NEWS RELEASE
FOR IMMEDIATE RELEASE

Monday, May 3, 2021

MOUNTAIN VALLEY MD PROCEEDING WITH PRE-CLINICAL CANCER TRIALS, FILES RELATED CANCER PATENT

Ivectosol™ being tested to target certain cancers to pursue novel human intratumoral injection and intravenous infusion

TORONTO, ON – May 3, 2021 - Mountain Valley MD Holdings Inc. (the “Company” or “MVMD”) (CSE: MVMD) (FRA:20MP) (OTCQB: MVMDF) is pleased to announce that the Company has filed a novel cancer adjuvant patent and is proceeding with pre-clinical trials with third-party cancer Contract Research Organizations (CROs) in triple-negative breast cancer, metastatic melanoma, and lung carcinoma.

Summary

- MVMD files cancer patent for direct intratumoral injection, intravenously, infusions or instillations as adjuvants for broad chemotherapeutic to immunotherapeutic cancer regimens.
- The Company is 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.
- The Company believes the research will have near-immediate application to direct human trials based on safety and efficacy of ivermectin.

“The extensive research supporting the drug ivermectin as effective in the inhibition of proliferation, metastasis, and angiogenic activity in a variety of cancers, and as an initiator of immunogenic cell death, is overwhelming,” stated Mike Farber, Director of Life Sciences at Mountain Valley MD. “Imagine what is possible when you have the world’s only human injectable form of ivermectin that can be directly injected into a tumor or provided through more bio-available forms such as intravenously. We believe this will be groundbreaking research with near-immediate application to be able to proceed directly to human trials based on the safety and efficacy of ivermectin.”

Leading up to the implementation of pre-clinical trial cancer research, MVMD has been extensively researching the drug ivermectin, including its impact on cancer, and has included numerous abstracts at the end of this media release. All of the research articles cited 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 2021*, Ivermectin has powerful antitumor effects 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.

MVMD filed its cancer adjuvant patent, Novel Injectable, Infusible, 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. MVMD’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 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 will test the effectiveness of Ivectosol™ combined with checkpoint inhibitor that would be equivalent to either OPDIVO or Keytruda for disease progression and complete response rate
- Arms in the study will look at single checkpoint inhibitor, oral IVM + checkpoint inhibitor and intratumoral IVM + checkpoint inhibitor
- Estimated initial readouts/analysis – 2nd week of June, 2021
- Complete readout with flow cytometry and statistical evaluation estimated mid-July, 2021 with possible abstract submission in August, 2021

Study Two: Metastatic melanoma
- Study will test the effectiveness of Ivectosol™ intratumoral combined with checkpoint inhibitor for disease progression and complete response rate
- Arms in the study will look at single checkpoint inhibitor, oral IVM + checkpoint inhibitor and intratumoral IVM + checkpoint inhibitor
- Estimated initial readouts by end of June, 2021
- Complete readout with flow cytometry and statistical evaluations estimated end of July, 2021 with possible abstract submission in August, 2021

Study Three: Lewis lung carcinoma as a proxy for non-small cell lung carcinoma
- Study will test the effectiveness of Ivectosol™ intratumorally combined with checkpoint inhibitor for disease progression and complete response rate
- Arms in the study will look at single checkpoint inhibitor, oral IVM + checkpoint inhibitor, navalbine + intratumoral IVM
- Estimated initial readouts by end of June, 2021
Complete readouts with flow cytometry and statistical evaluation estimated by end of July, 2021 with possible abstract submission in August, 2021

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. The Company is also actively pursuing a pre-clinical trial for bladder cancer and is currently assessing the best option to proceed through the evaluation of CRO proposals.

“Ivermectin is a Nobel prize winning global blockbuster drug with unprecedented potential. Overcoming its number one limitation of solubility using FDA approved excipients has opened up significant applications across multiple human and animal health lanes for Mountain Valley MD and our partners,” stated Dennis Hancock, President and CEO of Mountain Valley MD. “Driving innovation in cancer research to support positive outcomes for increased survival rates, productivity, and improved quality of life for the global population is directly aligned with our mission of more life, less death. We couldn’t be more honoured to drive forward this important work.”

According to the World Health Organization, cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths in 2020**. The World Cancer Day foundation estimates the total annual economic cost of cancer at approximately US$1.16 trillion***.

Reference Sources:

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

** World Health Organization - Cancer
https://www.who.int/news-room/fact-sheets/detail/cancer

*** World Cancer Day Foundation - Global and national economic impact

Cancer Research Sources:

NOTE: All of the articles cited below involve either 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 intertumoral administration.

Ivermectin, a potential anticancer drug derived from an anti-parasitic drug.
Authors: Mingyang Tang, Xiaodong Hu, Yi Wang, Xin Yao, Wei Zhang, Chenying Yu, Fuying Cheng, Jiangyan Li, Qiang Fang
Ivermectin as an inhibitor of cancer stem-like cells.
Authors: Guadalupe Dominguez-Gomez, Alma Chavez-Blanco, Jose Luis Medina-Franco, Fernanda Saldivar-Gonzalez, Ytzel Flores-Torrentegui, Mandy Juarez, José Diaz-Chávez, Aurora Gonzalez-Fierro, Alfonso Dueñas-González
Molecular Medicine Reports. February 2018
Link: https://www.spandidos-publications.com/mmr/17/2/3397

The Anti-Cancer Effects of Anti-Parasite Drug Ivermectin in Ovarian Cancer
Authors: Xianquan Zhan, Na Li

Ivermectin suppresses tumour growth and metastasis through degradation of PAK1 in Oesophageal squamous cell carcinoma.
Authors: Liang Chen, Shuning Bi, Qiuren Wei, Zhijun Zhao, Chaojie Wang, Songqiang Xie
Journal of Cellular and Molecular Medicine, March 2020

Ivermectin converts cold tumors hot and synergizes with immune checkpoint blockade for treatment of breast cancer
Authors: Dobrin Draganov, Zhen Han, Aamir Rana, Nitasha Bennett, Darrell J. Irvine, Peter P. Lee.
NPJ Breast Cancer, Volume 7, Article number: 22 (2021)
Link: https://www.nature.com/articles/s41523-021-00229-5

The Multitargeted drug Ivermectin: from an antiparasitic agent to a repositioned cancer drug.
Authors: Mandy Juarez, Alejandro Schcolnik-Cabrera, Alfonso Dueñas-Gonzalez
AM J Cancer Research: 2018
Link: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5835698/

Continuous high-dose ivermectin appears to be safe in patients with acute myelogenous leukemia and could inform clinical repurposing for COVID-19 infection.
Authors: Claudio Galvao de Castro Jr., Lauro Jose Gregianin, Jan A. Burger
Leukemia & Lymphoma: 2020, Volume 16, Issue 10
Link: https://www.tandfonline.com/doi/full/10.1080/10428194.2020.1786559

Repurposing anthelmintic agents to eradicate resistant leukemia.
Authors: Caterina Mezzatesta, Liridon Abduli, Anna Guinot, Cornelia Eckert, Denis Schewe, Marketa Zaliova, Luciana Vindi, Blerim Marovca, Yi-Chien Tsai, Silvia Jenni, Julia Aguade-Gorgorio, Arend von Stackelberg, Martin Schrappe, Franco Locatelli, Martin Stanulla, Gunnar Cario, Jean-Pierre Bourquin, Beat C. Bornhaus
Blood Cancer Journal: 2020
Link: https://www.nature.com/articles/s41408-020-0339-9.pdf

The Company is not making any claims that Ivectosol™ is an effective treatment for any form of cancer, or any other medical condition, at this time.

ABOUT MOUNTAIN VALLEY MD HOLDINGS INC
Mountain Valley MD is building a world-class biotech and life sciences company organization centred around the implementation of its patented Quicksome™ oral drug formulation and delivery technologies and its Quicksol™ solubilization technology for macrocyclic lactones, to innovate industry leading products that are sought out globally.

MVMD’s proposition for delivering Quicksome™ formulations that have rapid onset, high bioavailability, low variability and precision dosing is core to the Company’s success across key health and wellness categories. Consistent with its vision towards “Helping People Live Their Best Life”, MVMD applies its Quicksome™ and Quicksol™ technologies to its ground-breaking work for advanced delivery of vaccines and pharmaceutical drugs as well as the development of products for pain management, weight loss, energy, focus, sleep, anxiety, and more.

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 are capable of delivering vaccines, drugs and nutraceuticals into the body faster, with greater impact, efficiency and accuracy.

The Company’s patented Quicksol™ solubilization technology covers all highly solubilized macrocyclic lactones (including the drugs Ivermectin and Selamectin). MVMD’s solubility technology applied to the Ivermectin drug is the only form in the world that only uses 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.

For more Company information and contact details, visit www.mountainvalleymd.com.

SOURCE: Mountain Valley MD Holdings Inc.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION
Certain statements contained in this news release may constitute forward-looking information. Forward-looking information is often, but not always, identified by the use of words such as "anticipate", "plan", "estimate", "expect", "may", "will", "intend", "should", and similar expressions. Forward-looking information involves known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking information.

The Company's actual results could differ materially from those anticipated in this forward-looking information as a result of regulatory decisions, competitive factors in the industries
in which the Company operates, prevailing economic conditions, and other factors, many of which are beyond the control of the Company.

The Company is making forward-looking statements, including but not limited to its planned pre-clinical trials with third-party cancer CROs in triple-negative breast cancer, metastatic melanoma, and lung carcinoma.

The Company believes that the expectations reflected in the forward-looking information are reasonable, but no assurance can be given that these expectations will prove to be correct and such forward-looking information should not be unduly relied upon. Any forward-looking information contained in this news release represents the Company’s expectations as of the date hereof and is subject to change after such date. The Company disclaims any intention or obligation to update or revise any forward-looking information whether as a result of new information, future events or otherwise, except as required by applicable securities legislation.

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