

Form 51-102F3
Material Change Report

Item 1 Name and Address of Company

Cardiol Therapeutics Inc. (the “Corporation”)
602-2265 Upper Middle Road East
Oakville, Ontario
L6H 0G5

Item 2 Date of Material Change

October 25, 2022

Item 3 News Release

Attached as Schedule “A” is a copy of the news release relating to the material change, which was disseminated on October 25, 2022 through Newsfile and filed on the System for Electronic Document Analysis and Retrieval at www.sedar.com (“SEDAR”).

Item 4 Summary of Material Change

The Corporation announced that it will discontinue the *LANCER* trial due to lack of eligible patients to support recruitment and will prioritize its Phase II clinical programs focused on developing CardiolRx™ for two underserved diseases affecting the heart – acute myocarditis and recurrent pericarditis. The Corporation also announced that its cash runway now extends into 2026.

Item 5 Full Description of Material Change

5.1 Full Description of Material Change

Please see press release attached as Schedule “A” hereto

Item 6 Reliance on subsection 7.1(2) of National Instrument 51-102

Not applicable.

Item 7 Omitted Information

None.

Item 8 Executive Officer

The following executive officer is knowledgeable about the material changes and may be contacted about this report:

Chris Waddick
Chief Financial Officer
(289) 910-0850

Item 9 Date of Report

October 26, 2022.

SCHEDULE "A"

See attached news release.



2265 Upper Middle Road East, Suite 602
Oakville, ON L6H 0G5, Canada

Cardiol Therapeutics Prioritizes Phase II Clinical Programs in Underserved Heart Diseases

Discontinues *LANCER* Trial due to Lack of Eligible Patients for Recruitment

Cash Runway Now Extends into 2026

Oakville, ON – October 25, 2022 – 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 diseases, announced today that it will discontinue the *LANCER* trial due to lack of eligible patients to support recruitment and will prioritize its Phase II clinical programs focused on developing CardiolRx™ for two underserved diseases affecting the heart – acute myocarditis and recurrent pericarditis. The Company also announced that its cash runway now extends into 2026.

The *LANCER* trial, which was designed to investigate the cardioprotective properties of CardiolRx™ in patients hospitalized with COVID-19 who have a prior history of, or risk factors for, cardiovascular disease, will be discontinued due to the continuous decline in the number of eligible patients, and a lower than anticipated event rate in the study. Over the course of the study, multiple factors contributed to the decline in the number of patients that met the inclusion criteria of the trial, including: (i) a significant increase in vaccine-induced or natural immunity in the general population; (ii) the predominant circulating variants causing milder disease than their predecessors; and (iii) an increase in the regulatory approval and usage of therapeutics for the successful treatment of mild-to-moderate disease in patients who previously would have progressed to require hospitalization.

David Elsley, Cardiol Therapeutics’ President and CEO commented, “The decision to terminate the *LANCER* trial was difficult but necessary, as the evolution of the disease and its management have inhibited our ability to recruit eligible patients to such an extent that continuing the trial is no longer practical. We would like to extend our thanks and gratitude to the many patients who agreed to take part in *LANCER*, as well as acknowledge and thank our clinical trial site personnel who participated and contributed their expertise and experience. Notwithstanding this, we are in a strong financial position to support our international collaborations with world class researchers and clinicians who are at the forefront of developing important medicines for the treatment of debilitating heart diseases that affect all age groups and remain underserved by available therapies.”

Cardiol is currently advancing its Phase II *ARCHER* trial, designed to assess CardiolRx™ in acute myocarditis, an inflammatory condition of the heart muscle (myocardium). *ARCHER* has

received regulatory clearance in multiple jurisdictions, including Investigational New Drug Application (IND) authorization from the United States (U.S.) Food and Drug Administration (FDA), and is expected to enroll 100 patients at major cardiac centers in North America, Europe, Latin America, and Israel. The trial has been designed in collaboration with an independent steering committee comprising distinguished thought leaders in heart failure and myocarditis from international centers of excellence. The primary endpoints of the trial, which will be evaluated after 12 weeks of double-blind therapy, consist of the following cardiac magnetic resonance imaging measures: left ventricular function (ejection fraction and longitudinal strain) and myocardial edema/fibrosis (extra-cellular volume), each of which has been shown to predict long-term prognosis of patients with acute myocarditis.

Concurrent with the *ARCHER* trial, the Company is also undertaking a Phase II pilot study in recurrent pericarditis – a debilitating inflammatory heart disease. Cardiol's study is expected to enroll 25 patients at major clinical centers specializing in pericarditis in the U.S. The study protocol has been designed in collaboration with thought leaders in pericardial disease. The study's primary efficacy endpoint is the change, from baseline to 8 weeks, in patient-reported pericarditis pain using an 11-point numeric rating scale (NRS). The NRS is a validated clinical tool employed across multiple conditions with acute and chronic pain, including previous studies of recurrent pericarditis. Secondary endpoints include the pain score after 26 weeks of treatment, and changes in C-reactive protein (CRP).

About Acute Myocarditis

Myocarditis is an acute inflammatory condition of the heart muscle (myocardium) characterized by chest pain, impaired cardiac function, atrial and ventricular arrhythmias, and conduction disturbances. Although the symptoms are often mild, myocarditis remains an important cause of acute and fulminant heart failure and is a leading cause of sudden cardiac death in people under 35 years of age. Although viral infection is the most common cause of myocarditis, the condition can also result from administration of therapies used to treat several common cancers, including chemo-therapeutic agents and immune checkpoint inhibitors. There are no FDA-approved therapies for acute myocarditis which affects an estimated 54,000 people in the U.S. per year. Patients hospitalized with acute myocarditis experience an average 7-day length of stay and a 6% risk of in-hospital mortality, with average hospital charge per stay estimated at \$110,000 in the U.S. Severe cases frequently require ventricular assist devices or extracorporeal oxygenation and may necessitate heart transplantation.

About Recurrent Pericarditis

Recurrent pericarditis refers to inflammation of the pericardium (the membrane or sac that surrounds the heart) that follows an initial episode (frequently resulting from a viral infection). Patients may have multiple recurrences. Symptoms include debilitating chest pain, shortness of breath, and fatigue, resulting in physical limitations, reduced quality of life, emergency department visits, and hospitalizations. The only FDA-approved therapy for recurrent pericarditis, launched in 2021, is extraordinarily costly and is primarily used as a third-line intervention. The number of cases of patients seeking and receiving treatment for recurrent pericarditis annually in the U.S. is estimated at 38,000. Hospitalization due to recurrent pericarditis is often associated with a 6-8-day length of stay and cost per stay is estimated to range between \$20,000 and \$30,000 in the U.S.

About the U.S. Orphan Drug Designation Program

Cardiol is planning to pursue the development of CardiolRx™ as an Orphan Drug for the treatment of acute myocarditis and recurrent pericarditis. The U.S. Orphan Drug Designation program was created to provide the sponsor of a drug significant incentives, including seven-year marketing exclusivity and exemptions from certain FDA fees, to develop treatments for diseases that affect fewer than 200,000 people in the U.S. Products with Orphan Drug Designation also frequently qualify for accelerated regulatory review. The program was successfully utilized to support the first FDA approval of cannabidiol for the treatment of seizures associated with rare pediatric epilepsy syndromes. The European Union has a similar program for rare diseases.

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 diseases. The Company's lead product candidate, CardiolRx™, is a pharmaceutically manufactured oral cannabidiol formulation that is being clinically developed for use in heart diseases.

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-national, randomized, double-blind, placebo-controlled trial (the "ARCHER" trial) 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; and (ii) a Phase II multi-center open-label pilot study in recurrent pericarditis (inflammation 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.

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 cardiolrx.com.

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 "forward-looking 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 diseases, the Company undertaking Phase II trials that could qualify CardiolRx™ for Orphan Drug Designation, the Company's cash runway extending into 2026, 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 Information Form dated March 23, 2022, as well as the risks and uncertainties associated with product commercialization and clinical studies. These assumptions, risks, 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.

For further information, please contact:

Trevor Burns, Investor Relations +1-289-910-0855
trevor.burns@cardiolrx.com