Cardiol Therapeutics

Cardiol Therapeutics Announces Study Results Presented at the 2023 Annual Meeting of the European Society of Cardiology Working Group on Myocardial and Pericardial Diseases

Toronto, ON – November 16, 2023 – Cardiol Therapeutics Inc. (NASDAQ: CRDL) (TSX: CRDL) ("Cardiol" or the "Company"), a clinical-stage life sciences company focused on the research and clinical development of anti-inflammatory and anti-fibrotic therapies for the treatment of heart disease, announced today that study results demonstrated an experimental model of pericarditis induces mesothelial to mesenchymal transition ("MMT") and that this process is inhibited by cannabidiol treatment, the active pharmaceutical ingredient in CardiolRx[™]. An abstract summarizing these results was submitted by the Company's international research collaborators from the University of Virginia and Houston Methodist DeBakey Heart & Vascular Center to the 2023 Annual Meeting of the European Society of Cardiology Working Group on Myocardial and Pericardial Diseases ("MPD2023") held on November 15 and 16, 2023 in Belgrade, Serbia.

The poster entitled "Cannabidiol Inhibits the Mesothelial to Mesenchymal Transition in Experimental Pericarditis" was presented for general viewing within the poster sessions of the MPD2023 Scientific Programme. The results presented are a continuation of a research collaboration between Cardiol and the University of Virginia, which previously reported at the American Heart Association Scientific Sessions 2022 that cannabidiol reduces pericardial effusion and thickness in the same experimental model of pericarditis.

"We are intrigued by these new findings that further support an anti-fibrotic benefit of CardiolRx[™], in addition to its anti-inflammatory properties that were previously reported in this pre-clinical model," commented Dr. Andrew Hamer, Cardiol Therapeutics' Chief Medical Officer and Head of Research & Development. "Fibrosis is the basis of more severe long-term complications of recurrent pericarditis, for which no specific anti-fibrotic therapies are currently available, suggesting a potentially broader therapeutic benefit of CardiolRx[™]."

MMT is a complex and stepwise biological process whereby a mesothelial cell, the main cell type lining internal organs and several of the body's internal cavities including the pericardium, undergoes molecular reprogramming. This alters its characteristics towards a mesenchymal cell, such as a myofibroblast, which are the primary cells during wound healing and fibrosis. Mounting evidence indicates the transition to mesenchymal cells is involved in adult cardiovascular diseases, such as heart failure. Pericarditis leads to pericardial effusion and thickening that may evolve to fibrosis, and by limiting MMT and the ensuing fibrosis, CardiolRx[™] may also represent a novel strategy to prevent pericarditis complications.

The 2023 Annual Meeting of the European Society of Cardiology Working Group on Myocardial and Pericardial Diseases brings together a collaborative group dedicated to advancing knowledge, research, and clinical practises related to myocardial and pericardial diseases. Comprising an interdisciplinary team of cardiologists, researchers, and health care professionals, the meeting focuses on fostering a deeper understanding of the diagnosis, treatment, and management of conditions affecting the heart muscle and its surrounding protective layer. The Working Group aims to develop and disseminate guidelines, recommendations, and advancements in the field, ultimately enhancing patient care and outcomes for individuals affected by myocardial and pericardial diseases within the European and global medical community.

About Cardiol Therapeutics

Cardiol Therapeutics Inc. (NASDAQ: CRDL) (TSX: CRDL) is a clinical-stage life sciences company focused on the research and clinical development of anti-inflammatory and anti-fibrotic therapies for the treatment of heart disease. The Company's lead small molecule drug candidate, CardiolRx[™] (cannabidiol) oral solution, is pharmaceutically manufactured and in clinical development for use in the treatment of heart disease. It is recognized that cannabidiol inhibits activation of the inflammasome pathway, an intracellular process known to play an important role in the development and progression of inflammation and fibrosis associated with myocarditis, pericarditis, and heart failure.

Cardiol has received Investigational New Drug Application authorization from the United States Food and Drug Administration to conduct clinical studies to evaluate the efficacy and safety of CardiolRx[™] in two diseases affecting the heart: (i) a Phase II multi-center open-label pilot study in recurrent pericarditis (the MAvERIC-Pilot study; NCT05494788), an inflammatory disease of the pericardium which is associated with symptoms including debilitating chest pain, shortness of breath, and fatigue, and results in physical limitations, reduced quality of life, emergency department visits, and hospitalizations; and (ii) a Phase II multi-national, randomized, double-blind, placebo-controlled trial (the ARCHER trial; NCT05180240) in acute myocarditis, an important cause of acute and fulminant heart failure in young adults and a leading cause of sudden cardiac death in people less than 35 years of age.

Cardiol is also developing a novel subcutaneously administered drug formulation of cannabidiol intended for use in heart failure – a leading cause of death and hospitalization in the developed world, with associated healthcare costs in the United States exceeding \$30 billion annually.

For more information about Cardiol Therapeutics, please visit <u>cardiolrx.com</u>.

Cautionary statement regarding forward-looking information:

This news release contains "forward-looking information" within the meaning of applicable securities laws. All statements, other than statements of historical fact, that address activities, events, or developments that Cardiol believes, expects, or anticipates will, may, could, or might occur in the future are "forwardlooking information". Forward looking information contained herein may include, but is not limited to, statements relating to the Company's focus on developing anti-inflammatory and anti-fibrotic therapies for the treatment of heart disease, the anti-fibrotic benefit of CardiolRx[™] suggesting a potentially broader therapeutic benefit of CardiolRx[™], the molecular targets and mechanism of action of the Company's product candidates, the Company's intended clinical study and trial activities and timelines associated with such activities, and the Company's plan to advance the development of a novel subcutaneous formulation of CardiolRx[™] for use in heart failure. Forward-looking information contained herein reflects the current expectations or beliefs of Cardiol based on information currently available to it and is based on certain assumptions and is also subject to a variety of known and unknown risks and uncertainties and other factors that could cause the actual events or results to differ materially from any future results, performance or achievements expressed or implied by the forward-looking information, and are not (and should not be considered to be) guarantees of future performance. These risks and uncertainties and other factors include the risks and uncertainties referred to in the Company's Annual Report on Form 20-F dated March 28, 2023, as well as the risks and uncertainties, and other factors should be considered carefully, and investors should not place undue reliance on the forward-looking information, and such information may not be appropriate for other purposes. Any forward-looking information speaks only as of the date of this press release and, except as may be required by applicable securities laws, Cardiol disclaims any intent or obligation to update or revise such forward-looking information, whether as a result of new information, future events, or results, or otherwise.

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