of the Company's equity investments based on the trading price.
- 5. Research and development decreased \$808 from the comparable period. The decrease relates to research work and pre-clinical trials the Company paused or completed related to development of its technology as more fully described in this MD&A.
- 6. Stock based compensation decreased \$71 from the comparable period.
- 7. Advertising, marketing and technology support decreased \$108 from the comparable period. The Company decreased its contracting with various service providers during the period.

## **SUMMARY OF QUARTERLY RESULTS**

The following is a summary of the periods ended December 31, 2022 to December 31, 2023, which have been derived from the financial statements of the Company. This summary should be read in conjunction with the March 31, 2023 audited consolidated financial statements and the interim consolidated statements of the Company for the same periods.

(Unaudited, in thousands of Canadian Dollars, except for per share amounts).

|                         | December 31,<br>2023 | September 30,<br>2023 | June 30,<br>2023 | March 31,<br>2023 |
|-------------------------|----------------------|-----------------------|------------------|-------------------|
|                         | \$                   | \$                    | \$               | \$                |
| Total assets            | 10,539               | 15,355                | 15,979           | 16,769            |
| Working capital         | 8,071                | 8,838                 | 9,255            | 10,277            |
| Netloss                 | 4,732                | (590)                 | (695)            | (1,400)           |
| Loss per share          | (0.01)               | (0.00)                | (0.00)           | (0.00)            |
| Weighted average common |                      |                       |                  |                   |
| shares oustanding       | 329,653,424          | 329,653,424           | 329,653,424      | 329,653,424       |

|                         | December 31,<br>2022 | September 30, 2022 | June 30,<br>2022 | March 31,<br>2022 |
|-------------------------|----------------------|--------------------|------------------|-------------------|
|                         | \$                   | \$                 | \$               | \$                |
| Total assets            | 17,974               | 21,007             | 23,656           | 25,270            |
| Working capital         | 11,485               | 12,693             | 13,837           | 14,655            |
| Non-current financial   |                      |                    |                  |                   |
| liabilities             | -                    | 6                  | 6                | 6                 |
| Revenue                 | -                    | -                  | -                | 110               |
| Netloss                 | (1,210)              | (2,980)            | (1,852)          | (673)             |
| Loss per share          | (0.00)               | (0.01)             | (0.01)           | (0.00)            |
| Weighted average common |                      |                    |                  |                   |
| shares oustanding       | 329,653,424          | 329,653,424        | 329,647,895      | 329,236,773       |

(in thousands of Canadian Dollars, except for per share amounts):

For the quarter ended December 31, 2023, the Company incurred a loss of \$4,732 which consisted of the following:

- The Company generated \$60 of revenue.
- The Company incurred \$123 in research and development costs.
- The Company recorded additional stock-based compensation of \$49 in relation to vesting of stock options granted in previous periods.
- The Company incurred \$768 in general and administrative costs in the three-month period ended December 31, 2023 related to general business operating costs including marketing costs, and consulting fees in the normal course of business.
- An impairment loss of \$3,818 was recognized in relation to intangible asset.

#### LIQUIDITY AND CAPITAL RESOURCES

(in thousands of Canadian Dollars, except for per share amounts)

As at December 31, 2023, the Company has cash of \$6,857 compared to \$9,714 as at March 31, 2023. The Company has working capital (defined as total current assets less total current liabilities) of \$8,071 as at December 31, 2023 compared to working capital of \$11,485 as at December 31, 2022. Working capital decreased as the Company spent funds on business development, research and development, product inventory for sales and trialing purposes, and general and administrative expenses.

The Company has current liabilities of \$184 as at December 31, 2023 (\$591 as at March 31, 2023). Cash consumed by operating activities after changes in non-cash working capital during year ended December 31, 2023, was \$2,353, compared to cash consumed of \$3,622 for the period ended December 31, 2022.

The Company paid fees for business development activities, public relations activities, and fees to consultants, lawyers and other professionals in relation to its stated commercialization plans, including developing its proprietary technology compared to the prior period.

For the nine months ended December 31, 2023, investing activities consumed cash of \$503 compared to the comparable period December 31, 2022, in which investing activities provided cash of \$1,927.

At present, the Company's operations do not generate cash flow and its business plan and focus is on commercializing its three stated lines of business, including developing and licensing its intellectual property technology assets.

## **OFF-BALANCE SHEET ARRANGEMENTS**

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

## **RELATED PARTY TRANSACTIONS**

Key management consists of personnel having the authority and responsibility for planning, directing and controlling the activities of the Company, which are the directors and executive officers of the Company:

|                          | Nine months ended<br>December 31, 2023<br>\$ | Nine months ended<br>December 31, 2022<br>\$ |
|--------------------------|--|--|
| Consulting fees          | 305  | 484  |
| Director fees            | 71   | -  |
| Stock based compensation | 194  | 160  |
|                          | 570  | 644  |

## **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.

In preparation of the consolidated financial statements, the significant estimates and judgments made by management in applying the Company's accounting policies and the key sources of estimation uncertainty were the same as those applied to the consolidated financial statements for the year ended March 31, 2023.

The determination of long-lived asset impairment requires significant estimates and assumptions to determine the recoverable amount. The recoverable amount is the higher of the fair value less cost of disposal ("FVLCOD") and value in use ("VIU"). Determining the FVLCOD and VIU involved estimating the net present value of future cash flows derived from the use of the asset, discounted at an appropriate rate.

The key assumptions that have been utilized in the determination of the future cash flows of the intangible assets represent management's best estimate of a range of economic conditions relating to the asset, and were based on historical experience, industry trends, and communication with other key stakeholders of the Company. These key assumptions include sources of license revenue, estimates of license revenue amounts, license revenue growth rate and discount rate. Significant changes in key assumptions utilized in the determination of future cash flows could result in a material change in the impairment loss or reversal of impairment loss.

#### FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The Company's financial instruments include cash and cash equivalents, purchase consideration receivable, HST receivable, Corporate taxes payable, accounts payable and accrued liabilities. The carrying amounts of these financial instruments 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 December 31, 2023, 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 three months ended December 31, 2023.

## 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. 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 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.

# 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, 2023, the Company's financial liabilities have contractual maturities as summarized below:

|  | Due within        |                 |                 |
|--|-------------------|-----------------|-----------------|
|  | 0-12 months<br>\$ | 1-2 years<br>\$ | 2-3 years<br>\$ |
| Accounts payable and accrued liabilities | 104               |                 |                 |

## 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 three months ended December 31, 2023. As a result, a 10% change in the equity investments will translate to a \$155 (three months ended December 31, 2022, \$155) gain or loss from equity investments.

## **OUTSTANDING SHARE DATA**

The Company had the following common shares, stock options and warrants outstanding as at the date of this MD&A:

Issued and outstanding common shares 329,653,424

Stock options 20,643,500

Warrants -

## ADDITIONAL DISCLOSURE FOR VENTURE ISSUERS WITHOUT SIGNIFICANT REVENUES

Additional disclosure concerning the Company's research and development and general and administrative expenses is provided below:

Nine months ended December, 31

| Research and development                     | 2023 | 2022 |
|--|------|------|
|  | \$   | \$   |
| Third party research and pre-clinical trials | 134  | 469  |
| Consulting fees and salaries                 | 15   | 11   |
| R&D lab supplies                             | 15   | 492  |
| Total  | 164  | 972  |

Nine months ended December, 31

| General and administrative                    | 2023 | 2022  |
|---|------|-------|
|   | \$   | \$    |
| Advertising, marketing and technology support | 187  | 295   |
| Business development and travel               | 322  | 319   |
| Consulting fees and salaries                  | 843  | 1246  |
| Investor relations                            | 16   | 56    |
| Office, insurance and supplies                | 161  | 228   |
| Professional fees                             | 233  | 361   |
| Rent  | 65   | 37    |
| Transfer agent                                | 23   | 47    |
| Materials purchased                           | 21   | -     |
| Other costs                                   | 9    | (36)  |
| Total   | 1880 | 2,553 |

## **RISK FACTORS**

There are numerous and varied risks, known and unknown, that may prevent the Company from achieving its goals. A detailed description of the risks and uncertainties pertaining to the Company's operations can

be found in the Company's Annual Management's Discussion and Analysis for the fiscal year ended March 31, 2023. With the addition of the risk factors below, the Company is not aware of any significant changes to the risks and uncertainties disclosed at that time.

## Non-controlling interests

The Company's investments include equity securities of companies that it does not control. Such instruments and securities may be acquired through trading activities or through purchases of securities from the issuer of such securities. These investments are subject to the risk that the directors, officers, or other stakeholders of the company or other entity in which the investment is made may make business, financial or management decisions with which the Company does not agree or may take risks or otherwise act in a manner that does not serve the Company's interests, which could result in the requirement to contribute funding to such company or entity. If any of the foregoing was to occur, this could have an adverse effect on the Company's business, financial condition and results of operations.

## Reliance on Jurisdictional Regulatory Requirements

The Company's business is reliant in whole or in part on the successful registration of the sale of its developed or licensed products in various jurisdictions internationally. For example, the Company is required to register, directly or indirectly, the Agrarius product in each jurisdiction in which it intends to sell the product. Although it's anticipated that each such registration will ultimately be successful, it's possible that registration could be rejected or could take a longer than expected, or significant, period of time. Any rejection or delay could have an adverse effect on the Company's business, financial condition and results of operations.

## **ADDITIONAL INFORMATION**

Additional information concerning the Company and its operations is available on SEDAR+ at www.sedarplus.ca.