FORM 7

APRIL MONTHLY PROGRESS REPORT

Name of CSE Issuer: ***MOUNTAIN VALLEY MD HOLDINGS INC.*** *("MVMD" or the "Company").*

Trading Symbol: *MVMD*

Number of Outstanding Listed Securities (as at March 31, 2021): 329,581,549

Date: May 5, 2022

Report on Business

1. Provide a general overview and discussion of the development of the Issuer's business and operations over the previous month. Where the Issuer was inactive disclose this fact.

SIGNIFICANT PROJECTS

MVMD continued throughout the month of April 2022 with its previously announced significant projects, as follows:

ONCOLOGY

- *As announced on May 3, 2021, pre-clinical trials for Triple-negative Breast Cancer, Metastatic Melanoma and Lewis Lung Carcinoma were conducted to support MVMD's exploration of application of its technology to potential cancer treatments. Preliminary murine cell model studies were completed, and the research conducted presented some noteworthy exploratory findings that have resulted in MVMD expanding its oncology work to explore human cell line tumors with further investigational cell viability and proliferation research studies being executed over the past two quarters.*
- *MVMD is also reviewing additional pre-clinical models to explore combinations of its patented Soluvec™ with existing chemotherapeutic and immunomodulatory treatments across solid tumor and hematological malignancies.*
- *On April 5, 2022, the Company was granted a Patent for 'Novel Injectable, Infusable, Instillable Ivermectin Adjuvant for Cancer Therapies' for its solubilized ivermectin (Soluvec™). The issuance of this patent verifies the novel approach of MVMD's technology as applied to potential cancer types that the Company is exploring and assists in safeguarding the invention in support of potential commercial value in the future as the technology progresses through trials.*

COLD CHAIN

- *Cold chain is a temperature-controlled supply chain that prescribes necessary conditions during the transport, storage, and handling of vaccines and drugs to minimize excessive*

heat or cold exposure that can render product ineffective. The World Health Organization's (WHO) guideline for temperature requirements for three defined vaccine management categories includes 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.*

- *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 sublingual technology. In addition to its sublingual cold chain work, the Company studied in the first half of 2021, whether it could apply a thin Quicksome™ desiccated liposome layer of Trivalent Inactivated Poliovirus Vaccine (tIPV) inside a vial for five days of exposure at 40 degrees Celsius and then reconstituted for injection at the point of administration.*
- *Based on the cold chain technology achievements announced in July of 2021, the Company has advanced additional characterization studies with its proprietary Quicksome™ technology to optimize application across different human and animal vaccines. The Company believes the technology would allow for long term stability and ease of global distribution, appropriate for pandemic preparedness, as well as other administration and distribution advantages, including elimination of cold chain storage requirements and the related expenses, while reducing instances of vaccine spoilage.*
- *MVMD is finalizing agreements with third-party organizations who specialize in vaccine research and is initiating studies of the Company's technologies across an expanded vaccine target list, including those that have broad commercialization potential.*
- *Additionally, MVMD is in discussions with a potential partner in South America to apply the Company's cold chain technology to targeted husbandry animal vaccines.*

HUSBANDRY ANIMALS

- *Previously, the Company had disclosed the application of its Quicksol™ technology to the drug ivermectin and belief that a more solubilized format versus current in-market products would have novel applications across the broad husbandry animal marketplace.*
- *The Company completed initial husbandry animal trials in Bangladesh, previously announced on March 16, 2021, that were conducted with MVMD's injectable solubilized ivermectin technology, Soluvec™ 1%. The studies were conducted under the supervision of The People's Republic of Bangladesh's Ministry of Fisheries & Livestock and informed the requirements for final commercialization pathway inside of Bangladesh.*
- *Over the past six months, MVMD has been coordinating dosing and formulation testing and conducting extended stability tests on GMP manufactured Soluvec™ 1% in order to optimize the formulation for different conditions and environments. The results of some of the stability testing have now been received and have indicated that the base formula requires optimization and further stability testing in order to allow for the scaling of batch sizes for production and ensuring Soluvec™ 1% product applications have a predictable shelf life. This work is expected to proceed through to the first quarter of 2023.*

- *Concurrently, MVMD is working with its partner in Bangladesh to negotiate a commercial licensing agreement that would include management by the licensee of a local manufacturing partner and process for scaled Soluvec™ 1% commercial production requirements and completion of market specific stability testing for the husbandry animal applications inside Bangladesh, in support of pursuing government approval inside Bangladesh necessary to enable Soluvec™ 1% product to be commercialized.*
- *It is currently anticipated that Soluvec™ 1% will be ready for retail product introduction by the licensee in the first quarter of 2023, however this may be a longer or shorter period depending on various factors such as the results of the additional stability testing and the related timing of regulatory review and approval.*

ACQUACULTURE

- *The Company's partner in Bangladesh is working with the local Ministry of Fisheries, which engaged MVMD to evaluate whether a combined application of both its Quicksol™ and Quicksome™ technologies to a novel fish food application would be able to reduce the effect of parasitic infections across a variety of farmed fish species. The Company is working with the Ministry to finalize key protocols in these different species and is completing the trial planning protocol and aims to commence the trials in the third quarter of 2022.*
- *Additionally, MVMD is coordinating the research framework with an acclaimed international university to conduct a collaborative study of Soluvec™1% coated fish feed to study its health benefits in targeted aquatic species. It is anticipated the related studies will commence in the in the fourth quarter of 2022.*

DOSE SPARING ADJUVANT

- *The Company's patent-pending PANA technology has high surface area for vaccine-antigen binding that the Company believes may provide vaccine dose sparing advantages with long-term stability in aqueous media, and greater stability in harsh environments*
- *In partnership with the Tulane University School of Medicine in New Orleans, Louisiana, as previously disclosed, the Company executed a study comparing an existing Alhydrogel adjuvant to the Company's invented stable nano-particulate adjuvant by both intramuscular injection and intradermal injection immunization. The study evaluated the antibody responses following vaccination with fractional doses of IPV and compared delivery types with IPV alone or adjuvanted. The evaluation of MVMD'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.*
- *The Company continues its work with its key advisors at Tulane University to explore if changes in the adjuvant development and administration may support a positive research outcome across a broad spectrum of vaccines. MVMD anticipates exploratory progress over the third quarter of 2022, related to results from ongoing characterization work that will inform the plan forward and related timing for the technology evaluation.*

INSULIN

- *Diabetes is a disease in which the human or animal body either can't produce insulin or can't properly use the insulin it produces. Insulin is a hormone produced by the pancreas and its role is to regulate the amount of glucose circulating in the blood.*
- *In MVMD's view, despite significant innovation in recent years in relation to diabetes, insulin remains a cornerstone of treatment, and there continues to be an unmet need in the insulin space, resulting from challenges such as costs, the use of needles, hypoglycemia, and fear of injection.*
- *The Company is advancing its exploration of the application of its technology to the needleless administration of insulin and is currently planning the execution of formulation experiments with the goal of optimizing the potential delivery of rapid-acting human insulin in a sublingual format. Additionally, the Company has initiated the selection process for a third party CRO and is engaging experts in insulin science to support planning of necessary trials to validate the potential delivery of rapid-acting human insulin in a sublingual format.*
- *The Company expects to have further information on formulation developments and to complete testing of formulations in a Type 1 diabetes model in the second half of 2022.*

TUBERCULOSIS

- *Tuberculosis (TB) is a disease that is caused by bacteria that spread from person to person through microscopic droplets released into the air. TB 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 year.***
- *In March of 2021, the Company announced that it had confirmed its ability to create a solubilized selamectin product using its patented Quicksol™ technology applied to the macrocyclic lactone drug class. Selamectin drug is characterized as a highly insoluble molecule and MVMD believes that there is significant potential in treating mycobacterium-based infections in humans and animals with its solubilized format of the drug, Selactosol™ 1.5%.*
- *MVMD has completed its initial assessment and established the plan to optimize the formulation, the necessary testing assays, and related preclinical protocols required to advance studies for its novel Selactosol™ 1.5% targeting mycobacterium-based infections. MVMD intends to commence pre-clinical studies with its Selactosol™ 1.5% solution in the latter half of 2022.*

R&D COVID-19

- *The Company had explored the application of a solubilized form of ivermectin in the potential treatment of COVID-19. In May 2021 the Company announced the results from its third-party Bio Safety Level 4 ("BSL-4") COVID-19 viral clearance study conducted with its solubilized ivermectin technology, Soluvec™. In management's view based on an internal review of publicly available literature, the positive indicators from the BSL-4 trials are consistent in general with various global trials and contribute to evidence for the effect*

of ivermectin on inhibition of viral replication and the potential application as a treatment for COVID-19.

- *MVMD also acknowledges the positions of certain regulatory bodies, for example Health Canada and the Food and Drug Administration in the United States, that ivermectin has not be authorized or approved for use in the treatment of COVID-19. The Company's primary focus, in line with its "cold chain" work, has been on those jurisdictions which may have less access to vaccines and other treatments, where ivermectin has been studied for use in the treatment of COVID-19, and which might benefit from access to a solubilized form of the drug.*
- *In addition to potential sublingual administration applications, MVMD believes that its solubilized form of ivermectin could be favourable for front line emergency use applications, including injection and intravenous uses, potentially for COVID-19 treatments where authorized or in research for future possible pandemics.*
- *Due to the complexity and cost of human ivermectin trials, as well as the global and regulatory landscape for approval of treatments for COVID-19, the Company is currently working to evaluate the business case for further studies in humans, including stability of human grade GMP product, with academic and non-academic partnerships.*

NUTRACEUTICALS

- *Following evaluation of North American GMP manufacturing options for MVMD's nutraceutical product strategy, the Company is in the final stages of securing its third-party lead production partner.*
- *The Company's strategy will be to secure the selected lead manufacturing partner 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. The Company believes this strategy will help ensure product quality, support the ability to scale production, streamline audit process for royalty agreements, and provide the necessary protection of its technology and trade secrets versus having numerous licensed partners each replicating the manufacturing process for their own products.*
- *MVMD's current licensing arrangements with Circadian Wellness and Red White & Bloom Brands, and future such agreements, are anticipated to be supported by this strategy.*
- *Securing the lead manufacturer and finalizing the scaled GMP production environment is intended to align with MVMD's anticipated increased business development efforts in the latter half of 2022 to secure additional nutraceutical licensing partnerships.*

REFERENCE SOURCES

** WHO - The Extended Controlled Temperature Conditions*

https://www.who.int/teams/health-product-policy-and-standards/standards-and-specifications/vaccine-standardization/extended-controlled-temperature-conditions

*** Tuberculosis – Global Impact*

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

2. *Provide a general overview and discussion* of the activities of management.

   See No. 1.

3. Describe and provide details of any new products or services developed or offered. For resource companies, provide details of new drilling, exploration or production programs and acquisitions of any new properties and attach any mineral or oil and gas or other reports required under Ontario securities law.

   N/A for April 2022. See No. 1 for ongoing projects.

4. Describe and provide details of any products or services that were discontinued. For resource companies, provide details of any drilling, exploration or production programs that have been amended or abandoned.

   N/A

5. Describe any new business relationships entered into between the Issuer, the Issuer's affiliates or third parties including contracts to supply products or services, joint venture agreements and licensing agreements etc. State whether the relationship is with a Related Person of the Issuer and provide details of the relationship.

   The Company is in final stages of establishing an exclusive North American manufacturing agreement to support the production of nutraceutical products.

6. Describe the expiry or termination of any contracts or agreements between the Issuer, the Issuer's affiliates or third parties or cancellation of any financing arrangements that have been previously announced.

   N/A

7. Describe any acquisitions by the Issuer or dispositions of the Issuer's assets that occurred during the preceding month. Provide details of the nature of the assets acquired or disposed of and provide details of the consideration paid or payable together with a schedule of payments if applicable, and of any valuation. State how the consideration was determined and whether the acquisition was from or the disposition was to a Related Person of the Issuer and provide details of the relationship.

   N/A

8. Describe the acquisition of new customers or loss of customers.

   N/A

9. Describe any new developments or effects on intangible products such as brand names, circulation lists, copyrights, franchises, licenses, patents, software, subscription lists and trade-marks.

See No. 1 with respect to the grant of a new patent in connection with the Company's oncology work.

10. Report on any employee hiring's, terminations or lay-offs with details of anticipated length of lay-offs.

N/A

11. Report on any labour disputes and resolutions of those disputes if applicable.

N/A

12. Describe and provide details of legal proceedings to which the Issuer became a party, including the name of the court or agency, the date instituted, the principal parties to the proceedings, the nature of the claim, the amount claimed, if any, if the proceedings are being contested, and the present status of the proceedings.

N/A

13. Provide details of any indebtedness incurred or repaid by the Issuer together with the terms of such indebtedness.

N/A

14. Provide details of any loans to or by Related Persons.

N/A

15. Provide details of any changes in directors, officers or committee members.

N/A.

16. Discuss any trends which are likely to impact the Issuer including trends in the Issuer's market(s) or political/regulatory trends.

Since the emergence of a novel strain of coronavirus ("COVID-19"), in or about December 2019, the highly contagious virus had spread across the world. On March 11, 2020, the World Health Organization declared the outbreak of COVID-19 a global pandemic. Since

that time in response to the outbreak, governmental authorities in Canada and internationally implemented various measures with the aim of preventing or limiting further spread of COVID-19. These measures, which included travel restrictions, border closures, non-essential business closures, quarantines, self-isolations, and social distancing, have, among other things, resulted in widespread business, employment and economic disruptions. While many of these restrictions have been reduced or eliminated, the impact of COVID-19 may continue to have an impact on the Company's business globally, including as a result of backlogs.

The health of MVMD personnel was not impacted and the Company was able to continue to work effectively on many key business priorities internally during the pandemic. However, the Company engages with third parties globally to provide services such as sourcing of key raw materials, drugs and vaccines, and operating pre-clinical research trials. Certain jurisdictions have experienced significant issues and delays as a result of the pandemic and these delays have in turn delayed the services anticipated to be received by the Company. For example, the ability of third parties in Bangladesh with respect to the Company's husbandry animal trials was greatly impacted over the summer of 2021. Additionally, the Company has experienced moderate delays across its supply chains for outsourced contract research work as most suppliers have a backlog of work they are managing.

The Company updated its timelines and tempered expectations during this period of uncertainty.

The lasting impact of COVID-19 may have adverse impacts on the Company, including, among others:

- *continued impacts on workforces throughout the regions in which COVID-19 is present, which may result in delays in completing studies/trials;*
- *supply chain disruptions which could impact pricing and ability to procure materials for research and development work; and*
- *increase in costs to complete studies, including the potential requirement to redo certain studies.*

Certificate Of Compliance

The undersigned hereby certifies that:

1. The undersigned is a director and/or senior officer of the Issuer and has been duly authorized by a resolution of the board of directors of the Issuer to sign this Certificate of Compliance.

2. As of the date hereof there were is no material information concerning the Issuer which has not been publicly disclosed.

3. The undersigned hereby certifies to CNSX that the Issuer is in compliance with the requirements of applicable securities legislation (as such term is defined in National Instrument 14-101) and all CNSX Requirements (as defined in CNSX Policy 1).

4. All of the information in this Form 7 Monthly Progress Report is true.

Dated: May 5, 2022

"Dennis Hancock"
President & Chief Executive Officer

Issuer Details Name of Issuer *MOUNTAIN VALLEY MD HOLDINGS INC.*	For Month *April 2022*	Date of Report YY/MM/D *2022/05/05*
Issuer Address *260 Edgeley Blvd., Unit 4,*		
City/Province/Postal Code *Vaughan, ON L4K 3Y4*	Issuer Fax No. *N/A*	Issuer Telephone No. *647 725-9755*
Contact Name *Dennis Hancock*	Contact Position *President & CEO*	Contact Telephone No. *647 725-9755*
info@mvmd.com	www.mountainvalleymd.com	