

Medicure Announces Early Completion of Enrollment for iSPASM, a Phase 1/2a Exploratory Clinical Trial of AGGRASTAT® (tirofiban hydrochloride) Injection vs. Placebo for Induced Suppression of Platelets Activity in Aneurysmal Subarachnoid Hemorrhage Management

WINNIPEG, CANADA – (January 27, 2021) - Medicure Inc. ("Medicure" or the "Company") (TSXV:MPH, OTC:MCUJF), a cardiovascular pharmaceutical company, is pleased to announce the early completion of iSPASM, a randomized, double-blind, single-center, Phase 1/2a trial aimed at assessing the safety of long-term (7-day) use of AGGRASTAT® (tirofiban hydrochloride) injection (an intravenous GP IIb/IIIa inhibitor) vs. placebo in patients with aneurysmal subarachnoid hemorrhage (aSAH) (NCT03691727). The primary endpoint in the 30 patient study was hemorrhagic changes evident on head CT and/or MRI assessed by the rates of symptomatic and asymptomatic bleeding.

"Medicure is gratified and encouraged by the results of the trial led Dr. David Hasan, MD, Professor of Neurosurgery at University of Iowa Hospitals and Clinics, and the trial's principal investigator. His work is an important step in the exploration of the use of parenteral IV antiplatelet therapy in the management of aSAH in stroke patients.", said Albert D. Friesen, PhD, CEO of Medicure and Chair of its Board of Directors. Dr. Hasan expects to release top-line data and present the results at an upcoming conference with a manuscript to follow.

Dr. Hasan states, "The results of iSPASM are very promising. The trial is the first of its kind as it showed in a well-designed, randomized controlled trial that using continuous IV infusion of AGGRASTAT[®] appears to be safe in patients with ruptured intracranial aneurysms (stroke). Results from this study pave the way for a Phase 2 trial which will be focused on efficacy. A positive outcome will be groundbreaking in the management of these patients. Interventionalists who treat patients with this condition using stents or flow diverters could use AGGRASTAT[®] as the choice of antiplatelet therapy to prevent clotting and further ischemic stroke. We are very grateful for the sponsorship and partnership with Medicure for making this trial happen to benefit our patients."

iSPASM was funded by an unrestricted educational grant from Medicure. This study does not imply efficacy of AGGRASTAT[®] in patients with aSAH. Please note that the use of AGGRASTAT[®] in neurointerventions has not been approved by the FDA. As of this time, neither AGGRASTAT[®] nor any of the GP IIb/IIIa inhibitors are indicated for the use in stroke patients. AGGRASTAT[®] is approved for use in NSTE-ACS patients. Refer to **Important Safety Information** below and the U.S. Prescribing Information for complete product information.

About AGGRASTAT®

AGGRASTAT[®] is an IV antiplatelet medication indicated to reduce the rate of thrombotic cardiovascular events (combined endpoint of death, myocardial infarction, or refractory ischemia/repeat cardiac procedure) in patients with non-ST elevation acute coronary syndrome (NSTE-ACS). AGGRASTAT[®] is currently the most widely used GP IIb/IIIa inhibitor in the U.S.¹

and has several administration benefits including room temperature storage, a 3-year shelf life and is available in pre-mixed formats. Please refer to the **IMPORTANT SAFETY INFORMATION** below.

About Medicure Inc.

Medicure is a pharmaceutical company focused on the development and commercialization of therapies for the U.S. cardiovascular market. The present focus of the Company is the marketing and distribution of AGGRASTAT[®] (tirofiban hydrochloride) injection and ZYPITAMAG[®] (pitavastatin) tablets in the United States, where they are sold through the Company's U.S. subsidiary, Medicure Pharma Inc. Medicure also operates Marley Drug, Inc. ("Marley"), a pharmacy located in North Carolina that offers an Extended Supply mail order drug program serving all 50 states, Washington D.C. and Puerto Rico. Marley is committed to improving the health status of their patients and the communities they serve while reducing overall health care costs for employers and other health care consumers. For more information visit http://www.marleydrug.com. To learn more about The Extended Supply Generic Drug Program call 800.286.6781 or email marleydrug@bellsouth.net. For more information on Medicure please visit www.medicure.com. For additional information about AGGRASTAT[®], refer to the full Prescribing Information. For additional information about ZYPITAMAG[®], refer to the full Prescribing Information.

Important Safety Information for AGGRASTAT[®] (tirofiban hydrochloride)

Indications and Usage

AGGRASTAT[®] is indicated to reduce the rate of thrombotic cardiovascular events (combined endpoint of death, myocardial infarction, or refractory ischemia/repeat cardiac procedure) in patients with non-ST elevation acute coronary syndrome (NSTE-ACS).

Dosage and Administration

Administer intravenously 25 mcg/kg within 5 minutes and then 0.15 mcg/kg/min for up to 18 hours. In patients with creatinine clearance ≤60 mL/min, give 25 mcg/kg within 5 minutes and then 0.075 mcg/kg/min.

Contraindications

Known hypersensitivity to any component of AGGRASTAT[®], history of thrombocytopenia with prior exposure to AGGRASTAT[®], active internal bleeding, or history of bleeding diathesis, major surgical procedure or severe physical trauma within previous month.

Warnings and Precautions

AGGRASTAT[®] can cause serious bleeding. Most bleeding associated with AGGRASTAT[®] occurs at the arterial access site for cardiac catheterization. Minimize the use of traumatic or potentially traumatic procedures such as arterial and venous punctures, intramuscular injections, nasotracheal intubation, etc. Concomitant use of fibrinolytics, anticoagulants and antiplatelet drugs increases the risk of bleeding. If bleeding cannot be controlled, discontinue AGGRASTAT[®]. Thrombocytopenia: Discontinue AGGRASTAT[®] and heparin.

Adverse Reactions

Bleeding is the most commonly reported adverse reaction.

For more information on AGGRASTAT[®], please refer to <u>Full Prescribing Information</u> available at <u>www.aggrastatHDB.com</u>.

To be added to Medicure's e-mail list, please visit: <u>http://medicure.mediaroom.com/alerts</u>

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Forward Looking Information: Statements contained in this press release that are not statements of historical fact, including, without limitation, statements containing the words "believes", "may", "plans", "will", "estimates", "continues", "anticipates", "intends", "expects" and similar expressions, may constitute "forward-looking information" within the meaning of applicable Canadian and U.S. federal securities laws (such forward-looking information and forward-looking statements are hereinafter collectively referred to as "forward-looking statements"). Forward-looking statements, include estimates, analysis and opinions of management of the Company made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors which the Company believes to be relevant and reasonable in the circumstances. Inherent in forward-looking statements are known and unknown risks, uncertainties and other factors beyond the Company's ability to predict or control that may cause the actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements, and as such, readers are cautioned not to place undue reliance on forward-looking statements. Such risk factors include, among others, the Company's future product revenues, expected results, including future revenue from P5P, the likelihood of receiving a PRV, expected future growth in revenues, stage of development, additional capital requirements, risks associated with the completion and timing of clinical trials and obtaining regulatory approval to market the Company's products, the ability to protect its intellectual property, dependence upon collaborative partners, changes in government regulation or regulatory approval processes, and rapid technological change in the industry. Such statements are based on a number of assumptions which may prove to be incorrect, including, but not limited to, assumptions about: general business and economic conditions; the impact of changes in Canadian-US dollar and other foreign exchange rates on the Company's revenues, costs and results; the timing of the receipt of regulatory and governmental approvals for the Company's research and development projects; the availability of financing for the Company's commercial operations and/or research and development projects, or the availability of financing on reasonable terms; results of current and future clinical trials; the uncertainties associated with the acceptance and demand for new products and market competition. The foregoing list of important factors and assumptions is not exhaustive. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements or the foregoing list of factors, other than as may be required by applicable legislation. Additional discussion regarding the risks and uncertainties relating to the Company and its business can be found in the Company's other filings with the applicable Canadian securities regulatory authorities or the US Securities and Exchange Commission, and in the "Risk Factors" section of its Form 20F for the year ended December 31, 2019.

AGGRASTAT[®] (tirofiban hydrochloride) injection is a registered trademark of Medicure International Inc.

References:

1. Data on file

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