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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 20-F

(Mark One)

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2023

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report . . . . . .

For the transition period from _____to_____

Commission file number: 001-40712

Cardiol Therapeutics Inc.
(Exact name of Registrant as specified in its charter)

N/A
(Translation of Registrant's name into English)

Ontario
(Jurisdiction of Incorporation or Organization)

2265 Upper Middle Road East, Suite 602, Oakville, Ontario L6H 0G5
(Address of Principal Executive Offices)

David Elsley
Cardiol Therapeutics Inc.
2265 Upper Middle Road East, Suite 602
Oakville, Ontario L6H 0G5
Telephone: (289) 910-0850

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Shares	CRDL	The Nasdaq Stock Market LLC

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None
(Title of Class)

Securities for which there is a reporting obligation pursuant to section 15(d) of the Act

None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: 65,352,279

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

☐Yes ☒No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

☐Yes ☒No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

☒Yes ☐No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files)

☒Yes ☐No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒

Emerging growth company ☒

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act. ☐

† The term "new or revised financial accounting standard" refers to any updated issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐ International Financial Reporting Standards as issued by the International Accounting Standards Board ☒ Other ☐

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

☐ Item 17 ☐ Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

☐Yes ☒No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court

☒Yes ☐No

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GENERAL MATTERS

Unless otherwise noted or the context indicates otherwise “we”, “us”, “our”, “its”, the “Company”, the “Corporation” or “Cardiol” refers to Cardiol Therapeutics Inc. and its subsidiary.

Unless otherwise indicated, financial information in this Annual Report on Form 20-F (this “Annual Report”) has been prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB. Unless otherwise noted herein, all references to “$,” “C$,” “Canadian dollars,” or “dollars” are to the currency of Canada and “US$,” “United States dollars,” or “U.S. dollars” are to the currency of the United States.

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and as such, we are exempt from the auditor attestation requirement in the assessment of the Corporation’s internal control over financial reporting.

Unless otherwise indicated, the Corporation has obtained the market and industry data contained in this Annual Report from its internal research, and third-party public information and other industry publications. While the Corporation believes such internal research, and third-party public information is reliable, the Corporation has not independently verified such internal research and third-party public information While the Corporation is not aware of any misstatements regarding the market and industry data contained in this Annual Report, such data involves risks and uncertainties and are subject to change based on various factors, including those described under “Cautionary Statement Regarding Forward-Looking Information and Statements” and “Item 3.D. Risk Factors”.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report contains forward-looking statements that are subject to risks and uncertainties within the meaning of applicable U.S. and Canadian securities laws. These forward-looking statements include information about possible or assumed future results of our business, financial condition, results of operations, liquidity, plans and objectives. In some cases, you can identify forward-looking statements by terminology such as “believe,” “may,” “might,” “will,” “indicate,” “seek,” “likely,” “estimate,” “continue,” “anticipate,” “intend,” “should,” “plan,” “expect,” “predict,” “potential,” or the negative of these terms or other similar expressions. The statements we make regarding the following matters are forward-looking by their nature and are based on certain of the assumptions noted below:

- our anticipated cash needs, and the need for additional financing;
- our development of our product candidates for use in basic research, clinical studies, and commercialization;
- our ability to develop new routes of administration of our product candidates, including parenteral, for use in basic research, clinical studies, and commercialization;
- our ability to develop new formulations of our product candidates for use in basic research, clinical studies, and commercialization;
- the successful development and commercialization of our current product candidates and the addition of future products and product candidates;
- the ability of our product delivery technologies to deliver our product candidates to inflamed and/or fibrotic tissue;
- our intention to build a pharmaceutical brand and our products focused on addressing inflammation and fibrosis in heart disease, including acute myocarditis, recurrent pericarditis, and heart failure;
- the expected medical benefits, viability, safety, efficacy, effectiveness, and dosing of our product candidates;
- patents and intellectual property, including, but not limited to, our (a) ability to procure, defend, and/or enforce our intellectual property relating to our products, product formulations, routes of administration, product candidates, and associated uses, methods, and/or processes, and (b) freedom to operate;
- our competitive position and the regulatory environment in which we operate;

- the molecular targets and mechanism of action of our product candidates;
- our financial position; our business strategy; our growth strategies; our operations; our financial results; our dividend policy; our plans and objectives; and
- expectations of future results, performance, achievements, prospects, opportunities, or the market in which we operate.

In addition, any statements that refer to expectations, intentions, projections or other characterizations of future events or circumstances contain forward-looking information. Forward-looking information is based on certain assumptions and analyses made by the Corporation in light of the experience and perception of historical trends, current conditions, and expected future developments and other factors it believes are appropriate and are subject to risks and uncertainties. The preceding list is not intended to be an exhaustive list of all of our forward-looking statements. The forward-looking statements are based on our beliefs, assumptions and expectations of future performance, taking into account the information currently available to us. These statements are only predictions based upon our current expectations and projections about future events. Although we believe that the assumptions underlying these statements are reasonable, they may prove to be incorrect, and we cannot assure that actual results will be consistent with this forward-looking information. Given these risks, uncertainties, and assumptions, you should not place undue reliance on this forward-looking information. Whether actual results, performance, or achievements will conform to the Corporation's expectations and predictions is subject to a number of known and unknown risks, uncertainties, assumptions, and other factors, including those listed under "*Risk Factors*" in Item 3.D. of this Annual Report, and the following:

- the inherent uncertainty of product development including basic research and clinical trials;
- our requirement for additional financing;
- our negative cash flow from operations;
- our history of losses;
- dependence on the success of our early-stage product candidates which may not generate revenue;
- reliance on management, loss of members of management or other key personnel, or an inability to attract new management team members;
- our ability to successfully design, initiate, execute, and complete clinical trials, including the high cost, uncertainty, and delay of clinical trials and additional costs associated with any failed clinical trials;
- the uncertainty our investigational products will have a therapeutic benefit in the clinical indications we are pursuing;
- potential equivocal or negative results from clinical trials and their adverse impacts on our future commercialization efforts;
- our ability to receive and maintain regulatory exclusivities in multiple jurisdictions, including Orphan Drug Designations/Approvals, for our product candidates;
- delays in achievement of projected development goals;
- management of additional regulatory burdens;
- volatility in the market price for our securities;
- failure to protect and maintain and the consequential loss of intellectual property rights;
- third-party claims relating to misappropriation by the Corporation of their intellectual property;
- reliance on third parties to conduct and monitor our pre-clinical studies and clinical trials;

- our product candidates being subject to controlled substance laws which may vary from jurisdiction to jurisdiction;
- changes in laws, regulations, and guidelines relating to our business, including tax and accounting requirements;
- our reliance on early-stage research regarding the medical benefits, viability, safety, efficacy, and dosing of our product candidates;
- claims for personal injury or death arising from the use of our future products and product candidates;
- uncertainty relating to market acceptance of our product candidates;
- our lack of experience in commercializing any products, including selling, marketing, or distributing pharmaceutical products;
- securing third-party payor reimbursement for our product candidates;
- the level of pricing and reimbursement for our product candidates, if approved;
- our dependence on contract manufacturers;
- unsuccessful collaborations with third parties;
- business disruptions affecting third-party suppliers and manufacturers;
- lack of control in future production and selling prices of our product candidates;
- competition in our industry;
- our inability to develop new technologies and products and the obsolescence of existing technologies and products;
- unfavorable publicity or consumer perception towards our products;
- product liability claims and product recalls;
- expansion of our business to other jurisdictions;
- fraudulent activities of employees, contractors, and consultants;
- our reliance on key inputs and their related costs;
- difficulty associated with forecasting demand for products;
- operating risk and insurance coverage;
- our inability to manage growth;
- conflicts of interest among the officers and Directors;
- managing damage to our reputation and third-party reputational risks;
- relationships with customers and third-party payors and consequential exposure to applicable anti-kickback, fraud, and abuse and other healthcare laws;
- exposure to information systems security threats;

- no dividends for the foreseeable future;
- future sales Common Shares and Warrants by existing shareholders causing the market price for the common shares and warrants to fluctuate;
- the issuance of Common Shares in the future causing dilution;
- events outside of our control could adversely affect our operations;
- our ability to remediate any material weakness in our internal control over financial reporting;
- global geo-political events and the responses of governments having a significant effect on the world economy; and
- failure to meet regulatory or ethical expectations on environmental impact, including climate change.

If any of these risks or uncertainties materialize, or if assumptions underlying the forward-looking information prove incorrect, actual results may vary materially from those anticipated in the forward-looking information. Furthermore, unless otherwise stated, the forward-looking statements contained in this Annual Report are made as of the date hereof, and we have no intention and undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, changes or otherwise, except as required by law.

GLOSSARY

"**5-day VWAP**" means the five-day volume weighted average closing price of the Common Shares on the TSX.

"**ACE**" means Angiotensin Converting Enzyme.

"**ANDA**" means abbreviated new drug application.

"**APIs**" means active pharmaceutical ingredients.

"**ARCHER**" means the Corporation's Phase II multi-national, double-blind, placebo-controlled clinical study evaluating the tolerance, safety and efficacy of its lead product candidate, CardiolRx, in acute myocarditis.

"**Audit Committee**" means the Corporation's Audit Committee.

"**BDO**" means the independent registered public accounting firm of the Corporation, BDO Canada LLP, Chartered Professional Accountants, of 360 Oakville Place Drive, Suite 500, Oakville, ON L6H 6K8

"**BNP**" means B-type Natriuretic Peptide.

"**Board of Directors**" or "**Board**" means the board of directors of the Corporation and "**Director**" means each director of the Corporation.

"**Cannabis**" has the meaning set out in Canada's *Cannabis Act* (S.C. 2018, c. 16).

"**Cannabis Act**" means *Cannabis Act* (Canada), which came into force on October 17, 2018 and was amended on October 17, 2019, October 17, 2020, and December 2, 2022.

"**Cannabis Regulations**" means regulations issued pursuant to the Cannabis Act.

"**Cardiol**" or the "**Corporation**" means Cardiol Therapeutics Inc.

"**Cardiol USA**" means the wholly owned subsidiary of the Corporation, Cardiol Therapeutics USA Inc.

"**CARO**" means the Instituto Tecnológico y de Estudios Superiores de Monterrey's Clinical Academic Research Organization, S.A. de C.V.

"**CEC**" means Clinical Endpoints Committee.

"**CEO**" means Chief Executive Officer.

"**CFO**" means Chief Financial Officer.

"**CG&C Committee**" means the Corporate Governance and Compensation Committee.

"**cGMP**" means the FDA's Continuing Good Manufacturing Practice regulations.

"**CHMP**" means the Committee for Medicinal Products for Human Use.

"**CIPO**" means the Canadian Intellectual Property Office.

"**CMOs**" means contract manufacturing organizations.

"**Common Shares**" or "**Shares**" means the Class A common shares in the capital of the Corporation.

"**Computershare Trust**" means Computershare Trust Company of Canada, the Warrant agent.

"**COVID-19**" means a disease caused by the SARS-CoV-2 virus.

"**CRO**" means contract research organizations.

"**CSA**" means the U.S. Controlled Substances Act.

"**CTA**" means clinical trial application.

"**Dalton**" means Dalton Chemical Laboratories, Inc., operating as Dalton Pharma Services.

"**Dalton Services Agreement**" has the meaning set out under the heading "Commercial Relationships – Dalton".

"**DEA**" means the Drug Enforcement Agency.

"DIN" means the Drug Identification Number.

"**DSMC**" means the Data Safety Monitoring Committee.

"**DSUs**" means deferred share units.

"**EMA**" means European Medicines Agency.

"**EndoMT**" means endothelial-to-mesenchymal cell transition.

"**E.U.**" means European Union.

"**FCPA**" means the U.S. Foreign Corrupt Practices Act of 1977.

"**FDA"** means the U.S. Food and Drug Administration.

"**FDCA**" means the U.S. Federal Food, Drug, and Cosmetic Act.

"**Founders**" means the founders of Cardiol; namely, David Elsley, Dr. Eldon Smith, and Dr. Anthony Bolton.

"**GCP**" means Good Clinical Practices.

"GLP" means Good Laboratory Practice.

"**Health Canada**" means the department of the government of Canada with responsibility for national public health.

"**HF**" means heart failure.

"**HFpEF**" means heart failure with preserved ejection fraction.

"**ICFR**" means internal controls over financial reporting.

"**IFRS**" means International Financial Reporting Standards.

"IL-1ß" means interleukin-1ß.

"IL-6" means interleukin-6.

"**IND**" means an FDA investigational new drug.

"**IRB**" means Institutional Review Boards.

"**IT**" means information technology.

"**Legacy Equity Compensation Plan**" means the stock option plan the Board of Directors has adopted whereby options and shares may be granted to the Corporation's Directors, officers, employees, and consultants. This plan was replaced by the Omnibus Equity Incentive Plan.

"**MAA**" means marketing authorization application.

"**Management**" means the management of the Corporation.

"**Market Price**" means the 5-day VWAP.

"MAvERIC-Pilot" means the Corporation's Phase II Open Label Pilot study evaluating the tolerance, safety, and efficacy of its lead product candidate, CardiolRx, in recurrent pericarditis.

"**May 2021 Underwriters**" has the meaning set out under the heading "Corporate History – Year Ended December 31, 2021".

"May 2021 Warrants" has the meaning set out under the heading "Corporate History – Year Ended December 31, 2021".

"**Meros**" means Meros Polymers Inc.

"**Meros Escrow Shares**" has the meaning set out under the heading "Commercial Relationships – Meros".

"**Meros License Agreement**" has the meaning set out under the heading "Commercial Relationships – Meros".

"**Meros Milestone**" has the meaning set out under the heading "Commercial Relationships – Meros".

"Meros Special Warrants" has the meaning set out under the heading "Commercial Relationships – Meros".

"MJDS" means Multijurisdictional Disclosure System.

"MMT" means mesothelial to mesenchymal transition.

"nanoparticles" means particles of nano-scale – i.e., <100 nanometres in size.

"**nanotherapeutics**" means therapeutic drugs encapsulated within nanoparticles – i.e., particles that are <100 nanometres in diameter.

"**Nasdaq**" means the Nasdaq Stock Market LLC.

"**NDA**" means a New Drug Application under the FDA.

"**NDS**" means New Drug Submission.

"**NEO**" means the Corporation's named executive officers, being its Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, and Chief Medical Officer (or persons who acted in similar capacities).

"**NI 52-110**" means National Instrument 52-110 – Audit Committees.

"**NOC**" means Notice of Compliance.

"**NON**" means Notice of Noncompliance.

"**Noramco**" means Noramco, Inc.

"**November 2021 Underwriters**" has the meaning set out under the heading "Corporate History – Year Ended December 31, 2021".

"November 2021 Warrants" has the meaning set out under the heading "Corporate History – Year Ended December 31, 2021".

"Omnibus Equity Incentive Plan" means the equity compensation plan the Board of Directors has adopted whereby options, shares, and other share awards may be granted to the Corporation's Directors, officers, employees, and consultants.

"**Option**" means an option under the Legacy Equity Compensation Plan or Omnibus Equity Incentive Plan.

"**Orphan Drug"** means a drug or biological product to prevent, diagnose, or treat a rare disease or condition affecting fewer than 200,000 citizens in the U.S. or 5 per 10,000 citizens in the E.U. An Orphan Drug benefits from 7 years' market exclusivity in the U.S and 10 years' market exclusivity in the E.U.

"**Orphan Drug Designation**" means the FDA's designation and approval of an Orphan Drug under the standards and procedures as set out in the Orphan Drug Act (21 CFR Part 316).

"**PCL**" means polycaprolactone.

"**PEG**" means polyethylene glycol.

"PFIC" means passive foreign investment company.

"PDD" means pharmaceutical Drugs Directorate.

"**pharmacokinetics**" or "**PK**" means the fate of a drug once administered, for e.g., concentration and duration retained in circulation.

"**ppm**" means parts-per-million.

"**PSUs**" means performance share units.

"**Purisys**" means Purisys, LLC.

"**Purisys Exclusive Supply Agreement**" has the meaning set out under the heading "Commercial Relationships – Purisys".

"**Regulations**" has the meaning ascribed thereto under "Regulatory Framework in Canada for Cannabis".

"**RSUs**" means restricted share units.

"**SARS-CoV-2**" means severe acute respiratory syndrome coronavirus 2.

"**Share-based Awards**" means shares, performance share units, restricted share units, and deferred share units.

"**Shareholder**" means a shareholder of the Corporation.

"**SC**" means subcutaneous.

"**SEC**" means the U.S. Securities and Exchange Commission.

"**TecSalud**" means TecSalud del Tecnológico de Monterrey, Mexico.

"**TSX**" means the Toronto Stock Exchange.

"**U.S.**" means the United States of America.

"**U.S. Exchange Act**" means the U.S. Securities Exchange Act of 1934, as amended.

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS

Not required.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not required.

ITEM 3. KEY INFORMATION

3.A.

[Reserved]

3.B. Capitalization and Indebtedness

Not required.

3.C. Reasons for the Offer and Use of Proceeds

Not required.

3.D. Risk Factors

Following is a list of risks that the Corporation faces in its normal course of business. These are factors which, individually or in the aggregate, we think could cause our actual results to differ significantly from anticipated or historical results. The risks and uncertainties set out below are not exhaustive and are not the only ones the Corporation is facing. If any of the following risks actually occur, the Corporation's business may be harmed and the Corporation's financial condition and results of operations may suffer significantly. Investors should carefully consider the risk factors set out below and consider all other information contained herein and in the Corporation's other public filings before making an investment decision. The risks set out below are not an exhaustive list and should not be taken as a complete summary or description of all the risks associated with the Corporation's business and the biotechnology business generally. Additionally, investors should not interpret the disclosure of a risk to imply that the risk has not already materialized.

Risks Related to our Business and Industry

The Corporation's prospects depend on the success of our subcutaneous product candidate which is in early stages of development, and the success of our Phase II trial in acute myocarditis and Phase II open-label pilot study in recurrent pericarditis. We do not expect to generate revenue for several years, if at all, from the acute myocarditis, recurrent pericarditis and subcutaneous product candidates.

Given the early stage of development of our subcutaneous product candidate, and the uncertainty inherent in clinical trials, we can make no assurance that our research and development programs will result in regulatory approval or commercially viable products. To achieve profitable operations, we, alone or with others, must successfully develop, gain regulatory approval, and market our product candidates, if approved. We currently have no products that have been approved by the FDA, Health Canada, or any similar regulatory authority. To obtain regulatory approvals for our product candidates being developed and to achieve commercial success, if approved, clinical trials must demonstrate that the product candidates are safe for human use and that they demonstrate efficacy, as determined by the appropriate regulatory agency.

Many product candidates never reach the stage of clinical testing and even those that do have only a small chance of successfully completing clinical development and gaining regulatory approval. Product candidates may fail for a number of reasons, including, but not limited to, being unsafe for human use or due to the failure to provide therapeutic benefits equal to or better than the standard of treatment at the time of testing. Positive results of early pre-clinical research may not be indicative of the results that will be obtained in later stages of pre-clinical or clinical research. Interim results of a clinical trial do not necessarily predict final results. Similarly, positive results from early-stage clinical trials may not be indicative of favorable outcomes in later-stage clinical trials. We can make no assurance that any future studies, if undertaken, will yield favorable results. The early stage of our subcutaneous product development makes it particularly uncertain whether any of these product development efforts will prove to be successful and meet applicable regulatory requirements, and whether any of our product candidates will receive the requisite regulatory approvals, be capable of being manufactured at a reasonable cost, or be successfully marketed, if approved. If we are successful in developing our current and future product candidates into approved products, we will still experience many potential obstacles such as the need to develop or obtain manufacturing, marketing, and distribution capabilities. If we are unable to successfully commercialize any of our product candidates, our financial condition and results of operations may be materially and adversely affected.

The continued development of the Corporation will require additional financing. If we fail to raise such capital, it could result in the delay or indefinite postponement of our current business strategy, or we could cease to carry on business.

There is no guarantee that the Corporation will be able to execute on its strategy. The continued development of the Corporation will require additional financing. The failure to raise needed capital could result in the delay or indefinite postponement of current business strategy or the Corporation ceasing to carry on business. There can be no assurance that additional capital or other types of financing will be available if needed or that, if available, the terms of such financing will be favorable to the Corporation. If additional funds are raised through issuances of equity or convertible debt securities, existing shareholders could suffer significant dilution, and any new equity securities issued could have rights, preferences, and privileges superior to those of holders of Common Shares. In addition, from time to time, the Corporation may enter into transactions to acquire assets or the shares of other companies. These transactions may be financed wholly or partially with debt, which may temporarily increase the Corporation's debt levels above industry standards. Any debt financing secured in the future could involve restrictive covenants relating to capital raising activities and other financial and operational matters, which may make it more difficult for the Corporation to obtain additional capital and to pursue business opportunities, including potential acquisitions. Debt financings may contain provisions, which, if breached, may entitle lenders to accelerate repayment of loans and there is no assurance that the Corporation would be able to repay such loans in such an event or prevent the enforcement of security granted pursuant to such debt financing. The Corporation may require additional financing to fund its operations to the point where it is generating positive cash flows. Negative cash flow may restrict the Corporation's ability to pursue its business objectives.

In the event of bankruptcy, liquidation, or reorganization of Cardiol, holders of its debt and its trade creditors will generally be entitled to payment of their claims from the assets of Cardiol before any assets are made available for distribution to Cardiol or its shareholders. The Common Shares are effectively subordinated to the debt and other obligations of Cardiol.

We intend to expend our limited resources to pursue our current product candidates, and may fail to capitalize on other product candidates that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we are focusing on research programs relating to our current product candidates, which concentrates the risk of product failure in the event that our current product candidates prove to be unsafe or ineffective or inadequate for clinical development or commercialization. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on proprietary research and development programs relating to our current product candidates may not yield any commercially viable products.

We have a history of operating losses and may never achieve or maintain profitability in the future.

It is possible that we will never have sufficient product sales revenue to achieve profitability. We expect to continue to incur losses for at least the next several years as we or our collaborators and licensees pursue clinical trials and research and development efforts. To become profitable, we, either alone or with our collaborators and licensees, must successfully market our pharmaceutical cannabidiol and develop, manufacture, and market our current product candidates, as well as continue to identify, develop, manufacture, and market new product candidates. It is possible that we will never have significant product sales revenue or receive royalties on our licensed product candidates. If funding is insufficient at any time in the future, we may not be able to develop or commercialize our products, take advantage of business opportunities, or respond to competitive pressures.

We currently do not earn any revenues from our drug candidates and are therefore considered to be in the development stage. The continuation of our research and development activities and the commercialization of the targeted therapeutic products are dependent upon our ability to successfully finance and complete our research and development programs through a combination of equity financing and payments from strategic partners. We have no current sources of significant payments from strategic partners.

We rely on Management and need additional key personnel to grow our business, and the loss of key employees or inability to hire key personnel could harm our business.

The loss of David Elsley, our President and CEO, or other key members of our staff, could harm us. We also depend on our scientific and clinical collaborators and advisors, all of whom have outside commitments that may limit their availability to us. In addition, we believe that our future success will depend in large part upon our ability to attract and retain highly skilled scientific, managerial, medical, clinical, and regulatory personnel, particularly as we expand our activities and seek regulatory approvals for clinical trials. We routinely enter into consulting agreements with our scientific and clinical collaborators and advisors, key opinion leaders, and academic partners in the ordinary course of our business. We also enter into contractual agreements with physicians and institutions who will recruit patients into our clinical trials on our behalf in the ordinary course of our business. Notwithstanding these arrangements, we face significant competition for these types of personnel from other companies, research and academic institutions, government entities, and other organizations. We cannot predict our success in hiring or retaining the personnel we require for continued growth. The loss of the services of any of our executive officers or other key personnel could potentially harm our business operating results, or financial condition.

Clinical trials for our product candidates are expensive, time consuming, uncertain, and susceptible to change, delay or termination.

Clinical trials are expensive, time consuming, and difficult to design and implement. Even if the results of our clinical trials are favorable, the clinical trials for a number of our product candidates are expected to continue for several years and may take significantly longer to complete. In addition, we, the FDA, Health Canada or other regulatory authorities, including state and local authorities may suspend, delay, or terminate our clinical trials at any time, require us to conduct additional clinical trials, require a particular clinical trial to continue for a longer duration than originally planned, or require a change to our development plans such that we conduct clinical trials for a product candidate in a different order, e.g., in a step-wise fashion rather than running two trials of the same product candidate in parallel. Any of the foregoing could have a material adverse effect on our business, results of operations, and financial condition.

If clinical trials of our product candidates fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, we would incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct pre-clinical studies in animals and extensive clinical trials in humans to demonstrate the safety and efficacy of the product candidates. Clinical testing is expensive and difficult to design and implement, can take many years to complete, and has uncertain outcomes. The outcome of pre-clinical studies and early clinical trials may not predict the success of later clinical trials and interim results of a clinical trial do not necessarily predict final results.

A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety profiles, notwithstanding promising results in earlier trials. We do not know whether the clinical trials we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market any of our product candidates in any jurisdiction. A product candidate may fail for safety or efficacy reasons at any stage of the testing process. A major risk we face is the possibility that none of our product candidates under development will successfully gain market approval from the FDA, Health Canada, or other regulatory authorities, resulting in us being unable to derive any commercial revenue from them after investing significant amounts of capital in multiple stages of pre-clinical and clinical testing.

If we experience delays in clinical testing, we will be delayed in commercializing our product candidates, if approved, and our business may be substantially harmed.

We cannot predict whether any clinical trials will begin as planned, will need to be restructured, or will be completed on schedule, or at all. Our product development costs will increase if we experience delays in clinical testing. Significant clinical trial delays could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before us, which would impair our ability to successfully commercialize our product candidates, if approved, and may harm our financial condition, results of operations, and prospects. The commencement and completion of clinical trials for our product candidates may be delayed for a number of reasons, including delays related, but not limited, to:

- failure by regulatory authorities to grant permission to proceed or placing the clinical trial on hold;
- difficulties obtaining IRB or ethics committee approval to conduct a clinical trial at a prospective site;
- import/export and research restrictions for cannabinoid-based pharmaceuticals delaying or preventing clinical trials in various geographical jurisdictions;
- patients failing to enroll or remain in our trials at the rate we expect;
- suspension or termination of clinical trials by regulators for many reasons, including concerns about patient safety or failure of our contract manufacturers to comply with cGMP requirements;
- delays or failure to obtain clinical supply from contract manufacturers of our product candidates necessary to conduct clinical trials;
- product candidates demonstrating a lack of safety or efficacy during clinical trials;
- patients choosing an alternative treatment for the indications for which we are developing any of our product candidates or participating in competing clinical trials and/or scheduling conflicts with participating clinicians;
- patients failing to complete clinical trials due to dissatisfaction with the treatment, side effects, or other reasons;
- reports of clinical testing on similar technologies and products raising safety and/or efficacy concerns;
- clinical investigators not performing our clinical trials on their anticipated schedule, dropping out of a trial, or employing methods not consistent with the clinical trial protocol, and regulatory requirements, or other third parties not performing data collection and analysis in a timely or accurate manner;
- failure of our CROs to satisfy their contractual duties or meet expected deadlines;
- inspections of clinical trial sites by regulatory authorities or IRBs, or ethics committees finding regulatory violations that require us to undertake corrective action, resulting in suspension or termination of one or more sites or the imposition of a clinical hold on the entire study;
- one or more IRBs or ethics committees rejecting, suspending, or terminating the study at an investigational site, precluding enrollment of additional subjects, or withdrawing its approval of the trial; or
- failure to reach agreement on acceptable terms with prospective clinical trial sites.

In addition, a clinical trial may be suspended or terminated by us, the FDA, IRBs, ethics committees, data safety monitoring boards, or other foreign regulatory authorities overseeing the clinical trial at issue or other regulatory authorities due to a number of factors, including, among others:

- failure to conduct the clinical trial in accordance with regulatory requirements or our clinical trial protocols;

- inspection of the clinical trial operations or clinical trial sites by the FDA, the European Medicines Agency, or other foreign regulatory authorities that reveals deficiencies or violations that require us to undertake corrective action, including the imposition of a clinical hold;
- unforeseen safety issues, including any safety issues that could be identified in our ongoing pre-clinical studies;
- adverse side effects or lack of effectiveness; and
- changes in government regulations or administrative actions.

Our product development costs will increase if we experience delays in testing or approval or if we need to perform more or larger clinical trials than planned. Additionally, changes in regulatory requirements and policies may occur, and we may need to amend study protocols to reflect these changes. Amendments may require us to resubmit our study protocols to regulatory authorities, IRBs, or ethics committees for re-examination, which may impact the cost, timing, or successful completion of that trial. Delays or increased product development costs may have a material adverse effect on our business, financial condition, and prospects.

Negative results from clinical trials or studies of others and adverse safety events involving the targets of our product candidates may have an adverse impact on our future commercialization efforts.

From time to time, studies or clinical trials on various aspects of biopharmaceutical products are conducted by academic researchers, competitors, or others. The results of these studies or trials, when published, may have a significant effect on the market for the biopharmaceutical product that is the subject of the study. The publication of negative results of studies or clinical trials or adverse safety events related to our product candidates, or the therapeutic areas in which our product candidates compete, could adversely affect the price of our securities and our ability to finance future development of our product candidates, and our business and financial results could be materially and adversely affected.

Our activities are subject to comprehensive regulation, including under healthcare laws and compliance requirements.

In the United States, our activities are potentially subject to additional regulation by various federal, state, and local authorities in addition to the FDA, including, among others, the Centers for Medicare and Medicaid Services, other divisions of Health and Human Services, or HHS, (for example, the Office of Inspector General), the Department of Justice, and individual United States Attorney offices within the Department of Justice, and state and local governments.

In Canada, our activities are potentially subject to additional regulation by various federal and provincial authorities in addition to Health Canada, including among others, and publicly mandated organizations given a provincial sales license under the Cannabis Act.

Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If our operations are found to be in violation of any of the federal and state laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including criminal and significant civil monetary penalties, damages, fines, imprisonment, exclusion from participation in government programs, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, private “qui tam” actions brought by individual whistleblowers in the name of the government, or refusal to allow us to enter into supply contracts, including government contracts, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our products are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

We may not achieve our projected development goals in the time frames and cost estimates we announce and expect.

We set goals for, and make public statements regarding, the expected timing and costs of the accomplishment of objectives material to our success, the commencement and completion of clinical trials, and the expected costs to develop our product candidates. The actual timing and costs of these events can vary dramatically due to factors within and beyond our control, such as delays or failures in our clinical trials, issues related to the manufacturing of drug supply, uncertainties inherent in the regulatory approval process, market conditions, and interest by partners in our product candidates among other things. We may not make regulatory submissions or receive regulatory approvals as planned; our clinical trials may not be completed; or we may not secure partnerships for any of our product candidates. Any failure to achieve one or more of these milestones as planned would have a material adverse effect on our business, financial condition, and results of operations.

Unpredictable and volatile market price for Common Shares.

The market price for Common Shares may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond our control, including the following:

- actual or anticipated fluctuations in our quarterly results of operations;
- recommendations by securities research analysts;
- changes in the economic performance or market valuations of companies in the industry in which we operate;
- addition or departure of our executive officers and other key personnel;
- sales or perceived sales of additional Common Shares;
- significant acquisitions or business combinations, strategic partnerships, joint ventures, or capital commitments by or involving us or our competitors;
- operating and share price performance of other companies that investors deem comparable to us;
- fluctuations to the costs of vital production materials and services;
- changes in global financial markets and global economies and general market conditions, such as interest rates and pharmaceutical product price volatility;
- operating and share price performance of other companies that investors deem comparable to the Corporation or from a lack of market comparable companies; and
- news reports relating to trends, concerns, technological or competitive developments, regulatory changes, and other related issues in our industry or target markets.

Financial markets have recently experienced significant price and volume fluctuations that have particularly affected the market prices of equity securities of companies and that have often been unrelated to the operating performance, underlying asset values, or prospects of such companies. Accordingly, the market price of the Common Shares may decline even if our operating results, underlying asset values, or prospects have not changed. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which might result in impairment losses. There can be no assurance that continuing fluctuations in price and volume will not occur. If such increased levels of volatility and market turmoil continue, our operations could be adversely affected, and the trading price of the Common Shares might be materially adversely affected.

Securities or industry analysts may publish inaccurate or unfavorable research reports, stock price and trading volume could decline.

The trading market for our Common Shares will depend in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrade our Common Shares or publish inaccurate or unfavorable research about our business, our share price would likely decline. If one or more of these analysts cease coverage of our Corporation or fail to publish reports on us regularly, demand for our Common Shares could decrease, which might cause our share price and trading volume to decline.

If we fail to adequately protect or enforce our intellectual property rights or secure rights to patents of others, the value of our intellectual property rights would diminish.

Our success, competitive position, and future revenues will depend in part on our ability and the abilities of our licensors to obtain and maintain patent protection for our products, methods, processes, and other technologies, to preserve our trade secrets, to prevent third parties from infringing on our proprietary rights, and to operate without infringing the proprietary rights of third parties.

To date, we have exclusive rights to certain Canadian, United States, and other foreign intellectual property. We anticipate filing additional patent applications in Canada, the United States, and in other countries, as appropriate. However, we cannot predict:

- the degree and range of protection any patents will afford us against competitors, including whether third parties will find ways to invalidate or otherwise circumvent our patents;
- if and when patents will issue;
- whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings which may be costly whether we win or lose.

Our success also depends upon the skills, knowledge, and experience of our scientific and technical personnel, our consultants and advisors, as well as our licensors and contractors. To help protect our proprietary know-how and our inventions for which patents may be unobtainable or difficult to obtain, we rely on trade-secret protection and confidentiality agreements. To this end, it is our policy generally to require our employees, consultants, advisors, and contractors to enter into agreements which prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries, and inventions important to our business. These agreements may not provide adequate protection for our trade secrets, know-how, or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information. If any of our trade secrets, know-how, or other proprietary information is disclosed, the value of our trade secrets, know-how, and other proprietary rights would be significantly impaired and our business and competitive position would suffer.

Owning a patent does not per se prevent competition. To stop third-party infringement, a patent owner and/or licensee must take steps to enforce the patent through court proceedings. This can be a very lengthy and costly process and the outcome may be uncertain.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The CIPO and various foreign national or international patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. Periodic maintenance fees on any issued patent are due to be paid to CIPO and various foreign national or international patent agencies in several stages over the lifetime of the patent. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of patent rights include, but are not limited to, failure to timely file national and regional stage patent applications based on our international patent application, failure to respond to official actions within prescribed time limits, non-payment of fees, and failure to properly legalize and submit formal documents.

If we fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market, which would have a material adverse effect on our business.

While a patent may be granted by a national patent office, there is no guarantee that the granted patent is valid. Options exist to challenge the validity of the patent which, depending upon the jurisdiction, may include re-examination, opposition proceedings before the patent office, and/or invalidation proceedings before the relevant court. Patent validity may also be the subject of a counterclaim to an allegation of patent infringement.

Pending patent applications may be challenged by third parties in protest or similar proceedings. Third parties can typically submit prior art material to patentability for review by the patent examiner. Regarding Patent Cooperation Treaty applications, a positive opinion regarding patentability issued by the International Searching Authority does not guarantee allowance of a national application derived from the Patent Cooperation Treaty application. The coverage claimed in a patent application can be significantly reduced before the patent is issued, and the patent's scope can be modified after issuance. It is also possible that the scope of claims granted may vary from jurisdiction to jurisdiction.

The grant of a patent does not have any bearing on whether the invention described in the patent application would infringe the rights of earlier filed patents. It is possible to both obtain patent protection for an invention and yet still infringe the rights of an earlier granted patent.

We may become subject to claims by third parties asserting that we or our employees have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Our commercial success depends upon our ability to develop, manufacture, market, and sell our product candidates, and to use our related proprietary technologies without violating the intellectual property rights of others. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our product candidates, including interference or derivation proceedings before CIPO, United States Patent and Trademark Office, and other applicable patents offices in foreign jurisdictions. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future. If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue commercializing our product candidates. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Under certain circumstances, we could be forced, including by court order, to cease commercializing the applicable product candidate. In addition, in any such proceeding or litigation, we could be found liable for monetary damages. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business. Any claims by third parties that we have misappropriated their confidential information or trade secrets could have a similar negative impact on our business.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting, and defending patents on all of our product candidates throughout the world would be prohibitively expensive. Therefore, we have filed applications and/or obtained patents only in key markets, such as the United States, Canada, and certain countries internationally. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and their products may compete with ours.

We rely and will continue to rely on third parties to conduct and monitor many of our pre-clinical studies and our clinical trials, and their failure to perform as required could cause substantial harm to our business.

We rely and will continue to rely on third parties to conduct a significant portion of our pre-clinical and clinical development activities. Pre-clinical activities include *in vivo* studies providing access to specific disease models, pharmacology and toxicology studies, and assay development. Clinical development activities include trial design, regulatory submissions, clinical patient recruitment, clinical trial monitoring, clinical data management and analysis, safety monitoring and project management, contract manufacturing, and quality assurance. If there is any dispute or disruption in our relationship with third parties, or if they are unable to provide quality services in a timely manner and at a feasible cost, our active development programs will face delays. Further, if any of these third parties fails to perform as we expect or if their work fails to meet regulatory requirements, our testing could be delayed, cancelled, or rendered ineffective.

Our product candidates contain compounds that may be classified as "controlled substances" in jurisdictions outside of Canada and are classified as cannabis in Canada. Outside of Canada they may be subject to controlled substance laws and regulations; within Canada they will be subject to the Cannabis Act and the Cannabis Regulations. In all jurisdictions, failure to receive necessary approvals may delay the launch of our products and failure to comply with these laws and regulations may adversely affect the results of our business operations.

Our product candidates contain substances related to the cannabis plant and are subject to the *Cannabis Act* and the Cannabis Regulations in Canada. As a pharmaceutical product, cannabidiol will be subject to both the *Food and Drugs Act* and regulations issued thereunder and the *Cannabis Act* and the Cannabis Regulations. This will include the need for an establishment license, import and export permits, and extensive record keeping.

In addition, since our product candidates contain a cannabinoid, their regulatory approval may generate public controversy. Political and social pressures and adverse publicity could lead to delays in approval of, and increased expenses for our product candidates. These pressures could also limit or restrict the introduction and marketing of our product candidates. Adverse publicity from cannabis misuse or adverse side effects from cannabis or other cannabinoid products may adversely affect the commercial success or market penetration achievable for our product candidates. The nature of our business attracts a high level of public and media interest, and in the event of any resultant adverse publicity, our reputation may be harmed. Furthermore, if our product candidates are classified as "controlled substances", they may be subject to import/export and research restrictions that could delay or prevent the development of Cardiol's product candidates in various geographical jurisdictions.

Our ability to successfully produce our product candidates is dependent on extensive ongoing regulatory compliance and reporting requirements by the FDA, Health Canada, and other foreign regulatory authorities. Failure to comply with such requirements could have a material adverse impact on our business, financial condition and operating results. There is no assurance that regulatory approval will be granted or continued for our product candidates. Should regulatory approval not be granted or continued, our business, financial condition, and operating results would be materially adversely affected. Even if we receive regulatory approval for our product candidates, this approval may carry conditions that limit the market for the products or put the products at a competitive disadvantage relative to alternative therapies. For instance, regulatory approval may limit the indicated uses for which we can market a product (if approved) or the patient population that may utilize the product, or the product may be required to carry a warning on its packaging. Once a product candidate is approved, we remain subject to continuing regulatory obligations, such as safety reporting requirements and additional post-marketing obligations, including regulatory oversight of promotion and marketing.

If our operations are found to be in violation of any of the federal and state laws or any other governmental regulations that apply to us, we may be subject to penalties, including criminal and significant civil monetary penalties, damages, fines, imprisonment, exclusion from participation in government programs, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, private "qui tam" actions brought by individual whistleblowers in the name of the government, or refusal to allow us to enter into supply contracts, including government contracts, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our product candidates (if approved) are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

In both domestic and foreign markets, the development, formulation, manufacturing, packaging, labelling, handling, distribution, import, export, licensing, sale, and storage of pharmaceuticals are affected by a body of laws, governmental regulations, administrative determinations, including those by the Canadian Food Inspection Agency and the FDA, court decisions, and similar constraints. Such laws, regulations and other constraints can exist at the federal, provincial or local levels in Canada and at all levels of government in foreign jurisdictions. We and our partners may be required to incur significant costs to comply with such laws and regulations in the future, and such laws and regulations may have an adverse effect on the business. The failure of us or our partners to comply with current or future regulatory requirements could lead to the imposition of significant penalties or claims and may have a material adverse effect on our business. In addition, the adoption of new laws, regulations or other constraints or changes in the interpretations of such requirements might result in significant compliance costs or lead us and our partners to discontinue product development and could have an adverse effect on our business.

Our ability to research, develop, and commercialize product candidates, if approved, is dependent on our ability to obtain and maintain licenses relating to possession and supply of controlled substances.

Our research and manufacturing facilities are located in Canada. In Canada, various licenses are required to produce pharmaceutical cannabinoids. Our continued ability to research, develop, and commercialize our product candidates is dependent on our ability to obtain, and subsequently maintain, licenses relating to possession and supply of controlled substances. Loss of such licenses or inability to obtain such licenses could have an adverse effect on our business.

Controlled substance legislation differs between countries and legislation in certain countries may restrict or limit ability to sell products.

Most countries are parties to the Single Convention on Narcotic Drugs 1961, which governs international trade and domestic control of narcotic substances, including cannabis. Countries may interpret/implement their treaty obligations in a way that creates a legal obstacle to our obtaining marketing approval for our product candidates in those countries even though our cannabinoids are pharmaceutically manufactured and not botanically derived. These countries may not be willing or able to amend or otherwise modify their laws and regulations to permit our product candidates to be marketed, if approved, or achieving such amendments to the laws and regulations may take a prolonged period of time.

Changes in laws and regulations may make compliance challenging, costly, and time consuming for us.

Our operations are subject to a variety of laws, regulations, and guidelines relating to pharmacology, cannabinoids, and drug delivery, as well as laws and regulations relating to health and safety, the conduct of operations, and the protection of the environment. While, to our knowledge, we are currently in material compliance with all such laws, changes to such laws, regulations, and guidelines due to matters beyond our control may cause adverse effects to our operations and financial condition. These changes may require us to incur substantial costs associated with legal and compliance fees and ultimately require us to alter our business plan.

In addition, if the governments of Canada or the U.S. were to enact or amend laws relating to our industry, it may decrease the size of, or eliminate entirely, the market for our product candidates, if approved, may introduce significant new competition into the market and may otherwise potentially materially and adversely affect our business, results of operations, and financial condition.

Tax and accounting requirements may change in ways that are unforeseen to the Corporation and the Corporation may face difficulty or be unable to implement and/or comply with any such changes.

The Corporation is subject to numerous tax and accounting requirements, and changes in existing accounting or taxation rules or practices, or varying interpretations of current rules or practices, could have a significant adverse effect on the Corporation's financial results, the manner in which it conducts its business, or the marketability of any of its products (if approved). In the future, the geographic scope of the Corporation's business may expand, and such expansion will require the Corporation to comply with the tax laws and regulations of multiple jurisdictions. Requirements as to taxation vary substantially among jurisdictions. Complying with the tax laws of these jurisdictions can be time consuming and expensive and could potentially subject the Corporation to penalties and fees in the future if the Corporation were to inadvertently fail to comply. In the event the Corporation was to inadvertently fail to comply with applicable tax laws, this could have a material adverse effect on the business, results of operations, and financial condition of the Corporation.

Management may not be able to successfully implement adequate ICFR.

Proper systems of internal controls over financial accounting and disclosure are critical to the operation of a public company. However, the Corporation does not expect that its Disclosure, Controls, and Procedures, or ICFR will prevent all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Due to the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be detected in a timely manner or at all. If the Corporation cannot provide reliable financial reports or prevent fraud, its reputation and operating results could be materially adversely affected, which could cause investors to lose confidence in the Corporation's reported financial information, which in turn could result in a reduction in the value of the Common Shares.

Medical research of cannabidiol remains limited.

Research regarding the medical benefits, viability, safety, efficacy, and dosing of cannabidiol remains limited. There have been relatively few well-designed clinical trials conducted on the benefits of cannabidiol, and the Corporation is not aware of any randomized placebo-controlled studies of cannabidiol in heart diseases such as recurrent pericarditis, acute myocarditis, and heart failure. The statements made in this Annual Report concerning the potential medical benefits of cannabidiol are based on the published articles and reports from pre-clinical research studies. As a result, the statements made in this Annual Report are subject to the experimental parameters, qualifications, and limitations in the studies that have been completed.

Although the Corporation believes that the articles and reports with details of research studies referenced in this Annual Report reasonably support its beliefs regarding the medical benefits, viability, safety, efficacy, and dosing of cannabidiol, future research and clinical trials in pursuit of our development efforts may prove such statements to be incorrect, or could raise concerns regarding and perceptions relating to, cannabidiol. Given these risks, uncertainties and assumptions, undue reliance should not be placed on such articles and reports. Future research studies may draw opposing conclusions to those stated in this Annual Report or reach negative conclusions regarding the viability, safety, efficacy, dosing, social acceptance, or other facts and perceptions related to cannabidiol, which could have a material adverse effect on the demand for the Corporation's product candidates, if approved, and therefore materially impact the business, financial condition, and operating results of the Corporation.

Product candidates, if approved, may be unable to achieve the expected market acceptance and, consequently, limit our ability to generate revenue from new products.

Even if product development is successful and regulatory approval is obtained, our ability to generate significant revenue depends on the acceptance of our products by physicians and patients. We cannot assure that our pharmaceutical cannabinoid product candidates will achieve the expected market acceptance and revenue if and when they obtain the requisite regulatory approvals. The market acceptance of any product depends on a number of factors, including the indication statement and warnings approved by regulatory authorities on the product label, continued demonstration of efficacy and safety in commercial use, physicians' willingness to prescribe the product, reimbursement from third-party payers such as government health care systems and insurance companies, the price of the product, the nature of any post-approval risk management plans mandated by regulatory authorities, competition, and marketing and distribution support. Any factors preventing or limiting the market acceptance of our products could have a material adverse effect on our business, results of operations, and financial condition.

We currently have no commercialized products to date.

Even if we obtain regulatory approval for a product candidate, our future success will still depend on our ability to successfully commercialize our products, which depends on a number of factors beyond our control, including the willingness of physicians to prescribe our products to patients, payers' willingness and ability to pay for the product, the level of pricing achieved, patients' response to our products, the ability of our marketing partners to generate sales, and our ability to manufacture products on a cost-effective and efficient basis. If we are not successful in the commercialization of our products, our business, results of operations, and financial condition may be harmed.

We rely on contract manufacturers over whom we have limited control. If we are subject to quality, cost, or delivery issues with the pre-clinical and clinical grade materials supplied by contract manufacturers, our business operations could suffer significant harm.

We currently have no manufacturing experience and rely on Dalton and other CMOs to manufacture our product candidates for pre-clinical studies and clinical trials. We rely on CMOs for manufacturing, filling, packaging, storing, and shipping of product candidates in compliance with current good manufacturing practice, or cGMP, regulations applicable to our product candidates. The FDA ensures the quality of drug products by carefully monitoring drug manufacturers' compliance with cGMP regulations. The cGMP regulations for drugs contain minimum requirements for the methods, facilities, and controls used in manufacturing, processing, and packaging of a drug product. If our CMOs increase their prices or fail to meet our quality standards, or those of regulatory agencies such as the FDA, and cannot be replaced by other acceptable CMOs, our ability to obtain regulatory approval for and commercialize our product candidates may be materially adversely affected.

Business disruptions affecting our third-party suppliers, manufacturers, and CROs could harm our future revenues and financial condition and increase our costs and expenses.

We rely on third parties to supply the materials for and manufacture our APIs for our pre-clinical and clinical trials. There are only a limited number of suppliers and manufacturers of our APIs and our ability to obtain these materials could be disrupted if the operations of these manufacturers are affected by earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, regulatory enforcement activity, medical epidemics, including the COVID-19 pandemic, and other natural or man-made disasters or business interruptions. We also rely on CROs, clinical data management organizations, and consultants to design, conduct, supervise, and monitor pre-clinical studies of our product candidates and will do the same for our planned clinical trials. If their facilities are unable to operate because of an accident or incident, even for a short period of time, some or all of our research and development programs may be harmed or delayed, and our operations and financial condition could suffer.

Our existing collaboration agreements and any such agreement entered into in the future may not be successful, which would have adverse consequences.

We are a party to, and may seek additional, collaboration arrangements with pharmaceutical or biotechnology companies for the development or commercialization of our current and potential product candidates. We may enter into new arrangements on a selective basis depending on the merits of retaining commercialization rights for ourselves as compared to entering into selective collaboration arrangements with leading pharmaceutical or biotechnology companies for each product candidate, both in Canada and internationally. To the extent that we decide to enter into collaboration agreements, we will face significant competition in seeking appropriate collaborators. Moreover, collaboration arrangements are complex and time consuming to negotiate, document, and implement. We may not be successful in our efforts to establish, implement, and maintain collaborations or other alternative arrangements if we choose to enter into such arrangements. In addition, the terms of any collaboration or other arrangements that we may establish may not be favorable to us.

Any existing or future collaboration that we enter into may not be successful. The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborators generally have significant discretion in determining the efforts and resources that they will apply to these collaborations.

Disagreements between parties to a collaboration arrangement regarding development, intellectual property, regulatory, or commercialization matters, can lead to delays in the development process or commercialization of the applicable product candidate, if approved, and, in some cases, termination of the collaboration arrangement. These disagreements can be difficult to resolve if neither of the parties has final decision-making authority.

Collaborations with pharmaceutical or biotechnology companies and other third parties often are terminated or allowed to expire by the other party. Any such termination or expiration would adversely affect us financially and could harm our business reputation.

Product candidate shipment delays would have an adverse effect on the business.

The shipment, import, and export of our product candidates may require import and export licenses. In the United States, the FDA, United States Customs and Border Protection, and in other countries, similar regulatory authorities, regulate the import and export of pharmaceutical products that contain controlled substances. Specifically, the import and export process may require the issuance of import and export licenses by the relevant controlled substance authority in both the importing and exporting country. Once we are in the production phase, we may not be granted, or if granted, maintain, such licenses from the authorities in certain countries. Even if we obtain the relevant licenses, shipments of our product candidates may be held up in transit, which could cause significant delays and may lead to product batches being stored outside required temperature ranges. Inappropriate storage may damage the product shipment resulting in a partial or total loss of revenue from one or more shipment of our other product candidates. A partial or total loss of revenue from one or more shipment of our product candidates could have a material adverse effect on our business, results of operations and financial condition.

Our ability to generate product revenues will be diminished if our product candidates (if approved) sell for inadequate prices or patients are unable to obtain adequate levels of reimbursement.

Our ability to commercialize our product candidates, if approved, alone or with collaborators, will depend in part on the extent to which reimbursement will be available from:

- government and health administration authorities;

- private health maintenance organizations and health insurers; and
- other healthcare payers.

Significant uncertainty exists as to the reimbursement status of newly approved healthcare products. Healthcare payers are challenging the prices charged for medical products and services. Government and other healthcare payers increasingly attempt to contain healthcare costs by limiting both coverage and the level of reimbursement for drugs. Even if our product candidates are approved by the FDA or Health Canada, insurance coverage may not be available, and reimbursement levels may be inadequate, to cover our product candidates (if approved). If government and other healthcare payers do not provide adequate coverage and reimbursement levels for our product candidates, once approved, market acceptance of such product candidates could be reduced.

We do not have a history of selling, marketing, or distributing products.

We may not be able to market, sell, and distribute our product candidates, if approved, successfully. Our future success may depend, in part, on our ability to enter into and maintain collaborative relationships for such capabilities, the collaborator's strategic interest in the product candidates under development, and such collaborator's ability to successfully market and sell any such product candidates, if approved. Although we intend to pursue collaborative arrangements regarding the sale and marketing of our product candidates, if approved, there can be no assurance that we will be able to establish or maintain our own sales operations or effect collaborative arrangements, or that if we are able to do so, our collaborators will have effective sales forces. There can also be no assurance that we will be able to establish or maintain effective relationships with third party collaborators or develop in-house sales and distribution capabilities. To the extent that we will in the future depend on third parties for marketing and distribution, any revenues we receive will depend upon the efforts of such third parties, and there can be no assurance that such efforts will be successful. In addition, there can also be no assurance that we will be able to market and sell our product candidates, if approved, internationally.

We may face intense competition from other companies which may be larger and better financed.

Competition from pharmaceutical companies, biotechnology companies, and universities is intense and is expected to increase. Increased competition by larger and better financed competitors could materially and adversely affect the business, financial condition, and results of operations of the Corporation. The Corporation's future success depends in part on its ability to maintain a competitive position, including the ability to further progress its product candidates through the necessary pre-clinical and clinical trials towards regulatory approval for sale and commercialization. Other companies may succeed in commercializing products earlier than the Corporation is able to commercialize its product candidates, if approved, or they may succeed in developing products that are more effective. While the Corporation will seek to expand its capabilities in order to remain competitive, there can be no assurance that developments by others will not render its product candidates, if approved, non-competitive or that the Corporation or its licensors will be able to keep pace with technological developments. Competitors have developed or could develop technologies that could be the basis for competitive products. Some of those products may have an entirely different approach or means of accomplishing the desired therapeutic effect than the Corporation's product candidates and may be more effective or less costly than the Corporation's product candidates, if approved. In addition, other forms of medical treatment may offer competition to the Corporation's product candidates, if approved. The success of the Corporation's competitors and their products relative to the Corporation's capabilities and competitiveness could have a material adverse effect on the future of pre-clinical and clinical trials of the Corporation's product candidates, including its ability to obtain the necessary regulatory approvals for the conduct of such trials.

Research and development, and evolving technology and products, may render our product candidates (if approved) obsolete, if we are unable to continue to improve our product offerings in the future.

Rapidly changing markets, technology, emerging industry standards, and frequent introduction of new products characterize the Corporation's business. The introduction of new products embodying new technologies, including new manufacturing processes, and the emergence of new industry standards may render the Corporation's product candidates, if approved, obsolete, less competitive, or less marketable. The process of developing the Corporation's product candidates is complex and requires significant continuing costs, development efforts, and third-party commitments. The Corporation's failure to develop new technologies and product candidates and the obsolescence of existing technologies could adversely affect the business, financial condition, and operating results of the Corporation. The Corporation may be unable to anticipate changes in its potential customer requirements that could make the Corporation's existing technology obsolete. The Corporation's success will depend, in part, on its ability to continue to enhance its existing technologies, develop new technology that addresses the increasing sophistication and varied needs of the market, and respond to technological advances and emerging industry standards and practices on a timely and cost-effective basis. The development of the Corporation's proprietary technology entails significant technical and business risks. The Corporation may not be successful in using its new technologies or exploiting its niche markets effectively or adapting its businesses to evolving customer or medical requirements or preferences or emerging industry standards.

Negative public or consumer perception around cannabinoids may negatively affect the development and commercialization of our product candidates.

The Corporation believes the cannabinoid industry is highly dependent upon consumer perception regarding the safety, efficacy, and quality of the cannabinoid produced. Consumer perception of the Corporation's pharmaceutical cannabinoid product candidates can be significantly influenced by scientific research or findings, regulatory investigations, litigation, media attention, and other publicity regarding the consumption of cannabinoids. There can be no assurance that future scientific research, findings, regulatory proceedings, litigation, media attention, or other research findings or publicity will be favorable to the cannabinoid market or any particular product, or consistent with earlier publicity. Future research reports, findings, regulatory proceedings, litigation, media attention, or other publicity that are perceived as less favorable than, or that question, earlier research reports, findings, or publicity could have a material adverse effect on the demand for the Corporation's pharmaceutical cannabinoids, if approved, and the business, results of operations, financial condition, and cash flows of the Corporation. The Corporation's dependence upon consumer perceptions means that adverse scientific research reports, findings, regulatory proceedings, litigation, media attention, or other publicity, whether or not accurate or with merit, could have a material adverse effect on the Corporation, the demand for the Corporation's pharmaceutical cannabinoids, if approved, and the business, results of operations, financial condition, and cash flows of the Corporation. Further, adverse publicity reports or other media attention regarding the safety, efficacy, and quality of cannabinoid in general, or the Corporation's pharmaceutical cannabinoids, if approved, specifically, or associating the consumption of cannabinoid with illness or other negative effects or events, could have such a material adverse effect. Such adverse publicity reports or other media attention could arise even if the adverse effects associated with such products resulted from consumers' failure to consume such products legally, appropriately, or as directed.

We may face risks from product liability claims if our product candidates are approved.

If we become a manufacturer and distributor of products designed to be ingested by humans, the Corporation faces an inherent risk of exposure to product liability claims, regulatory action, and litigation if its product candidates (once approved) are alleged to have caused significant loss or injury. In addition, the manufacture and sale of cannabis products involve the risk of injury to consumers due to tampering by unauthorized third parties or product contamination. Previously unknown adverse reactions resulting from human consumption of cannabis products alone or in combination with other medications or substances could occur. The Corporation may be subject to various product liability claims, including, among others, that the products produced by the Corporation caused injury or illness, include inadequate instructions for use or include inadequate warnings concerning possible side effects or interactions with other substances. A product liability claim or regulatory action against the Corporation could result in increased costs, could adversely affect the Corporation's reputation with its clients and consumers generally, and could have a material adverse effect on the business, financial condition, and operating results of the Corporation. There can be no assurances that the Corporation will be able to obtain or maintain product liability insurance on acceptable terms or with adequate coverage against potential liabilities. Such insurance is expensive and may not be available in the future on acceptable terms, or at all. The inability to obtain sufficient insurance coverage on reasonable terms or to otherwise protect against potential product liability claims could prevent or inhibit the commercialization of product candidates (if approved).

The Corporation's product candidates, if approved, may be subject to product recalls.

Manufacturers and distributors of products are sometimes subject to the recall or return of their products for a variety of reasons, including product defects, such as contamination, unintended harmful side effects or interactions with other substances, packaging safety and inadequate or inaccurate labeling disclosure. If any of the product candidates (if approved) that the Corporation produces or intends to produce are recalled due to an alleged product defect or for any other reason, the Corporation could be required to incur the unexpected expense of the recall and any legal proceedings that might arise in connection with the recall. The Corporation may lose a significant amount of sales and may not be able to replace those sales at an acceptable margin or at all. In addition, a product recall may require significant Management attention. Although the Corporation has detailed procedures in place for testing finished products (if our product candidates are approved), there can be no assurance that any quality, potency, or contamination problems will be detected in time to avoid unforeseen product recalls, regulatory action, or lawsuits. Additionally, if one of Corporation's product candidates, if approved, were subject to recall, the image of that product and the Corporation could be harmed. A recall for any of the foregoing reasons could lead to decreased demand for products produced by the Corporation and could have a material adverse effect on the results of operations and financial condition of the Corporation. Additionally, product recalls may lead to increased scrutiny of the operations of the Corporation by Health Canada or other regulatory agencies, requiring further Management attention and potential legal fees and other expenses.

The Corporation may seek to expand its business and operations into jurisdictions outside of Canada, and there are risks associated with doing so.

The Corporation may in the future expand its operations and business into jurisdictions outside of Canada. There can be no assurance that any market for the Corporation's product candidates (if approved) will develop in any such foreign jurisdiction. The Corporation may face new or unexpected risks or significantly increase its exposure to one or more existing risk factors, including economic instability, changes in laws and regulations, and the effects of competition. These factors may limit the Corporation's capability to successfully expand its operations and may have a material adverse effect on the Corporation's business, financial condition, and results of operations.

The Corporation may become subject to liability arising from any fraudulent or illegal activity by its employees, contractors, and consultants.

The Corporation is exposed to the risk that its employees, independent contractors, and consultants may engage in fraudulent or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to the Corporation that violates: (i) government regulations; (ii) manufacturing standards; (iii) federal and provincial healthcare fraud and abuse laws and regulations; or (iv) laws that require the true, complete, and accurate reporting of financial information or data. It is not always possible for the Corporation to identify and deter misconduct by its employees and other third parties, and the precautions taken by the Corporation to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting the Corporation from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against the Corporation, and it is not successful in defending itself or asserting its rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of the Corporation's operations, any of which could have a material adverse effect on the Corporation's business, financial condition and results of operations.

The Corporation's business is dependent on key inputs, and the inability to secure such inputs may negatively affect our business.

The Corporation's business is dependent on a number of key inputs and their related costs including raw materials and supplies related to its growing operations, as well as electricity, water, and other local utilities. Any significant interruption or negative change in the availability or economics of the supply chain, for key inputs could materially impact the business, financial condition, and operating results of the Corporation. Any inability to secure required supplies and services or to do so on appropriate terms could have a materially adverse impact on the business, financial condition, and operating results of the Corporation.

The Corporation's development plans may be impacted by global supply chain challenges including extended delivery times, increases in pricing and constraints on the availability of materials and components required by the Corporation and the development and manufacturing firms it has engaged. Prices of numerous materials and components have increased and they may continue to increase due to increased demand and supply constraints.

Our insurance coverage may be insufficient to protect us from our operating risk.

The Corporation has insurance to protect its assets, operations, and employees. While the Corporation believes its insurance coverage addresses all material risks to which it is exposed and is adequate and customary in its current state of operations, such insurance is subject to coverage limits and exclusions and may not be available for all risks and hazards to which the Corporation is exposed. In addition, no assurance can be given that such insurance will be adequate to cover the Corporation's liabilities or will be generally available in the future or, if available, that premiums will be commercially justifiable. If the Corporation were to incur substantial liability and such damages were not covered by insurance or were in excess of policy limits, or if the Corporation were to incur such liability at a time when it is not able to obtain liability insurance, its business, results of operations, and financial condition could be materially adversely affected.

We may be unable to manage our growth effectively.

The Corporation may be subject to growth-related risks, including capacity constraints and pressure on its internal systems and controls. The ability of the Corporation to manage growth effectively will require it to continue to implement and improve its operational and financial systems and to expand, train, and manage its employee base. The inability of the Corporation to deal with this growth may have a material adverse effect on the Corporation's business, financial condition, results of operations, and prospects.

Some of our Directors and/or officers may have conflicts of interest from other business activities.

The Corporation may be subject to various potential conflicts of interest because of the fact that some of its officers and Directors may be engaged in a range of business activities. In addition, the Corporation's executive officers and Directors may devote time to their outside business interests, so long as such activities do not materially or adversely interfere with their duties to the Corporation. In some cases, the Corporation's executive officers and Directors may have fiduciary obligations associated with these business interests that interfere with their ability to devote time to the Corporation's business and affairs and that could adversely affect the Corporation's operations. These business interests could require significant time and attention from the Corporation's executive officers and Directors. In addition, the Corporation's executive officers and Directors control a percentage of Common Shares and may have the ability to control matters affecting the Corporation.

The Corporation may also become involved in other transactions which conflict with the interests of its Directors and the officers who may from time-to-time deal with persons, firms, institutions, or companies with which the Corporation may be dealing, or which may be seeking investments similar to those desired by it. The interests of these persons could conflict with those of the Corporation. In addition, from time to time, these persons may be competing with the Corporation for available investment opportunities. Conflicts of interest, if any, will be subject to the procedures and remedies provided under applicable laws. In particular, in the event that such a conflict of interest arises at a meeting of the Corporation's Directors, a director who has such a conflict will abstain from voting for or against the approval of such participation or such terms. In accordance with applicable laws, the Directors of the Corporation are required to act honestly, in good faith, and in the best interests of the Corporation.

Certain publicity may cause damage to our reputation.

Damage to the Corporation's reputation could be the result of the actual or perceived occurrence of any number of events, and could include any negative publicity, whether true or not. The increased usage of social media and other web-based tools used to generate, publish, and discuss user generated content and to connect with other users has made it increasingly easier for individuals and groups to communicate and share opinions and views in respect to the Corporation and its activities, whether true or not. Although the Corporation believes that it operates in a manner that is respectful to all stakeholders and that it takes care in protecting its image and reputation, the Corporation ultimately does not have direct control over how it is perceived by others. Reputation loss may result in decreased investor confidence, increased challenges in developing and maintaining community relations, and an impediment to the Corporation's overall ability to advance its product candidates, thereby having a material adverse impact on financial performance, financial condition, cash flows, and growth prospects.

Third parties may perceive reputational risk for doing business with us as a company involved in the development and marketing of cannabinoid-based treatments.

The parties with which the Corporation does business may perceive that they are exposed to reputational risk as a result of the Corporation's cannabinoid-related activities. This may impact the Corporation's ability to retain current partners, such as its banking relationship, or source future partners as required for growth or future expansion in Canada or internationally. Failure to establish or maintain business relationships could have a material adverse effect on the Corporation.

Our relationships with healthcare providers, patients and third-party payors will be subject to applicable anti-kickback, fraud and abuse, and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, and diminished profits and future earnings.

Healthcare providers, customers, and third-party payors play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with healthcare providers, third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell, and distribute our products for which we obtain marketing approval. As a pharmaceutical company, even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid, or other third-party payors, certain federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to our business.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations, or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal, and administrative penalties, damages, fines, imprisonment, exclusion from government funded healthcare programs, and the curtailment or restructuring of our operations. If any physicians or other healthcare providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil, or administrative sanctions, including exclusions from government funded healthcare programs.

We and our third-party providers may face security threats to information systems.

The Corporation has entered into agreements with third parties for hardware, software, telecommunications, and other IT services in connection with its operations. The Corporation's operations depend, in part, on how well it and its suppliers protect networks, equipment, IT systems, and software against damage from a number of threats, including, but not limited to, cable cuts, damage to physical plants, natural disasters, terrorism, fire, power loss, hacking, computer viruses, vandalism, and theft. The Corporation's operations also depend on the timely maintenance, upgrade, and replacement of networks, equipment, IT systems and software, as well as pre-emptive expenses to mitigate the risks of failures. Any of these and other events could result in information system failures, delays and/or an increase in capital expenses. The failure of information systems or a component of information systems could, depending on the nature of any such failure, adversely impact the Corporation's reputation and results of operations.

The Corporation has not experienced any material losses to date relating to cyber-attacks or other information security breaches, but there can be no assurance that the Corporation will not incur such losses in the future. The Corporation's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cybersecurity and the continued development and enhancement of controls, processes, and practices designed to protect systems, computers, software, data, and networks from attack, damage, or unauthorized access is a priority. As cyber threats continue to evolve, the Corporation may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

We do not currently, and have no plans to, pay dividends on our Common Shares.

Our current policy is to retain earnings to finance the development and enhancement of our product candidates and to otherwise reinvest in the Corporation. Therefore, we do not anticipate paying cash dividends on the Common Shares in the foreseeable future. Our dividend policy will be reviewed from time to time by our Board of Directors in the context of our earnings, financial condition, and other relevant factors. Until the time that we do determine to pay dividends, which we might never do, our shareholders will not be able to receive a return on their Common Shares unless they sell them.

Future sales of Common Shares by existing shareholders.

Holders of Options, PSUs, RSUs, DSUs, and other share-based awards to purchase Common Shares may have an immediate income inclusion for tax purposes when they exercise these awards (that is, tax is not deferred until they sell the underlying Common Shares). As a result, these holders may need to sell Common Shares purchased on the exercise of these awards in the same year that they exercise. This might result in a greater number of Common Shares being sold in the public market, and fewer long-term holds of Common Shares by Management and our employees.

The Corporation may be subject to securities litigation which is expensive and could divert Management's attention.

The market price of the Common Shares may be volatile, and in the past companies that have experienced volatility in the market price of their shares have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our Management's attention from other business concerns, which could seriously harm our business.

Our Common Shares are subject to market price volatility.

The market price of Common Shares may be adversely affected by a variety of factors relating to the Corporation's business, including fluctuations in the Corporation's operating and financial results, the results of any public announcements made by the Corporation and its failure to meet analysts' expectations. In addition, from time to time, the stock market experiences significant price and volume volatility that may affect the market price of Common Shares for reasons unrelated to the Corporation's performance. Additionally, the value of Common Shares is subject to market value fluctuations based upon factors that influence the Corporation's operations, such as legislative or regulatory developments, competition, technological change, global capital market activity and changes in interest and currency rates. There can be no assurance that the market price of Common Shares will not experience significant fluctuations in the future, including fluctuations that are unrelated to the Corporation's performance.

The market value of Common Shares may also be affected by the Corporation's financial results and political, economic, financial, and other factors that can affect the capital markets generally, the stock exchanges on which Common Shares are traded, and the market segments of which the Corporation is a part.

Failure to comply with the FCPA, the CFPOA, and other global anti-corruption and anti-bribery laws could subject the Corporation to penalties and other adverse consequences.

The FCPA and the CFPOA, as well as any other applicable domestic or foreign anti-corruption or anti-bribery laws to which the Corporation is or may become subject, generally prohibit corporations and individuals from engaging in certain activities to obtain or retain business or to influence a person working in an official capacity and requires companies to maintain accurate books and records and internal controls, including at foreign-controlled subsidiaries.

Compliance with these anti-corruption laws and anti-bribery laws may be expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, these laws present particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and physicians and other hospital employees are considered to be foreign officials. Certain payments by other companies to hospitals in connection with clinical trials and other work have been deemed to be improper payments to governmental officials and have led to FCPA enforcement actions.

The Corporation's internal control policies and procedures may not protect it from reckless or negligent acts committed by the Corporation's employees, distributors, licensees, or agents. The Corporation can make no assurance that they will not engage in prohibited conduct, and the Corporation may be held liable for their acts under applicable anti-corruption and anti-bribery laws. Noncompliance with these laws could subject the Corporation to investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension or debarment from contracting with certain persons, the loss of export privileges, whistleblower complaints, reputational harm, adverse media coverage, and other collateral consequences. Any investigations, actions, or sanctions or other previously mentioned harm could have a material adverse effect on the Corporation's business, operating results, and financial condition.

The Corporation may be classified as a "passive foreign investment company" for U.S. federal income tax purposes, which would subject U.S. investors that hold the Corporation's Common Shares to potentially significant adverse U.S. federal income tax consequences.

If the Corporation is classified as a PFIC for U.S. federal income tax purposes in any taxable year, U.S. investors holding the Corporation's Common Shares generally will be subject, in that taxable year and all subsequent taxable years (whether or not the Corporation continued to be a PFIC), to certain adverse U.S. federal income tax consequences. The Corporation will be classified as a PFIC in respect of any taxable year in which, after taking into account its income and gross assets (including the income and assets of 25% or more owned subsidiaries), either (i) 75% or more of its gross income consists of certain types of "passive income" or (ii) 50% or more of the average quarterly value of its assets is attributable to "passive assets" (assets that produce or are held for the production of passive income).

Based upon the current and expected composition of the Corporation's income and assets, the Corporation believes that it was a PFIC for the taxable year ended December 31, 2023 and expects that it may be a PFIC for the current taxable year. Because the Corporation's PFIC status must be determined annually with respect to each taxable year and will depend on the composition and character of the Corporation's assets and income, including the Corporation's use of proceeds from offerings, and the value of the Corporation's assets (which may be determined, in part, by reference to the market value of Common Shares, which may be volatile) over the course of such taxable year, the Corporation may be a PFIC in any taxable year. Because there are uncertainties in the application of the relevant rules and PFIC status is a factual determination made annually after the close of each taxable year, there can be no assurance that the Corporation will not be a PFIC for any future taxable year. In addition, it is possible that the U.S. Internal Revenue Service may challenge the Corporation's classification of certain income and assets as non-passive, which may result in the Corporation being or becoming a PFIC in the current or subsequent years.

If the Corporation is a PFIC for any year during a U.S. Holder's (as defined below) holding period, then such U.S. Holder generally will be required to treat any gain realized upon a disposition of Common Shares, or any "excess distribution" received on its Common Shares, as ordinary income ratably allocated over its holding period, and to pay an interest charge on the underpayment of tax attributable to such gain or distribution, unless the U.S. Holder makes a timely and effective "qualified electing fund" election ("QEF Election") or a "mark-to-market" election with respect to its Common Shares. A U.S. Holder who makes a QEF Election generally must report on a current basis its share of the Corporation's net capital gain and ordinary earnings for any year in which the Corporation is a PFIC, whether or not the Corporation distributes any amounts to its shareholders. However, U.S. Holders should be aware that there can be no assurance that the Corporation will satisfy the record keeping requirements that apply to a QEF, or that the Corporation will supply U.S. Holders with information that such U.S. Holders require to report under the QEF Election rules, in the event that the Corporation is a PFIC and a U.S. Holder wishes to make a QEF Election. Thus, U.S. Holders may not be able to make a QEF Election with respect to their Common Shares. A U.S. Holder who makes a mark-to-market election generally must include as ordinary income each year the excess of the fair market value of the Common Shares over the taxpayer's basis therein. Each U.S. Holder should consult its own tax advisors regarding the PFIC rules and the U.S. federal income tax consequences of the acquisition, ownership, and disposition of Common Shares.

As used in this discussion, the term "U.S. Holder" means a beneficial owner of Common Shares that is, for U.S. federal income tax purposes, (1) an individual who is a citizen or resident of the United States, (2) a corporation (or entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia, (3) an estate the income of which is subject to U.S. federal income tax regardless of its source or (4) a trust (x) with respect to which a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all of its substantial decisions or (y) that has elected under applicable U.S. Treasury regulations to be treated as a domestic trust for U.S. federal income tax purposes.

It may be difficult for United States investors to obtain and enforce judgments against the Corporation because of the Corporation's Canadian incorporation and presence.

The Corporation is a corporation existing under the laws of Ontario, Canada. Many of the Corporation's Directors and officers are residents of Canada, and all or a substantial portion of their assets, and a substantial portion of the Corporation's assets, are located outside the United States. Consequently, it may be difficult for holders of the Corporation's securities who reside in the United States to effect service of process within the United States upon those Directors, officers, and experts who are not residents of the United States. It may also be difficult for holders of the Corporation's securities who reside in the United States to realize in the United States upon judgments of courts of the United States predicated upon the Corporation's civil liability and the civil liability of the Corporation's Directors, officers and experts under United States federal securities laws. Investors should not assume that Canadian courts would (i) enforce judgments of United States courts obtained in actions against the Corporation or such Directors or officers predicated upon the civil liability provisions of the United States federal securities laws or the securities or "blue sky" laws of any state or jurisdiction of the United States or (ii) would enforce, in original actions, liabilities against the Corporation or such Directors, officers or experts predicated upon the United States federal securities laws or any securities or "blue sky" laws of any state or jurisdiction of the United States. In addition, the protections afforded by Canadian securities laws may not be available to investors in the United States.

As a foreign private issuer, the Corporation is subject to different U.S. securities laws and rules than a U.S. domestic issuer, which may limit the information publicly available to U.S. investors.

The Corporation is a "foreign private issuer", under applicable U.S. federal securities laws, and is, therefore, not subject to the same requirements that are imposed upon U.S. domestic issuers by the SEC. Under the US Exchange Act, the Corporation is subject to reporting obligations that, in certain respects, are less detailed and less frequent than those of U.S. domestic reporting companies. As a result, the Corporation does not file the same reports that a U.S. domestic issuer would file with the SEC, although the Corporation is required to file with or furnish to the SEC the continuous disclosure documents that it is required to file in Canada under Canadian securities laws. In addition, the Corporation's officers, Directors, and principal shareholders are exempt from the reporting and short-swing profit recovery provisions of Section 16 of the U.S. Exchange Act. Therefore, the Corporation's shareholders may not know on as timely a basis as with U.S. domestic issuers when the Corporation's officers, Directors, and principal shareholders purchase or sell Common Shares, as the reporting periods under the corresponding Canadian insider reporting requirements are longer. As a foreign private issuer, the Corporation is exempt from the rules and regulations under the U.S. Exchange Act related to the furnishing and content of proxy statements. The Corporation is also exempt from Regulation FD, which prohibits issuers from making selective disclosures of material non-public information. While the Corporation complies with the corresponding requirements relating to proxy statements and disclosure of material non-public information under Canadian securities laws, these requirements differ from those under the U.S. Exchange Act and Regulation FD and shareholders should not expect to receive the same information at the same time as such information is provided by U.S. domestic companies. In addition, the Corporation may not be required under the U.S. Exchange Act to file annual and quarterly reports with the SEC as promptly as U.S. domestic companies whose securities are registered under the U.S. Exchange Act. In addition, as a foreign private issuer, the Corporation has the option to follow certain Canadian corporate governance practices, except to the extent that such laws would be contrary to U.S. securities laws, and provided that the Corporation disclose the requirements it is not following and describe the Canadian practices it follows instead. The Corporation has elected to follow home country practices in Canada with regard to certain corporate governance matters. As a result, the Corporation's shareholders may not have the same protections afforded to shareholders of U.S. domestic companies that are subject to all corporate governance requirements.

The Corporation may lose its foreign private issuer status in the future, which could result in significant additional costs and expenses to the Corporation.

In order to maintain its status as a foreign private issuer, a majority of the Corporation's Common Shares must be either directly or indirectly owned by non-residents of the U.S. unless the Corporation also satisfies one of the additional requirements necessary to preserve this status. The Corporation may in the future lose its foreign private issuer status if a majority of its Common Shares are held in the U.S. and if the Corporation fails to meet the additional requirements necessary to avoid loss of its foreign private issuer status. The regulatory and compliance costs under U.S. federal securities laws as a U.S. domestic issuer may be significantly more than the costs incurred as a Canadian foreign private issuer. If the Corporation is not a foreign private issuer, it would not be eligible to use the MJDS or other foreign issuer forms and would be required to file periodic and current reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer, and would be required to file financial statements prepared in accordance with United States generally accepted accounting principles. In addition, the Corporation may lose the ability to rely upon exemptions from Nasdaq corporate governance requirements that are available to foreign private issuers.

The Corporation relies upon certain accommodations available to it as an "emerging growth company."

The Corporation is an "emerging growth company" as defined in section 3(a) of the U.S. Exchange Act (as amended by the JOBS Act, enacted on April 5, 2012), and the Corporation will continue to qualify as an emerging growth company until the earliest to occur of: (a) the last day of the fiscal year during which the Corporation has total annual gross revenues of US$1,235,000,000 (as such amount is indexed for inflation every five years by the SEC) or more; (b) the last day of the fiscal year of the Corporation following the fifth anniversary of the date of the first sale of common equity securities of the Corporation pursuant to an effective registration statement under the U.S. Securities Act; (c) the date on which the Corporation has, during the previous three-year period, issued more than US$1,000,000,000 in non-convertible debt; and (d) the date on which the Corporation is deemed to be a "large accelerated filer", as defined in Rule 12b-2 under the U.S. Exchange Act. The Corporation will qualify as a large accelerated filer (and would cease to be an emerging growth company) at such time when on the last business day of its second fiscal quarter of such year the aggregate worldwide market value of its common equity held by non-affiliates will be US$700,000,000 or more. For so long as the Corporation remains an emerging growth company, it is permitted to and intends to rely upon exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act. The Corporation cannot predict whether investors will find the Common Shares less attractive because the Corporation relies upon certain of these exemptions. If some investors find the Common Shares less attractive as a result, there may be a less active trading market for the Common Shares and the Common Share price may be more volatile. On the other hand, if the Corporation no longer qualifies as an emerging growth company, the Corporation would be required to divert additional management time and attention from the Corporation's development and other business activities and incur increased legal and financial costs to comply with the additional associated reporting requirements, which could negatively impact the Corporation's business, financial condition, and results of operations.

Our operations could be adversely affected by events outside of our control, such as natural disasters, wars or health epidemics.

We may be impacted by business interruptions resulting from pandemics and public health emergencies, including those related to geopolitical actions, including war and terrorism or natural disasters including earthquakes, typhoons, floods, and fires. An outbreak of infectious disease, a pandemic or a similar public health threat or a fear of any of the foregoing, could adversely impact us by causing operating, manufacturing supply chain, clinical trial and project development delays and disruptions, labour shortages, travel and shipping disruption and shutdowns (including as a result of government regulation and prevention measures). It is unknown whether and how we may be affected if such an epidemic persists for an extended period of time. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results, and financial condition.

Failure to meet regulatory or ethical expectations on environmental impact, including climate change.

Environmental issues will become more material in the marketplace as the wider healthcare system embraces net-zero climate targets. The environmental targets and performance of our business will come under increased scrutiny by investors, governments, and non-governmental organizations. Environmental considerations are starting to become embedded in the public procurement of goods and services, including medicinal products and devices. Specific intermediates used to manufacture medicines, or those used in excipients or propellants, are coming under increased regulation and some may be subject to time-limited exemptions or potential phase-out. The physical impacts of climate change could impact the resilience of our business operations and supply chain.

Our operations could be adversely affected by macroeconomic risks.

In recent years, economies and markets have faced the phenomenon of inflation, the control of which is the focus of all regulatory institutions around the world. Towards the end of the year 2023 the inflation rate came down and raises of the benchmark interest rate have been halted, but the lag effect impact is still of concern. Inflation represents a significant risk to macroeconomic stability; it results in rising energy and commodity costs, and global equity and capital markets may experience significant volatility and weakness. These factors could have a material adverse effect on our business, operating results, and financial condition.

General Risk Factors

Issuances of our equity securities in the future may result in dilution to current shareholders.

Our articles of incorporation and by-laws allow us to issue an unlimited number of Common Shares for such consideration and on such terms and conditions as established by the Corporation's Board of Directors, in many cases, without shareholder approval. The Corporation may issue additional Common Shares in future offerings (including through the sale of securities convertible into or exchangeable for Common Shares) and on the exercise of stock options or other securities exercisable for Common Shares. The Corporation cannot predict the size of future issuances of Common Shares or the effect that future issuances and sales of Common Shares will have on the market price of Common Shares. Issuances of a substantial number of additional Common Shares, or the perception that such issuances could occur, may adversely affect prevailing market prices for Common Shares. With any additional issuance of Common Shares, investors will suffer dilution to their voting power and may experience dilution in its earnings per share.

The Corporation may use the proceeds from prior equity offerings for purposes other than those previously set out.

Management will have discretion in the actual use of the proceeds raised in prior equity offerings and may elect to allocate proceeds differently from the purposes previously disclosed if it believes that it would be in the best interests of the Corporation to do so. The failure by Management to apply these funds effectively could have a material adverse effect on the Corporation's business.

ITEM 4. INFORMATION ON THE COMPANY

History and Development of the Company

Name, Address and Incorporation

The Corporation was incorporated under the *Business Corporations Act* (Ontario) on January 19, 2017. The Corporation has one wholly owned subsidiary, Cardiol Therapeutics USA Inc., incorporated under the laws of Delaware on March 30, 2022.

The head and registered office of the Corporation is located at Suite 602 – 2265 Upper Middle Road East, Oakville, Ontario L6H 0G5, Canada.

On August 14, 2018, the Board of Directors of the Corporation approved an amendment and restatement of By-law No. 1 of the Corporation to: (i) amend the by-law to change the number of shares required to be represented at a meeting from a majority of such shares to twenty-five percent (25%) of such shares (the "By-Law Quorum Amendment"); and (ii) adopt by-laws requiring advance notice of director nominees from Shareholders (the "Advance Notice By-Law Amendment" and, together with the By-Law Quorum Amendment, the "By-Law Amendment"). The purpose of the By-law Quorum Amendment is to ensure that if the Corporation's shares become widely held, a quorum for meetings of Shareholders will be more easily obtained. The purpose of the Advance Notice By-Law Amendment is to ensure that an orderly nomination process is observed, that Shareholders are well-informed about the identity, intentions, and credentials of director nominees, and that Shareholders vote in an informed manner after having been afforded reasonable time for appropriate deliberation. The By-Law Amendment was confirmed by an ordinary resolution of Shareholders of the Corporation on August 28, 2018. The Articles of the Corporation were amended on February 13, 2017 to provide that its authorized capital consists of an unlimited number of Common Shares and make certain amendments of a "housekeeping" nature. The Articles of the Corporation were amended on August 29, 2018 to remove certain share transfer restrictions.

General Development of the Business of the Company

Corporation's Overview

The Corporation 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 Corporation's lead drug candidate, CardiolRx™ (cannabidiol) oral solution, is pharmaceutically manufactured and is currently in clinical development for use in the treatment of two heart diseases. 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 FDA to conduct clinical studies to evaluate the efficacy and safety of CardiolRx in two rare diseases affecting the heart: (i) a Phase II multi-center open-label pilot study in recurrent pericarditis (MAvERIC-Pilot; 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 (ARCHER; 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.

The FDA has granted Orphan Drug Designation to CardiolRx for the treatment of pericarditis, which includes recurrent pericarditis. The U.S. Orphan Drug Designation program was created to provide the sponsor of a drug or biologic 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 EMA has a similar orphan medicine product program for rare diseases.

Cardiol is also developing a novel subcutaneously administered drug formulation of its lead small molecule drug candidate ("CRD-38") 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.[1]

Corporate History

Cardiol was founded by current President and CEO David Elsley, Dr. Eldon Smith, and Dr. Anthony Bolton. For over 25 years they have had an active interest in the role that inflammation plays in the development and progression of heart disease. Prior to the formation of Cardiol, the founders pursued scientific and clinical research in this area and were successful in securing funding to support the development of a novel therapeutic from concept through to completion of Phase III multi-center and multi-national clinical trials. Based on an extensive review of the scientific literature conducted in 2014, the founders identified cannabidiol as a molecule of interest to investigate in heart disease due to its anti-inflammatory, anti-fibrotic, and cardioprotective properties.

Cardiol was incorporated on January 19, 2017, and on December 20, 2018, the Corporation completed its initial public offering on the Toronto Stock Exchange. As a result, the Common Shares commenced trading on the TSX under the symbol "CRDL". On May 12, 2021, warrants arising from a "bought deal" short form prospectus offering that closed on the same date, commenced trading on the TSX. These warrants trade under the symbol "CRDL.WT.A". On August 10, 2021, the Corporation's Common Shares commenced trading on the Nasdaq Capital Market under the symbol "CRDL".

[1] Tsao CW et al.; American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. Heart Disease and Stroke Statistics-2023 Update: A Report From the American Heart Association. Circulation. 2023 Jan 25.

Recent Developments

In January 2024, the Corporation announced that it has exceeded 50% patient enrollment for ARCHER.

In January 2024, the Corporation announced that it received notice on January 23, 2024, from Nasdaq stating that the Corporation has regained compliance with the minimum bid price requirement under Nasdaq Listing Rule 5550(a)(2) for continued listing on The Nasdaq Capital Market. Accordingly, the Corporation is now in compliance with all applicable listing standards.

In February 2024, the Corporation announced the FDA has granted Orphan Drug Designation to CardiolRx for the treatment of pericarditis, which includes recurrent pericarditis.

In February 2024, the Corporation announced completion of patient enrollment in MAvERIC-Pilot.

Three-year History

The following events significantly influenced the general development of the business of the Corporation:

Year ended December 31, 2021

In January 2021, the Corporation announced the formation of the DSMC and the CEC for the Corporation's Phase II/III trial in high-risk patients hospitalized with COVID-19 (See below – "Phase II/III study – COVID-19 (LANCER)").

In February 2021, the Corporation granted 1,146,666 stock options to certain consultants of the Corporation. Each option allowed the holder to acquire one common share of the Corporation at an exercise price ranging from $3.16 to $4.80 and expired between January 31, 2023 and February 22, 2023. 696,666 of the options vested immediately, while the remainder vested 25% per quarter from the grant date.

In February 2021, the Corporation received proceeds of $7,879,820 on the exercise of 2,424,560 warrants with an exercise price of $3.25, and $503,068 on the exercise of 201,227 warrants with an exercise price of $2.50. In addition, there were a total of 916,666 stock option exercises, resulting in cumulative proceeds of $2,604,648.

In March 2021, the Corporation announced that it had submitted an application to list the Corporation's Common Shares on the Nasdaq.

In March 2021, the Corporation announced that Dr. Andrew Hamer joined the Corporation as Chief Medical Officer.

In May 2021, the Corporation completed a short form base shelf prospectus offering of units of the Corporation for aggregate gross proceeds of $22,003,200. Under the offering, the Corporation sold a total of 6,112,000 units at a price of $3.60. Each unit was comprised of one common share of the Corporation and one-half purchase warrant of the Corporation (the "May 2021 Warrants"). Each full warrant entitles the holder thereof to acquire one common share at a price of $4.60 for a period of 36 months from issuance. The warrants are listed for trading on the TSX under the symbol "CRDL.WT.A".

The offering was conducted through a syndicate of underwriters (the "May 2021 Underwriters"). The May 2021 Underwriters were paid cash fees of $1,025,590. Concurrent with the closing, the May 2021 Underwriters purchased an additional 433,400 warrants for gross proceeds of $8,668, pursuant to the over-allotment option.

In June 2021, the Corporation adopted an Omnibus Equity Incentive Plan which permits the grant or issuance of stock options, Restricted Share Units, Performance Share Units, and Deferred Share Units, as well as other share-based awards to participants.

In July 2021, the Corporation announced that its Board of Directors appointed Dr. Guillermo Torre-Amione as the new Chair. Dr. Torre-Amione has been an independent director of Cardiol since August 2018 and took over from Dr. Eldon Smith, the founding Chairman of Cardiol and who retired from the Board.

In August 2021, the Corporation's Common Shares commenced trading on the Nasdaq under the symbol "CRDL". Concurrent with the listing on the Nasdaq, the Common Shares ceased to be quoted on the OTCQX.

In August 2021, the Corporation announced that the FDA provided clearance to proceed with the Corporation's IND application to commence a Phase II, multi-center, double-blind, randomized, placebo-controlled trial designed to study the safety and tolerability of CardiolRx, as well as its impact on myocardial recovery in patients presenting with acute myocarditis (See below – "Phase II study – Acute myocarditis (ARCHER)").

In September 2021, the Corporation announced the appointment of Michael J. Willner, Esq. to its Board of Directors.

In September 2021, the Corporation announced the acceleration of the expiry date of all outstanding common share purchase warrants of the Corporation that were issued on June 4, 2020, to October 12, 2021, from the original expiry date of June 4, 2022.

In October 2021, the Corporation announced that it is expanding its Phase II/III trial in high-risk patients hospitalized with COVID-19 trial to include several hospital centers in Brazil and Mexico.

In October 2021, the Corporation announced that it is received approval from Health Canada to proceed with the Corporation's Phase II, multi-center, double-blind, randomized, placebo-controlled trial designed to study the safety and tolerability of CardiolRx as well as its impact on myocardial recovery in patients presenting with acute myocarditis (See below – "Phase II study – Acute myocarditis (ARCHER)").

In November 2021, the Corporation granted 1,200,000 performance share units to certain consultants. Each performance share unit allows the holder to acquire one common share. Vesting of the performance share units was based on specific performance metrics that must be achieved prior to the expiry date of June 30, 2022. All 1,200,000 performance share units expired on June 30, 2022.

In November 2021, the Corporation completed a short form base shelf prospectus offering of units of the Corporation for aggregate gross proceeds of US$50,194,500. Under the offering, the Corporation sold a total of 16,350,000 units at a price of US$3.07. Each unit is comprised of one common share of the Corporation and one-half purchase warrant of the Corporation (the "November 2021 Warrants"). Each full warrant entitles the holder thereof to acquire one common share at a price of US$3.75 for a period of 36 months from issuance.

The Offering was conducted through a syndicate of underwriters (the "November 2021 Underwriters"). The November 2021 Underwriters were paid cash fees of US$3,011,670.

Year ended December 31, 2022

In January 2022, the Corporation announced the appointment of Paul M. Ridker, MD, MPH, Bruce McManus, PhD, MD, and Joseph A. Hill, MD, PhD, to its Scientific Advisory Board. For biographies of members, see "Scientific Advisory Board".

In March 2022, the Corporation announced the appointment of Jennifer M. Chao to its Board of Directors. Ms. Chao was also appointed Chair of the Corporate Governance and Compensation Committee. Iain Chalmers stepped down from the Board of Directors to accommodate Ms. Chao's appointment.

In March 2022, the Corporation incorporated a wholly owned subsidiary, Cardiol USA, under the laws of Delaware.

In May 2022, the Corporation announced the appointment of Teri Loxam and Chris Waddick to its Board of Directors. Ms. Loxam has also been appointed Chair of the Audit Committee. Dr. Guillermo Torre-Amione stepped down from the Audit Committee to accommodate Ms. Loxam's appointment.

In June 2022, the Corporation announced it entered into an equity distribution agreement with Canaccord Genuity LLC and Cantor Fitzgerald & Co. (the "Sales Agents") acting as co-agents in connection with the 2022 at-the-market offering program (the "2022 ATM Program"). Under the terms of the 2022 ATM Program, the Corporation could, from time to time, sell Common Shares having an aggregate value of US$50,000,000 through the Sales Agents on the Nasdaq Capital Market. As of the date of this Annual Report the Corporation did not issue any shares under the 2022 ATM Program. Subsequent to December 31, 2023, the 2022 ATM program expired with no shares having been issued under it.

In August 2022, the Corporation announced that the first patient was enrolled in ARCHER, (See below – "Phase II study – Acute myocarditis (ARCHER)").

In October 2022, the Corporation announced that pre-clinical study results demonstrated Cardiol's cannabidiol formulation inhibits and also promotes the reversal of mechanisms known to play a role in the occurrence and development of cardiac fibrosis. The data were presented by its research collaborators from Houston Methodist DeBakey Heart & Vascular Center at The Annual Scientific Meeting of the Heart Failure Society of America ("HFSA2022").

The poster entitled "Cannabidiol Inhibits Endothelial-to-Mesenchymal Transition and also Promotes the Reverse Process *in vitro*" was presented within the "Basic and Translational Science" category of the HFSA2022 Scientific Programme. The authors concluded that Cardiol's cannabidiol formulation protects cardiac function and exhibits an antifibrotic effect, possibly mediated by EndoMT.

In November 2022, the Corporation announced study results demonstrating that Cardiol's cannabidiol formulation significantly reduces pericardial effusion and thickening in a pre-clinical model of acute pericarditis and significantly suppresses the secretion of key inflammatory markers IL-1ß and IL-6 *in vitro*. The data were presented by the Corporation's research collaborators from Virginia Commonwealth University ("VCU") at The American Heart Association Scientific Sessions 2022 ("AHA2022").

The poster entitled "Protective Effects of Pharmaceutically Manufactured Cannabidiol in a Mouse Model of Acute Pericarditis" was presented on November 5th within the "Late-Breaking Basic Science Posters" session of AHA2022. The authors concluded that Cardiol's cannabidiol formulation administered in the study may represent a novel therapy for treating pericarditis and preventing its complications and recurrence. Data presented also demonstrated a dose-response effect on IL-1ß *in vitro*. In addition, the formulation was shown *in vitro* to significantly inhibit the transcription of IL-1ß and NLRP3, as measured by mRNA expression. NLRP3 is a sensor protein that comprises a part of the NLRP3 inflammasome, a large multiprotein complex that regulates inflammatory responses of the innate immune system. The Corporation has filed comprehensive patent applications with the U.S. patent office in connection with these new findings.

In November 2022, the Corporation announced that it received a notice from the Nasdaq, stating that the Corporation was not in compliance with the minimum bid price requirement of US$1.00 per share under the Nasdaq Listing Rule 5550(a)(2) based upon the closing bid price of the Common Shares for the 30 consecutive business days prior to the date of the notice. In August 2023, the Corporation announced that it received notice from the Nasdaq stating the Company has regained compliance with the minimum bid price requirement under Nasdaq Listing Rule 5550(a)(2) for continued listing on The Nasdaq Capital Market.

In December 2022, the Corporation announced the initiation of a Phase II open-label pilot study to investigate the tolerance, safety, and efficacy of CardiolRx in patients with recurrent pericarditis. In addition to standard safety assessments, the study is designed to evaluate improvement in objective measures of disease, and during an extension period, assess the feasibility of weaning concomitant background therapy including corticosteroids, while taking CardiolRx (see – "Phase II Open Label Pilot Study – Recurrent Pericarditis (MAvERIC-Pilot)").

Year ended December 31, 2023

In January 2023, the Corporation announced that the first patient has been enrolled in MAvERIC-Pilot (see – "Phase II Open Label Pilot Study – Recurrent Pericarditis (MAvERIC-Pilot)").

In March 2023, the Corporation announced study results from one of its international collaborating research centers demonstrating that its pharmaceutically manufactured cannabidiol significantly prevents cardiac dysfunction and the development of fibrosis and cardiomyocyte hypertrophy in a pre-clinical model of heart failure and reduces expression of key inflammatory and fibrotic markers.

The studies were presented by researchers from TecSalud at the American College of Cardiology's 72nd Annual Scientific Session together with World Congress of Cardiology ("ACC.23/WCC"). TecSalud is one of the Corporation's international collaborating research centers working towards the common goal of developing therapies to advance the treatment of heart diseases.

In August 2023, the Corporation announced that it received notice from the Nasdaq stating the Company has regained compliance with the minimum bid price requirement under Nasdaq Listing Rule 5550(a)(2) for continued listing on The Nasdaq Capital Market. Accordingly, the Corporation is now in compliance with all applicable listing standards.

In September 2023, the Corporation announced that all collaborating research centers had been initiated and were eligible to enroll patients in ARCHER (See below – "Phase II study – Acute myocarditis (ARCHER)").

In October 2023, the Corporation announced positive study results from one of its international collaborating research centers demonstrating that subcutaneously administered cannabidiol, the active pharmaceutical ingredient in Cardiol's novel CRD-38 subcutaneous formulation, slowed increases in body weight and heart weight, and prevented increases in key cardiac inflammatory and remodeling markers in a model of HFpEF.

The poster entitled "Cannabidiol As A Potential Treatment For Heart Failure With Preserved Ejection Fraction" was presented on October 7th within the "ePoster Viewing Session III" of HFSA2023. This work was performed using a model of HFpEF that is induced using a combination of high-fat diet and hypertension that leads to an increase in heart weight to tibia length ratio, and an increase in markers for inflammation and cardiac remodeling. Cannabidiol administered subcutaneous was associated with significantly lower BNP (a cardiac stress marker raised in heart failure patients), IL-10 (a promotor of fibrosis in HFpEF), and visceral adipose tissue (VAT) to subcutaneous adipose tissue (SAT) ratio.

In October 2023, the Corporation announced that it received a notice from the Nasdaq, stating that the Corporation is not in compliance with the minimum bid price requirement of US$1.00 per share under the Nasdaq Listing Rule 5550(a)(2) based upon the closing bid price of the Common Shares for the 30 consecutive business days prior to the date of the notice. (See above – "Recent Developments" for recompliance date).

In November 2023, the Corporation announced that it has exceeded 50% of the patient enrollment target for MAvERIC-Pilot (see – "Phase II Open Label Pilot Study – Recurrent Pericarditis (MAvERIC-Pilot)").

In November 2023, the Corporation announced that study results demonstrated an experimental model of pericarditis induces 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.

In December 2023, the Corporation announced that Massachusetts General Hospital was initiated and eligible to enroll patients in MAvERIC-Pilot. (see – "Phase II Open Label Pilot Study – Recurrent Pericarditis (MAvERIC-Pilot)").

Phase II Open Label Pilot Study – Recurrent Pericarditis (MAvERIC-Pilot)

Pericarditis refers to inflammation of the pericardium (the membrane or sac that surrounds the heart), frequently resulting from a viral infection. Recurrent pericarditis is the reappearance of symptoms after a symptom-free period of at least four to six weeks following the initial acute episode of pericarditis. 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. Causes of pericarditis can include infection (e.g., tuberculosis), systemic disorders such as autoimmune and inflammatory diseases, cancer, and post-cardiac injury syndromes. Pericarditis (and its recurrences) are symptomatic events, the diagnosis of which is based on meeting two of four criteria: chest pain; pericardial friction rub; electrocardiogram changes; and new or worsening pericardial swelling. Elevation of inflammatory markers such as C-reactive protein ("CRP"), and evidence of pericardial inflammation by an imaging technique (computed tomography scan or cardiac magnetic resonance) may help the diagnosis and the monitoring of disease activity. Although generally self-limited and not life threatening, pericarditis is diagnosed in 0.2% of all cardiovascular in-hospital admissions and is responsible for 5% of emergency room admissions for chest pain in North America and Western Europe.

Recurrent pericarditis appears in 15% to 30% of patients following the acute index episode and usually within 18 months. Furthermore, up to 50% of patients with a recurrent episode of pericarditis experience more recurrences. Standard first-line medical therapy consists of non-steroidal anti-inflammatory drugs or aspirin with or without colchicine. Corticosteroids such as prednisone are second-line therapy in patients with continued recurrence and inadequate response to conventional therapy. The only FDA-approved therapy for recurrent pericarditis, launched in 2021, is a costly and potent subcutaneously injected interleukin-1 inhibitor with immunosuppressive effects. It is generally used as a third-line intervention in patients with persistent underlying disease, multiple recurrences, and an inadequate response to conventional therapy.

On an annual basis, the number of patients in the U.S. having experienced at least one recurrence is estimated at 38,000. Approximately 60% of patients with multiple recurrences (>1) still suffer for longer than two years, and one third are still impacted at five years. 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 US$20,000 and US$30,000 in the U.S.

In May 2022, the Corporation announced the FDA has authorized the Corporation's IND application to commence a Phase II open- label pilot study designed to evaluate the tolerance, safety, and efficacy of CardiolRx in patients with recurrent pericarditis. MAvERIC-Pilot will also assess the improvement in objective measures of disease, and during an extension period, assess the feasibility of weaning concomitant background therapy including corticosteroids, while taking CardiolRx. Recurrent pericarditis is a rare disease in the U.S., thereby making CardiolRx eligible for orphan drug status under the FDA's Orphan Drug Designation program.

The MAvERIC-Pilot study protocol was designed to enroll 25 patients at major clinical centers in the U.S. specializing in pericarditis. In February 2024, Corporation announced that the MAvERIC-Pilot study had achieved its patient enrollment objective. The primary efficacy endpoint of the study is the change, from baseline to eight weeks, in patient-reported pericarditis pain using an 11-point numeric rating scale ("NRS"). The NRS is a validated clinical tool used 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 high sensitivity CRP. Importantly, the study will also assess freedom from pericarditis recurrence.

The MAvERIC-Pilot study was designed with the support of an independent Advisory Committee and key trial investigators, consisting of international thought leaders in cardiovascular disease, including:

- **Study Chair: Allan Klein, MD, CM** – Director, Center for the Diagnosis and Treatment of Pericardial Diseases, and Professor of Medicine, Heart, Vascular and Thoracic Institute, Cleveland Clinic;

- **Antonio Abbate, MD** – Ruth C. Heede Professor of Cardiology, School of Medicine, and Department of Medicine, Division of Cardiovascular Medicine – Heart and Vascular Center, University of Virginia;

- **Allen Luis, MBBS, PhD** – Co-Director of the Pericardial Diseases Clinic, Associate Professor of Medicine, Department of Cardiovascular Medicine, at Mayo Clinic Rochester Minnesota;

- **Paul Cremer, MD** – Departments of Medicine and Radiology, Northwestern University, and Multimodality Cardiac Imaging and Clinical Trials Unit, Bluhm Cardiovascular Institute;

- **Stephen Nicholls** – Program Director, Victorian Heart Hospital, Director, Monash Victorian Heart Institute, and Professor of Cardiology, Monash University, Melbourne; and

- **Stefano Toldo, PhD** – Associate Professor of Medicine, Department of Medicine, Cardiovascular Medicine at University of Virginia.

The Corporation expects to report topline results from the MAvERIC-Pilot study in Q2 2024 and trial extension data during H2 2024. Cardiol has budgeted additional costs to complete this study to be approximately $1 million. If Cardiol determines that the study has met its objectives, it currently expects to undertake the next steps in its clinical development program, which would consist of a larger clinical study, the details of which will be determined in conjunction with its external clinical advisors and regulatory agencies. The total cost and timeline to complete this clinical development program cannot be determined at this stage as this will depend on a variety of factors. The Corporation may involve a commercial partner from the pharmaceutical industry to fund the late-stage clinical development and commercialization of CardiolRx for the treatment of recurrent pericarditis.

Phase II study – Acute myocarditis (ARCHER)

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.

In a proportion of patients, the inflammation in the heart persists and causes decreased heart function with symptoms and signs of heart failure, and as such pharmacological treatment is based on conventional therapy for heart failure. This includes diuretics, ACE inhibitors, angiotensin receptors blockers, beta blockers, and aldosterone inhibitors. For those with a fulminant presentation, intensive care is often required, with the use of inotropic medications (to increase the force of the heart muscle contraction). Severe cases frequently require ventricular assist devices or extracorporeal oxygenation and may necessitate heart transplantation. There are no FDA-approved therapies for acute myocarditis. Patients hospitalized with acute myocarditis experience an average 7-day length of stay and a 4 – 6% risk of in-hospital mortality, with average hospital charge per stay estimated at US$110,000 in the U.S.

Data from multiple sources, including the 'Global Burden of Disease Study', reports that the number of cases per year of myocarditis range from approximately 10 to 22/100,000 persons (estimated U.S. patient population of 33,000 to 73,000), qualifying the condition as a rare disease in the U.S. and in European Union. Cardiol believes that there is a significant opportunity to develop a therapy for acute myocarditis that may be eligible for designation as an orphan drug under the FDA's Orphan Drug Designation and the European Medicines Agency Orphan Medicine programs.

In August 2021, Cardiol received IND authorization from the FDA to conduct a Phase II clinical trial of CardiolRx in acute myocarditis – the *ARCHER* trial. *ARCHER* has also received regulatory clearance in other jurisdictions and is expected to enroll 100 patients at major cardiac centers in North America, Europe, Latin America and Israel. In January 2024, the Corporation announced that the ARCHER trial had exceeded 50% of its patient enrollment objective. ARCHER 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 (global 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.

Members of the Steering Committee include:

- **Chair: Dennis M. McNamara, MD** – Professor of Medicine at the University of Pittsburgh. He is also the Director of the Heart Failure/Transplantation Program at the University of Pittsburgh Medical Center;
- **Co-Chair: Leslie T. Cooper, Jr., MD** – General cardiologist and the Chair of the Mayo Clinic Enterprise Department of Cardiovascular Medicine, as well as chair of the Department of Cardiovascular Medicine at the Mayo Clinic in Florida;
- **Arvind Bhimaraj, MD** – Specialist in Heart Failure and Transplantation Cardiology and Associate Professor of Cardiology, Institute for Academic Medicine at Houston Methodist and at Weill Cornell Medical College, NYC;
- **Wai Hong Wilson Tang, MD** – Advanced Heart Failure and Transplant Cardiology specialist at the Cleveland Clinic in Cleveland, Ohio. Dr. Tang is also the Director of the Cleveland Clinic's Center for Clinical Genomics; Research Director, and staff cardiologist in the Section of Heart Failure and Cardiac Transplantation Medicine in the Sydell and Arnold Miller Family Heart & Vascular Institute at the Cleveland Clinic;
- **Peter Liu, MD** – Chief Scientific Officer and Vice President, Research, of the University of Ottawa Heart Institute, and Professor of Medicine and Physiology at the University of Toronto and University of Ottawa;
- **Carsten Tschöpe, MD** – Professor of Medicine and Cardiology and Vice Director of the Department of Internal Medicine and Cardiology, University Medicine Berlin;
- **Matthias Friedrich, MD** – Full Professor within the Departments of Medicine and Diagnostic Radiology at McGill University in Montreal, and Chief, Cardiovascular Imaging at the McGill University Health Centre;
- **Yaron Arbel, MD** – Cardiologist and Director of the CardioVascular Research Center (CVRC) at the Tel Aviv "Sourasky" Medical Center;
- **Edimar Bocchi, MD –** Serves as the Head of Heart Failure Clinics and Heart Failure Team at Heart Institute (Incor) of Hospital das Clinicas of São Paulo University Medical School, Associate Professor of São University Medical School, São Paulo, Brazil; and
- **Mathieu Kerneis, MD, PhD** – Interventional cardiologist at Pitié Salpêtrière Hospital (Sorbonne University).

It is anticipated that patient recruitment will be completed during Q3 2024. Cardiol has budgeted additional costs to complete this study to be approximately $6 million. If Cardiol determines that the Phase II study meets its objectives, it currently expects to undertake the next steps of its clinical development program, which would consist of a larger clinical study, the details of which will be determined in consultation with its external clinical advisors and regulatory agencies. The total cost and timeline to complete this clinical development program cannot be determined at this stage as this will depend on a variety of factors. The Corporation may involve a commercial partner from the pharmaceutical industry, to fund the late-stage clinical development and commercialization of CardiolRx for the treatment of acute myocarditis.

Phase II/III study – COVID-19 (LANCER)

In October 2022, the Corporation announced that it would discontinue the LANCER trial due to lack of eligible patients to support recruitment and would prioritize its Phase II clinical programs focused on developing CardiolRx for the treatment of acute myocarditis and recurrent pericarditis.

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, was 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.

Phase I study

In April 2021, the Corporation announced results from a Phase I single and multiple ascending dose clinical trial of CardiolRx.

The Phase I trial was a randomized, placebo-controlled, double-blind study designed to evaluate the safety, tolerability, and PK profile of CardiolRx at various dose levels. The study randomized 52 subjects (age range 25 to 60 years) to one of two groups. In Group A, there were three sub-groups, each involving 12 subjects (nine active and three placebo), with each subject receiving a single dose of 5 mg/kg or 15 mg/kg of CardiolRx, in either the fed or fasted state. In Group B, there were two sub-groups, each involving eight subjects (six active and two placebo) with each subject receiving 5 mg/kg or 15 mg/kg twice daily for six days. Serial blood samples were taken to measure the level of cannabidiol and its two main metabolites.

Results indicated that CardiolRx was safe and generally well tolerated at all dose levels, with no serious adverse events reported in the study. Fifty-one of the 52 enrolled subjects completed all requirements of the protocol. Each subject had repeated standard measures of safety including physical examination (with vital signs), electrocardiogram (ECG) to monitor cardiac time intervals (particularly, the QTc interval, which is an important measure of the risk for abnormal heart rhythms), as well as biochemical and coagulation laboratory tests. Despite the relatively high doses of CardiolRx administered during the study, there were no ECG or abnormal laboratory findings after six days of dosing, no elevation of liver enzymes, or QTc changes were detected. The recorded adverse events were all mild or moderate in severity and were primarily related to the gastro-intestinal tract.

The results of the study formed an integral part of the Corporation's IND application with the FDA for an international Phase II clinical trial in acute myocarditis.

Cardiol's Approach to the Treatment of Heart Disease

Cardiol is investigating the potential of its lead small molecule drug candidate CardiolRx™ (cannabidiol), a pharmaceutically manufactured oral solution currently in clinical trials for the treatment of recurrent pericarditis and acute myocarditis. In addition, Cardiol is developing CRD-38 injection for subcutaneous administration, currently in preclinical development, for the treatment of heart failure. 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.

Published third-party research has shown that there is an experimental basis for investigating the efficacy of cannabidiol in cardiovascular disease. Cannabidiol has been shown in pre-clinical models to improve endothelial function by reducing inflammatory activation of the endothelial lining of blood vessels thus improving endothelial vasorelaxation and blood flow. Cannabidiol has also been shown to attenuate a number of other measures of potential importance in the treatment of cardiovascular disease, including cardiac dysfunction, oxidative stress, fibrosis, and inflammatory and cell death signaling pathways, in models of diabetes, a common co-morbidity in cardiovascular disease and heart failure patients.

The rationale for using cannabidiol to treat patients with cardiovascular disease is based on pre-clinical investigations by Cardiol and others in models of cardiovascular disease which have demonstrated that cannabidiol has anti-fibrotic and anti-inflammatory activity, as well as anti-ischemic, and anti-arrhythmic action. In pre-clinical models of cardiac injury, cannabidiol was shown to be cardio-protective by reducing cardiac hypertrophy, fibrosis, and the production of certain re-modelling markers, such as cardiac BNP, which is typically elevated in patients with heart failure.

Development of a subcutaneous (SC) cannabidiol formulation

Cardiol is currently developing an SC cannabidiol formulation that is intended to improve the pharmacokinetic profile compared to existing oral formulations. SC administration has the potential to allow for a lower dose of drug to be delivered with less frequent administration, while achieving the same or greater therapeutic effect. The Corporation's research collaborators have shown that cannabidiol, when administered subcutaneously, is effective in a pre-clinical model of heart failure. The SC approach is practical and widely used in human medicine although the formulation requires specific characteristics. Cardiol has developed CRD-38; a formulation that meets the required physical characteristics for SC administration. In 2023, two rounds of pharmacokinetic testing were performed on CRD-38 with positive results showing a long blood level duration that supports the premise of administering CRD-38 once per week or even less frequently. Currently, this formulation is undergoing scale-up manufacturing to support toxicity studies.

Due to the early stage of development, the total costs and timing of the development program cannot be determined at this stage as they will depend on a variety of factors. Cardiol relies on CROs, clinical data management organizations, and consultants to assist with the design, conduct, supervision, and monitoring of pre-clinical studies of Cardiol's product candidates.

Nanotechnology for Drug Encapsulation and Delivery

Cardiol's nanotechnology is based on a patented family of biocompatible and biodegradable polymers made from PEG and PCL (See "Commercial Relationships – Meros"). Both PEG and PCL have a history of safe use in humans and are non-immunogenic when tested *in vitro*. PCL lies at the core of the nanoparticles and is lipophilic, allowing the solubilization and encapsulation of lipophilic drugs such as cannabidiol. PEG forms the surface layer of the nanoparticles and is compatible with water, allowing the nanoparticles with their encapsulated drug to circulate in the aqueous environment of the blood. Cardiol's nanoparticles also accumulate within inflamed and fibrotic tissue and are therefore particularly appropriate for the delivery of anti-fibrotic, as well as anti-inflammatory drugs – fibrotic stiffening of the heart muscle is a feature of HF pathology.

Due to the early stage of development, the total costs and timing of the development program cannot be determined at this stage as they will depend on a variety of factors. Cardiol relies on CROs, clinical data management organizations, and consultants to assist with the design, conduct, supervision, and monitoring of pre-clinical studies of Cardiol's product candidates.

Research Programs

Cardiol has assembled an international network of experts in the synthesis, formulation, pharmacology and testing of drugs. Cardiol has several research programs underway or completed with the following organizations:

- Virginia Commonwealth University and University of Virginia
- The Houston Methodist DeBakey Heart & Vascular Center
- TecSalud del Tecnológico de Monterrey & Nano4Heart

Due to the early stage of these research programs, the total costs and timing of these programs beyond the costs previously funded cannot be determined at this stage as they will depend on a variety of factors. Cardiol relies on researchers and clinicians, CROs, clinical data management organizations, and consultants to assist with the design, conduct, supervision, and monitoring of these research programs.

TecSalud & Nano4Heart

Cardiol established a research and development collaboration (See "Commercial Relationships") with TecSalud and Nano4Heart, both of the Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico, to collaborate on the research and development of proprietary therapeutics for the treatment of heart failure. This research collaboration combines the significant research capability of TecSalud and Nano4heart's extensive experience in preclinical cardiovascular research with Cardiol's scientific, clinical, and business expertise. By combining these intellectual resources, Cardiol expects to accelerate the necessary research towards the mutual goal of developing a breakthrough heart failure treatment.

TecSalud is committed to delivering outstanding patient care with four state-of-the-art academic medical centers that combine innovative research, clinical services, and education. TecSalud has collaborative relationships with the Houston Methodist DeBakey Heart & Vascular Center and has established a formal agreement with the Massachusetts Institute of Technology to promote research and development in Mexico.

The primary objective of this collaboration is to develop the experimental evidence necessary to support advancing potential breakthrough medicines for heart failure into clinical development. Research is currently underway to investigate the therapeutic potential of cannabidiol formulations that target inflammation in a model of hypertension-induced heart failure. Initial research was completed in 2021 showing encouraging results. In 2023, following positive experimental results showing the impact of Cardiol's cannabidiol formulation, data were accepted for presentation at The American College of Cardiology's 72nd Annual Scientific Session Together with the World Congress of Cardiology. Also in 2023, a new model of HFpEF was developed and is currently being used to test Cardiol's cannabidiol. Preliminary data were positive, and presented at the Heart Failure Society of America Annual Scientific Meeting 2023.

Houston Methodist DeBakey Heart & Vascular Center

The Houston Methodist DeBakey Heart & Vascular Center is recognized internationally as a center of excellence for the treatment of heart failure.

In January 2018, Cardiol announced that experimental research performed at the Houston Methodist DeBakey Heart & Vascular Center showed new functionality of the Corporation's in-licensed patented nanotherapeutics. Designed to act as a vehicle to target anti-inflammatory drugs to inflamed heart tissue, these data demonstrated the accumulation of nanoparticles at regions of inflammation and fibrosis in diseased hearts, showing potential for Cardiol's proprietary nanotechnology to be used to target drugs directly to areas of inflammation and fibrosis to treat heart failure.

In August 2018, Cardiol entered into a research contract with the Houston Methodist DeBakey Heart & Vascular Center to build upon the initial research using an experimental model of non-ischemic heart failure. In this model, heart failure is induced by administering NaCl, L-NAME, and angiotensin II. This leads to an increase in both cardiac fibrosis and cardiomyocyte size (hypertrophy). Cannabidiol was encapsulated within Cardiol's nanoparticle technology and used as a treatment in this model. Results demonstrated that nano-encapsulated cannabidiol reduces both fibrosis and cardiomyocyte size, suggesting nano-encapsulated cannabidiol has both anti-fibrotic and anti-hypertrophic effects. These data were presented at American Heart Association Scientific Sessions 2021.

Research on this model continued and was expanded upon, demonstrating that the induction of heart failure also leads to reduced ejection fraction. Treatment was performed with both free cannabidiol and nano-encapsulated cannabidiol. Both treatments prevented the reduction of ejection fraction and the increase in cardiac fibrosis. These results were presented at American Heart Association Basic Cardiovascular Sciences 2022.

Also presented at this time were the first data investigating the method of action of cannabidiol in a model of EndoMT (endothelial to mesenchymal transition). EndoMT is a process in which endothelial cells undergo a series of events that lead to a change in phenotype towards mesenchymal cell types; for example, myofibroblasts and smooth muscle cells. The EndoMT process is normal during development, but there is increasing evidence of its involvement in adult cardiovascular diseases such as atherosclerosis and pulmonary hypertension. EndoMT has also been suggested to cause fibrosis, leading to heart failure. The *in vitro* model of EndoMT developed at Houston uses endothelial cells in which transition is induced using L-NAME and angiotensin II. Results presented show that Cardiol's cannabidiol can inhibit the transition from endothelial to mesenchymal cell types.

Research into the interaction between cannabidiol and the EndoMT process was pursued, and further experimentation demonstrated that cannabidiol can not only inhibit the transition from endothelial to mesenchymal cell types, but can also promote the reversal of the EndoMT process. These data that suggest cannabidiol may protect cardiac function via EndoMT inhibition and reversal, were presented at Heart Failure Society of America's Annual Scientific Meeting 2022. In 2023, work progressed the investigation of potential targets of cannabidiol in EndoMT and investigation of the effect of cannabidiol on EndoMT *in vivo*, in order to further elucidate how cannabidiol has its effects.

Virginia Commonwealth University and University of Virginia ("UVA")

Cardiol has been working with collaborators at VCU and UVA to add to the data generated to date in support of cannabidiol in pre-clinical in vivo models of cardiovascular diseases. A pre-clinical model of pericarditis has been developed at VCU that induces pericarditis-characterized as an acute inflammatory response in the pericardium in an NLRP3 inflammasome-dependent manner. The model was previously used to show the efficacy of, among other drugs, rilonacept, which is an emerging novel treatment for pericarditis following a successful Phase III trial.

A study was performed using Cardiol's cannabidiol formulation in VCU's model of pericarditis, results were positive, and data were presented at American Heart Association Annual Scientific Sessions 2022. These data demonstrating Cardiol's formulations' ability to mitigate pericarditis led to further collaboration and, in 2023, the design of experiments, between UVA and Houston Methodist. This work investigated whether mesenchymal transition is also implicated in the progression of disease in UVA's model of pericarditis, and tested Cardiol's cannabidiol ability to inhibit the disease progression. Results were positive, and data from this work were presented at the 2023 Annual Meeting of the European Society of Cardiology Working Group on Myocardial and Pericardial Diseases.

Commercial Relationships

Dalton

Cardiol entered into an exclusive master services agreement (the "Dalton Services Agreement") dated April 17, 2018 and effective as of June 12, 2017 for pharmaceutical cannabidiol and has subcontracted the manufacturing of its drug product candidates to Dalton. Dalton has the manufacturing capability for Cardiol's clinical trial materials, scalable to support all stages of the drug development process (Phase I, II, III, and commercial). As consideration under the Dalton Services Agreement, Cardiol issued 400,000 Common Shares to Dalton. Cardiol also agreed to issue to Dalton an additional 400,000 Common Shares if Dalton meets certain performance objectives. The Dalton Services Agreement may be terminated by Cardiol upon provision of thirty days' notice of termination.

The services provided by Dalton under the Dalton Services Agreement are undertaken on a project and product basis. With respect to each project or product, Cardiol and Dalton agree in writing upon objectives, scope, price, and fees payable, specifications, deliverables, milestones, and timelines in a work order.

Purisys

Cardiol entered into an exclusive supply agreement (the "Purisys Exclusive Supply Agreement") with Noramco (Purisys) dated September 28, 2018, as amended on December 7, 2018, December 11, 2018, July 2, 2019, September 11, 2019, and November 12, 2019 pursuant to which Purisys will be the exclusive supplier of pharmaceutical cannabidiol for Cardiol, provided Purisys is able to meet Cardiol's supply requirements.

In 2020, the agreement was assigned to Purisys, an affiliate of Noramco headquartered in Athens, Georgia. This assignment had no impact on Cardiol's rights under the original agreement.

Effective upon entering into a supply agreement with Shoppers Drug Mart Inc. ("Shoppers") on March 16, 2020. Purisys shall not sell pharmaceutical cannabidiol to any third party for use in the production of products sold to retail pharmacies in Canada and Mexico, such as Shoppers. Notwithstanding this restriction, Purisys shall have the right to sell pharmaceutical cannabidiol to third parties outside Canada for use in products that are approved as prescription medicines by the Therapeutic Products Directorate of Health Canada for delivery into Canada.

The initial term of the Purisys Exclusive Supply Agreement expires on December 31, 2038, and thereafter automatically renews for successive periods of two calendar years each, unless written notice of termination is given by either party at least 18 months before the expiration of the initial term or completion of the then-current renewal term.

TecSalud (CARO)

Cardiol entered into development agreements with CARO dated August 28, 2018 and December 15, 2023, for research and development of proprietary drug formulations for the treatment of heart failure. CARO is a Mexican corporation dedicated to providing clinical and scientific experimentation and consulting, as well as performing its own development activities or through third-party providers. TecSalud and Nano4heart are third parties through which CARO will provide its consulting and development activities for Cardiol.

Meros

Meros is a privately held Alberta corporation formed in 2009 to commercialize advanced drug delivery technologies developed within the Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta.

Cardiol entered into a license agreement (the "Meros License Agreement") with Meros dated January 20, 2017, granting Cardiol the sole, exclusive, irrevocable, royalty-bearing license, including the right to sublicense, certain patented nanotechnologies for use with any drugs or classes of drugs currently used or developed in the future to diagnose or treat heart failure and/or any cardiovascular disease and/or cardiopulmonary disease and/or cardiac arrhythmias. The term of the Meros License Agreement is 20 years or for the life of the patents of the licensed technologies.

Under the Meros License Agreement, Cardiol agreed to certain milestones and milestone payments, including the following:(i) payment of $100,000 upon enrolling the first patient in a Phase IIB clinical trial designed to investigate the safety and indications of efficacy of one of the licensed technologies; (ii) payment of $500,000 upon enrolling the first patient in a Pivotal Phase III clinical trial designed to investigate the safety and efficacy of one of the licensed technologies; (iii) $1,000,000 upon receiving regulatory approval from the FDA on any therapeutic and/or prophylactic treatment incorporating the licensed technologies. Cardiol also agreed to pay Meros the following royalties: (i) 5% of worldwide proceeds of net sales of the licensed technologies containing cannabinoids that Cardiol receives from human and animal disease indications and derivatives as outlined in the Meros License Agreement; (ii) 7% of any non-royalty sub license income that Cardiol receives from human and animal disease indications and derivatives for licensed technologies containing cannabinoids as outlined in the Meros License Agreement; (iii) 3.7% of worldwide proceeds of net sales that Cardiol receives from the licensed technology in relation to human and animal cardiovascular and/or cardiopulmonary disease, heart failure, and/or cardiac arrhythmia diagnosis and/or treatments using the drugs outlined in the Meros License Agreement; and (iv) 5% of any non-royalty sub license income that Cardiol receives in relation to any human and animal heart disease, heart failure and/or arrhythmias indications as outlined in the Meros License Agreement.

In addition, as part of the consideration under the Meros License Agreement, Cardiol: (i) issued to Meros 1,020,000 Common Shares; (ii) issued to Meros an additional 1,020,000 Common Shares to be held in escrow (the "Meros Escrow Shares") and to be released upon the first patient being enrolled in a Phase I clinical trial as described in the Meros License Agreement (the "Meros Milestone"). The 1,020,000 Meros Escrow Shares were subsequently cancelled and replaced with 1,020,000 special warrants (the "Meros Special Warrants") convertible automatically into Common Shares for no additional consideration upon the Corporation achieving the Meros Milestone.

The Meros License Agreement may be terminated by Meros, if Cardiol breaches any payment provisions, if Cardiol ceases to develop and/or commercialize the licensed technologies, or if Cardiol ceases any and all attempts to raise capital to support developing and or commercializing the licensed technologies. Cardiol may terminate the Meros License Agreement if Cardiol determines in its sole discretion that the licensed technologies are not worthy of development based on research outcomes or commercial viability.

Competitive Conditions

Cardiol's competitors include multinational pharmaceutical companies and specialized biotechnology companies, universities, and other research institutions that are conducting research in cannabinoid products, as well as those focusing on therapies for pericarditis, acute myocarditis and heart failure.

More established companies may have a competitive advantage over Cardiol due to their greater size, capital resources, cash flows, and institutional experience. Compared to Cardiol, many competitors may have significantly greater financial, technical, and human resources at their disposal. Due to these factors, competitors may have an advantage in marketing their approved products and may obtain regulatory approval of their product candidates before Cardiol, which may limit Cardiol's ability to develop or commercialize its product candidates. Competitors may also develop drugs that have a better safety profile, are more effective, are more widely used, are less expensive, and may also be more successful in manufacturing and marketing their products.

Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in resources being concentrated among a smaller number of Cardiol's competitors. Smaller and other early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties also compete with Cardiol in recruiting and retaining qualified scientists, management, and commercial personnel, establishing clinical trial sites and subject registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, Cardiol's programs.

Intellectual Property Rights

Cardiol strives to obtain and protect intellectual property that is important to its business. Such intellectual property includes, or may in future include, patents, patent applications, regulatory dossiers, manufacturing and process know-how, proprietary unpatented information including trade secrets, contractual arrangements, and trademarks. Patents and patent applications owned by or licensed to Cardiol cover compositions of matter, their methods of use, related technology, and other applicable inventions.

Cardiol's intellectual property portfolio has been built from in-house technology and product research and development, as well as strategic relationships with partners, including Dalton, the University of Alberta, the Houston Methodist DeBakey Heart and Vascular Centre, Virginia Commonwealth University, University of Virginia, and TecSalud Instituto Tecnológico y de Estudios Superiores de Monterrey.

Cardiol has an exclusive in-licensing arrangement with Meros under which Cardiol licenses territorial rights to certain technologies, patents, and related know-how.

The Corporation has filed for and/or licensed patents and patent applications in major pharmaceutical markets, including Canada, the U.S., Japan, major European countries, Australia, Brazil, and Mexico. Cardiol also relies on proprietary unpatented information, including trade secrets. Furthermore, Cardiol has registered and applied for trademarks in many, if not all, of the same jurisdictions.

The Corporation's patent portfolio includes the following families:

- Poly (Ethylene Oxide)-Block-Poly (Ester) Block Copolymers (the "Block Copolymer Family")
- Amphiphilic Block Copolymers, Micelles, And Methods for Treating and/or Preventing Heart Failure
- Stable Medicinal Cannabidiol Compositions
- Parenteral or Oral Cannabidiol Compositions for Treating Heart Conditions
- Stable Oral Cannabidiol Compositions
- Stable Injectable Cannabinoid Formulations
- Cannabidiol For Use In Treating Or Preventing Recurrent Pericarditis
- Beta-Caryophyllene For Use In Treating Or Preventing Pericarditis

Trademark protection for Cardiol, CardiolRx and Cardiol Therapeutics Inc. has been registered in the United States and Canada.

Scientific Advisory Board

To provide guidance and oversight to the Corporation's ongoing research programs, Cardiol has constituted a world-class SAB comprising thought leaders in cardiovascular medicine. Their combined knowledge and insight will prove to be invaluable as Cardiol pursues the commercial development of breakthrough therapies for heart failure.

Cardiol's SAB includes:

Paul M. Ridker, MD, MPH

Dr. Ridker is director of the Center for Cardiovascular Disease Prevention, a translational research unit at Brigham and Women's Hospital (BWH), Boston. A cardiovascular medicine specialist, he is also the Eugene Braunwald Professor of Medicine at Harvard School of Medicine (HMS). Dr. Ridker received his medical degree from HMS and then completed an internal medicine residency and a cardiology fellowship at BWH. Dr. Ridker is board certified in internal medicine. His clinical interests include coronary artery disease and the underlying causes and prevention of atherosclerotic disease. Dr. Ridker is the author of over 900 peer-reviewed publications and reviews, 64 book chapters, and six textbooks related to cardiovascular medicine. His primary research focus has involved inflammatory mediators of heart disease and the molecular and genetic epidemiology of hemostasis and thrombosis, with particular interests in biomarkers for coronary disease, "predictive" medicine, and the underlying causes and prevention of atherosclerotic disease. Notably, Dr. Ridker has been the Principal Investigator or Study Chairman of several large international trials that have demonstrated the role of inflammation in the genesis and management of coronary artery disease. He was included in TIME magazine's list of 100 most influential people of 2004, and between the years 2000 and 2010, Dr. Ridker was among the ten most often cited researchers in cardiovascular medicine worldwide. Amongst many other honors, he received the American Heart Association Distinguished Scientist Award in 2013, gave the Braunwald Lecture of the American College of Cardiology in 2019, was awarded the Gotto Prize for Atherosclerosis Research from the International Atherosclerosis Society in 2021, and is an elected Member of the National Academy of Medicine (USA).

Bruce McManus, PhD, MD

Dr. McManus is Professor Emeritus, Department of Pathology and Laboratory Medicine, the University of British Columbia. He has served as CEO, Centre of Excellence for Prevention of Organ Failure (PROOF Centre), Director, UBC Centre for Heart Lung Innovation, and Scientific Director, Institute of Circulatory and Respiratory Health, CIHR. Dr. McManus received BA and MD degrees (University of Saskatchewan), an MSc (Pennsylvania State University), and a PhD (University of Toledo). He pursued post-doctoral fellowships at the University of California, Santa Barbara (Environmental Physiology) and at the National Heart, Lung, and Blood Institute, Bethesda, MD (Cardiovascular & Pulmonary Pathology), and residency training at the Peter Bent Brigham Hospital, Harvard University (Internal Medicine and Pathology). Dr. McManus' investigative passion relates to mechanisms, consequences, detection and prevention of injury and aberrant repair in inflammatory diseases of the heart and blood vessels. He has had a longstanding interest in the diagnosis and management of acute viral myocarditis.

His life's scholarship is reflected in more than 400 original peer-reviewed publications, over 60 chapters, and several books. He is an extraordinary mentor. Dr. McManus has been widely appreciated for his research, mentoring, and leadership contributions to the health sciences. Amongst many awards and honors, Dr. McManus received the prestigious Max Planck Research Award in 1991, was elected a Fellow of the Royal Society of Canada in 2002, was appointed a Member of the Order of Canada in 2018, and to the Order of British Columbia the following year.

Joseph A. Hill, MD, PhD

Dr. Hill is Professor of Internal Medicine and Molecular Biology, Chief of Cardiology at UT Southwestern Medical Center, Dallas, TX, and Director of the Harry S. Moss Heart Center. Dr. Hill holds both the James T. Willerson, MD, Distinguished Chair in Cardiovascular Diseases, and the Frank M. Ryburn Jr. Chair in Heart Research. He graduated from Duke University with MD and PhD degrees in 1987. His PhD dissertation research was in the field of cardiac ion channel biophysics. Dr. Hill then worked for five years as a postdoctoral fellow at the Institut Pasteur in Paris studying central and peripheral nicotinic receptors. He next completed an internal medicine internship and residency, as well as a clinical cardiology fellowship, at the Brigham and Women's Hospital, Harvard Medical School. He served on faculty at the University of Iowa for five years before moving in 2002 to the UT Southwestern. Dr. Hill's research examines molecular mechanisms of structural, functional, metabolic, and electrophysiological remodeling in cardiac hypertrophy and heart failure. He has served on many NIH panels and committees and delivered numerous invited lectures in the U.S. and around the world. Dr. Hill has received many recognitions and awards, including election to the Association of American Professors and the 2018 Research Achievement Award from the International Society for Heart Research. For the past seven years, Dr. Hill has been the Editor-in-Chief of the prestigious American Heart Association journal Circulation.

Regulatory Overview

Drugs are evaluated for safety, efficacy, and manufacturing quality as a condition of market access, and promotional messages must adhere to approved product labelling. Drug prices also are regulated in most countries with national health insurance systems. Regulation of market access and promotion derives from uncertainty about the real-life value of drugs. Real-life product characteristics can only be determined from accumulated experience over large numbers of patients in carefully designed epidemiological trials or observational studies.

Government Regulation and Product Approval

As a biopharmaceutical company that intends to test, register, and commercialize products in Canada, U.S. and other jurisdictions, we are subject to extensive regulation by various regulatory authorities. The primary regulatory agency in the U.S. is the FDA, in Canada it is Health Canada, and in the E.U. it is the EMA. Together with these three, there are other federal, state, and local regulatory agencies. In the U.S., the FDCA, and its implementing regulations set forth, among other things, requirements for the research, testing, development, manufacture, quality control, safety, effectiveness, approval, labeling, storage, record keeping, reporting, distribution, import, export, and advertising and promotion of our products. Although the discussion below focuses on regulation in the U.S., we anticipate seeking approval for, and marketing of, our products in other countries.

Generally, our activities outside the U.S. will be subject to regulation that is similar in nature and scope as that imposed in the U.S., although there can be important differences. Approval in the U.S., Canada, or the E.U. does not assure approval by other regulatory agencies, although often test results from one country may be used in applications for regulatory approval in another country. Additionally, some significant aspects of regulation in the E.U. are addressed in a centralized way through the EMA, but country-specific regulation remains essential in many respects. The April 2015 publication titled "Medicinal Products in the E.U., the legal framework for medicines for human use"[2] from the European Parliamentary Research Service gives a general overview of several aspects of E.U. legislation on human medicines. A major difference in Europe, when compared to Canada and the United States, is with the approval process. In the E.U., there are different procedures that can be used to gain marketing authorization. The first procedure is referred to as the centralized procedure and requires that a single application be submitted to the EMA and, if approved, allows marketing in all countries of the E.U. The centralized procedure is mandatory for certain types of medicines and optional for others. The second procedure is the decentralized procedure which requires one member state to act as the reference member state conducting the review of the application which is simultaneously filed to the reference member state and to selected other member states. The third procedure is a state-by-state application.

The process of obtaining regulatory marketing approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources and may not be successful. See "Risk Factors" in this Annual Report.

The Corporation has a business relationship with Purisys, which is a U.S. based company. Purisys is a manufacturer of controlled drug substance APIs and is registered with the DEA for the manufacturing of controlled drug substances.

New Drug Submissions – Health Canada

To obtain approval to market a drug in Canada, a sponsor usually requests a pre-submission meeting with the review division of Health Canada responsible for the therapeutic field. If the meeting is granted, the sponsor must submit a Pre-Submission Information package to Health Canada to meet with the review division. This process occurs prior to submitting the NDS application. The purpose of the pre-submission meeting is to review the evidence (non-clinical and clinical research, quality information, indication) that will be submitted in the NDS application.

During the drug development process, the sponsor prepares study reports. Once the sponsor releases the last study required for the submission, the sponsor completes the NDS application and submits it to Health Canada. Prior to submitting the NDS and if applicable based on the intended use of the product in the identified patient population, the sponsor may submit in advance a request for priority review status.

After submitting the NDS application, the file undergoes a screening process prior to being accepted for review. The PDD has 45 calendar days from receipt to complete the screening review process. If granted a priority review, the screening period is reduced to 25 calendar days.

[2] https://www.europarl.europa.eu/RegData/etudes/IDAN/2015/554174/EPRS_IDA(2015)554174_EN.pdf

After a comprehensive review of an NDS application, Health Canada will issue a NOC if the product is approved or a NON if further questions remain. If a NOC is issued, a DIN is also issued that is required to be printed on each label of the product, as well as the final version of the Product Monograph that has been agreed to between Health Canada and the sponsor.

The average target time for reaching a first decision on an NDS is 300 calendar days, unless the submission has received a priority review in which case the time is 180 calendar days.

Fees are levied for a review of an NDS application.

U.S. Government Regulation

The FDA is the main regulatory body that controls pharmaceuticals in the U.S., and its regulatory authority is based in the FDCA. Pharmaceutical products are also subject to other federal, state, and local statutes. A failure to comply explicitly with any requirements during the product development, approval, or post-approval periods may lead to administrative or judicial sanctions. These sanctions could include the imposition by the FDA or an IRB of a hold on clinical trials, refusal to approve pending marketing applications or supplements, withdrawal of approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties, or criminal prosecution. As presented on the section of the FDA's website titled "Drug Review Process: Ensuring Drugs are Safe and Effective"[3], the steps required before a new drug may be marketed in the U.S. generally include:

- completion of nonclinical studies, animal studies, and formulation studies in compliance with the FDA's GLP regulations;
- submission to the FDA of an IND application to support human clinical testing in the U.S.;
- approval by an IRB at each clinical site before each trial may be initiated;
- performance of adequate and well-controlled clinical trials in accordance with federal regulations and with GCP, and regulations to establish the safety and efficacy of the investigational product candidate for each target indication;
- submission of an NDA authorization application to the FDA;
- satisfactory completion of an FDA Advisory Committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facilities at which the investigational product candidate is produced to assess compliance with continuing Good Manufacturing Practices (cGMP) regulations, and to assure that the facilities, methods, and controls are adequate; and
- FDA review and approval of the NDA.

[3] https://www.fda.gov/Drugs/ResourcesForYou/Consumers/ucm143534.htm

Clinical Trials

An IND is a request for authorization from the FDA to administer an investigational product candidate to humans. This authorization is required before interstate shipping and administration of any new drug product to humans in the U.S. that is not the subject of an approved NDA. A 30-day waiting period after the submission of each IND is required prior to the commencement of clinical testing in humans. If the FDA has neither commented on nor questioned the IND within this 30-day period, the clinical trial proposed in the IND may begin. Clinical trials involve the administration of the investigational product candidate to healthy volunteers or patients with the disease under study, under the supervision of qualified investigators following GCPs, an international standard meant to protect the rights and health of patients with the disease under study and to define the roles of clinical trial sponsors, administrators, and monitors. Clinical trials are conducted under protocols that detail the parameters to be used in monitoring safety, and the efficacy criteria to be evaluated. Each protocol involving testing on patients in the U.S. and subsequent protocol amendments must be submitted to the FDA as part of the IND application. Cardiol has submitted three IND applications on CardiolRx, and have received three "Study May Proceed" letters from the FDA. The first IND application authorization was to study CardiolRx in the prevention of cardiovascular complications due to COVID-19 infections. The second was to study CardiolRx in the treatment of myocarditis. The third was to study CardiolRx in the treatment of pericarditis.

As set out in the October 6, 2021 publication "ICH E8(R1) Guideline – General Considerations for Clinical Trials[4] ", published by the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use, the three phases of clinical investigation are as follows:

- Phase I. Phase I includes the initial introduction of an investigational product candidate into humans. Phase I clinical trials may be conducted in patients with the target disease or condition, or in healthy volunteers. These studies are designed to evaluate the safety, metabolism, PK, and pharmacologic actions of the investigational product candidate in humans, the side effects associated with increasing doses, and if possible, to gain early evidence on effectiveness. During Phase I clinical trials, sufficient information about the investigational product's PK and pharmacological effects may be obtained to inform the design of Phase II clinical trials. The total number of participants included in Phase I clinical trials varies but is generally in the range of 20 to 80.

- Phase II. Phase II includes the controlled clinical trials conducted to evaluate the effectiveness of the investigational product for a particular indication(s) in patients with the disease or condition under study, to determine dosage tolerance and optimal dosage, and to identify possible adverse side effects and safety risks associated with the product candidate. Phase II clinical trials are typically well-controlled, closely monitored, conducted in a limited subject population, and usually involve no more than several hundred participants

- Phase III. Phase III clinical trials are controlled clinical trials conducted in an expanded subject population at geographically dispersed clinical trial sites. They are performed after preliminary evidence suggesting effectiveness of the investigational product has been obtained, are intended to further evaluate dosage, clinical effectiveness and safety, to establish the overall benefit-risk relationship of the product candidate, and to provide an adequate basis for drug approval. Phase III clinical trials usually involve several hundred to several thousand participants. In most cases, the FDA requires two adequate and well-controlled Phase III clinical trials to demonstrate the efficacy of the drug.

The decision to terminate development of an investigational product may be made by either a health authority body, such as the FDA or IRB/ethics committees, or by a company for various reasons. The FDA may order the temporary, or permanent, discontinuation of a clinical trial at any time, or impose other sanctions, if it believes that the clinical trial either is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients. In some cases, clinical trials are overseen by an independent group of qualified experts organized by the trial sponsor or the clinical monitoring board. This group provides authorization for whether or not a trial may move forward at designated check points. These decisions are based on the limited access to data from the ongoing trial. The suspension or termination of development can occur during any phase of clinical trials if it is determined that the participants or patients are being exposed to an unacceptable health risk. In addition, there are requirements for the registration of ongoing clinical trials of products on public registries and the disclosure of certain information pertaining to the trials, as well as clinical trial results after completion.

[4] ICH_E8-R1_Guideline_Step4_2021_1006.pdf

New Drug Applications – FDA

In order to obtain approval to market a drug in the U.S., a marketing application must be submitted to the FDA that provides data establishing the safety and effectiveness of the product candidate for the proposed indication. The application includes all relevant data available from pertinent nonclinical studies and clinical trials, including negative or ambiguous results, as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labeling, among other things. Data can come from company-sponsored clinical trials intended to test the safety and effectiveness of a product, or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and effectiveness of the investigational product candidate to the satisfaction of the FDA. In most cases, the NDA must be accompanied by a substantial user fee; there may be some instances in which the user fee is waived. The FDA will initially review the NDA for completeness before it accepts it for filing. The FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. After the NDA is accepted for filing, the FDA begins an in-depth review. The FDA has agreed to certain performance goals in the review of NDAs. Most such applications for standard review products are reviewed within ten to twelve months. The FDA can extend this review by three months to consider certain late submitted information or information intended to clarify data already provided in the submission. The FDA reviews the NDA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured in accordance with cGMP. The FDA may refer applications for novel products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation, and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving an NDA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and are adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. After the FDA evaluates the NDA and the manufacturing facilities, it issues either an approval letter or a complete response letter. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If, or when, those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. Product approval may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

Disclosure of Clinical Trial Information

Sponsors of clinical trials of certain FDA-regulated products, including prescription drugs, are required to register and disclose certain clinical trial information (though not specifically required for Phase I trials) on a public website maintained by the U.S. National Institutes of Health ("NIH"). Information related to the product, patient population, phase of investigation, study sites and investigator, and other aspects of the clinical trial is made public as part of the registration. Sponsors are also obligated to disclose the results of these trials after completion. Disclosure of the results of these trials can be delayed until the product or new indication being studied has been approved. Competitors may use this publicly available information to gain knowledge regarding the design and progress of our development programs.

Advertising and Promotion

As set out in the FDA`s website discussion[5] on the "The Prescription Drug Marketing Act of 1987", the FDA and other federal regulatory agencies closely regulate the marketing and promotion of drugs through, among other things, standards and regulations for direct-to-consumer advertising, communications regarding unapproved uses, industry-sponsored scientific and educational activities, and promotional activities involving the Internet. A product cannot be commercially promoted before it is approved. After approval, product promotion can include only those claims relating to safety and effectiveness that are consistent with the labeling (package insert) approved by the FDA. Healthcare providers are permitted to prescribe drugs for "off-label" uses – that is, uses not approved by the FDA and, therefore, not described in the drug's labeling – because the FDA does not regulate the practice of medicine. However, FDA regulations impose stringent restrictions on manufacturers' communications regarding off-label uses.

Post-Approval Regulations

As set out in the FDA`s website discussion[6] on "Post Marketing Requirements and Commitments", after regulatory approval of a drug is obtained, a company is required to comply with a number of post-approval requirements. For example, as a condition of approval of an NDA, the FDA may require post-marketing testing, including Phase IV clinical trials, and surveillance to further assess and monitor the product's safety and effectiveness after commercialization. In addition, as a holder of an approved NDA, a company would be required to report adverse drug reactions and production problems to the FDA, to provide updated safety and efficacy information, and to comply with requirements concerning advertising and promotional labeling for any of its products. Also, quality control and manufacturing procedures must continue to conform to cGMP after approval to assure and preserve the long-term stability of the drug or biological product. The FDA periodically inspects manufacturing facilities to assess compliance with cGMP, which imposes extensive procedural and substantive record keeping requirements. In addition, changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon a company and any third-party manufacturers that a company may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

Controlled Substances

Potential sources of API for our cannabinoid products are in the U.S., Canada, and certain E.U. countries. In the U.S., pharmaceutically produced cannabidiol is not on any of the five schedules of controlled substances as established by the CSA and the U.S. DEA. Whether a pharmaceutically produced cannabinoid product is controlled in the U.S. depends on whether the product contains any quantity of a synthetically-produced tetrahydrocannabinol or any other controlled substance. If the product contains any quantity of synthetically produced tetrahydrocannabinol, or more than 0.3% organically produced tetrahydrocannabinol on a dry weight basis it is controlled in schedule I of the CSA, unless it is specifically excepted or listed in another schedule. The DEA has indicated our pharmaceutically produced cannabidiol is not controlled under the CSA as it is free of tetrahydrocannabinol with none detected at the detection limit of five parts per million.

We may choose to conduct clinical trials for any of our drug candidates outside the U.S. subject to regulatory approval. We may decide to develop, manufacture, or commercialize our product candidates in additional countries, which may consider pharmaceutically produced cannabidiol a controlled substance. As a result, we may be subject to controlled substance laws and regulations from the various other regulatory agencies in other countries where we develop, manufacture, or commercialize our cannabinoid products in the future.

Marketing Exclusivity

As discussed in the May 19, 2015 issue[7] of the "FDA/CDER SBIA Chronicles" published by the FDA, upon NDA approval of a new chemical entity, which for this purpose is defined as a drug that contains no active moiety that has been approved by the FDA in any other NDA, that drug receives five years of marketing exclusivity during which the FDA cannot approve any ANDA seeking approval of a generic version of that drug. Certain changes to the scope of an approval for a drug, such as the addition of a new indication to the package insert, are associated with a three-year period of exclusivity during which the FDA cannot approve an ANDA for a generic drug that includes the change. A Section 505(b)(2) NDA may be eligible for three-year marketing exclusivity, assuming the NDA includes reports of new clinical studies (other than bioequivalence studies) essential to the approval of the NDA.

[5] https://www.fda.gov/regulatory-information/selected-amendments-fdc-act/prescription-drug-marketing-act-1987
[6] https://www.fda.gov/drugs/guidance-compliance-regulatory-information/postmarket-requirements-and-commitments
[7] SBIA Chronicles. Patents and Exclusivity. May 19, 2015. https://www.fda.gov/downloads/Drugs/DevelopmentApprovalProcess/SmallBusinessAssistance/UCM447307.pdf

An ANDA may be submitted one year before marketing exclusivity expires if a Paragraph IV certification is filed. In this case, the 30 months stay, if applicable, runs from the end of the five-year marketing exclusivity period. If there is no listed patent in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book, there may not be a Paragraph IV certification, and, thus, no ANDA may be filed before the expiration of the exclusivity period.

Additionally, six months of marketing exclusivity in the United States is available under Section 505A of the FDCA if, in response to a written request from the FDA, a sponsor submits and the agency accepts requested information relating to the use of the approved drug in the pediatric population. This six-month pediatric exclusivity period is not a stand-alone exclusivity period, but rather is added to any existing patent or non-patent exclusivity period for which the drug product is eligible.

Patent Term Extension

As set out in the FDA`s website discussion[8] "Small Business Assistance: Frequently Asked Questions on the Patent Term Restoration Program", the term of a patent that covers an FDA-approved drug may be eligible for patent-term extension, which provides patent-term restoration as compensation for the patent term lost during the FDA regulatory review process. The U.S. Federal Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent-term extension of up to five years beyond the expiration of the patent. The length of the patent-term extension is related to the length of time the drug is under regulatory review. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Similar provisions are available in Canada, Europe, and other foreign jurisdictions to extend the term of a patent that covers an approved drug.

European and Other International Government Regulation

In addition to regulations in the U.S. and Canada, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Some countries outside of the U.S. have a similar process that requires the submission of a CTA much like the IND prior to the commencement of human clinical trials. In the E.U., for example, a CTA must be submitted under the centralized Clinical Trial Regulation and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is approved in accordance with a country's requirements, clinical trial development may proceed.

To obtain regulatory approval to commercialize a new drug under E.U. regulatory systems, we must submit a MAA. The MAA is similar to the NDA, with the exception of, among other things, country-specific document requirements.

For other countries outside of the E.U., such as countries in Latin America, or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing, and reimbursement vary from country to country. Internationally, clinical trials are generally required to be conducted in accordance with GCP, applicable regulatory requirements of each jurisdiction, and the medical ethics principles that have their origin in the Declaration of Helsinki.

Compliance

During all phases of development (pre- and post-marketing), failure to comply with applicable regulatory requirements may result in administrative or judicial sanctions. These sanctions could include the FDA's imposition of a clinical hold on trials, refusal to approve pending applications, withdrawal of an approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, product detention, or refusal to permit the import or export of products, injunctions, fines, civil penalties, or criminal prosecution. Any agency or judicial enforcement action could have a material adverse effect.

[8] https://www.fda.gov/drugs/cder-small-business-industry-assistance-sbia/small-business-assistance-frequently-asked-questions-patent-term-restoration-program

Other Special Regulatory Procedures

Fast Track Designation

According to the discussion[9] on the FDA's website on "Fast Track", under the Fast Track program, the sponsor of an IND may request the FDA to designate the drug candidate as a Fast Track drug if it is intended to treat a serious condition and fulfill an unmet medical need. The FDA must determine if the drug candidate qualifies for Fast Track designation within 60 days of receipt of the sponsor's request. Once the FDA designates a drug as a Fast Track candidate, it is required to facilitate the development and expedite the review of that drug by providing more frequent communication with and guidance to the sponsor.

In addition to other benefits such as the ability to use surrogate endpoints and have greater interactions with the FDA, the FDA may initiate review of sections of a Fast Track drug's NDA before the application is complete. This rolling review is available if the applicant provides, and the FDA approves, a schedule for the submission of the remaining information and the applicant pays applicable user fees. However, the FDA's review period for filing and reviewing an application does not begin until the last section of the NDA has been submitted. Additionally, the Fast Track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

Breakthrough Therapy Designation

According to discussion[10] on the FDA's website on "Breakthrough Therapy", the FDA may provide the Breakthrough Therapy designation to drugs to expedite the development and review of a candidate that is planned for use to treat a serious or life-threatening disease or condition when preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints. A Breakthrough Therapy designation includes all of the Fast Track program features, as well as more intensive FDA guidance on an efficient drug development program. The FDA also has an organizational commitment to involve senior management in such guidance.

Orphan Drug Designation

As set out in the FDA website discussion[11] on "Designating an Orphan Product: Drugs and Biological Products", the FDA may grant Orphan Drug Designation to drugs intended to treat a rare disease or condition that affects fewer than 200,000 individuals in the U.S., or, if the disease or condition affects more than 200,000 individuals in the U.S., if there is no reasonable expectation that the cost of developing and making the drug would be recovered from sales in the U.S.. As set out in the EMA's website discussion[12] on "Orphan Designation", in the E.U., the EMA's Committee for Orphan Medicinal Products grants orphan medicine designation to promote the development of products that are intended for the diagnosis, prevention, or treatment of life-threatening or chronically debilitating conditions affecting not more than five in 10,000 persons in the E.U. community. Additionally, the orphan medicine designation is granted for products intended for the diagnosis, prevention, or treatment of a life-threatening, seriously debilitating or serious and chronic condition and when, without incentives, it is unlikely that sales of the drug in the E.U. would be sufficient to justify the necessary investment in developing the drug.

In the U.S., Orphan Drug Designation entitles a party to financial incentives, such as opportunities for grant funding towards clinical trial costs, tax credits for certain research, and user fee waivers under certain circumstances. In addition, if a product receives the first FDA approval for the indication for which it has Orphan Drug Designation, the Orphan Drug is entitled to seven years of market exclusivity, which means the FDA may not approve any other application for the same drug for the same indication for a period of seven years, in limited circumstances, such as a showing of clinical superiority over the product with orphan drug exclusivity. Orphan Drug exclusivity does not prevent the FDA from approving a different drug for the same disease or condition, or the same drug for a different disease or condition. In the E.U., orphan medicine designation also entitles a party to financial incentives such as reduction of fees or fee waivers and ten years of market exclusivity following drug approval. This period may be reduced to six years if the orphan medicine designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity. Orphan Drug Designation and orphan medicine designation must be requested before submission of an application for marketing approval. Orphan Drug Designation and orphan medicine designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

Orphan Drug Designation was granted on February 14, 2023 in the U.S. to the Corporation for the treatment of pericarditis.

[9] https://www.fda.gov/ForPatients/Approvals/Fast/ucm405399.htm
[10] https://www.fda.gov/ForPatients/Approvals/Fast/ucm405397.htm
[11] https://www.fda.gov/industry/developing-products-rare-diseases-conditions/designating-orphan-product-drugs-and-biological-products
[12] http://www.ema.europa.eu/ema/index.jsp?curl=pages/regulation/general/general_content_000029.jsp&mid=WC0b01ac0580b18a41

Priority Review (U.S.) and Accelerated Assessment (E.U.)

Based on results of the Phase III clinical trial(s) submitted in an NDA, upon the request of an applicant, a priority review designation may be granted to a product by the FDA, which sets the target date for FDA action on the application at six months from the FDA's decision on priority review application, or eight months from the NDA filing. According to the FDA website discussion[13] on "Priority Review", this status is given where preliminary estimates indicate that a product, if approved, has the potential to provide a safe and effective therapy where no satisfactory alternative therapy exists, or a significant improvement compared to marketed products is possible. If criteria are not met for priority review, the standard FDA review period is ten months from the FDA's decision on priority review application, or 12 months from the NDA filing. The priority review designation does not change the scientific/medical standard for approval or the quality of evidence necessary to support approval.

According to the EMA website discussion[14] on "Accelerated Assessment", under the Centralised Procedure in the E.U., the maximum timeframe for the evaluation of a MAA is 210 days (excluding "clock stops," when additional written or oral information is to be provided by the applicant in response to questions asked by the CHMP. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of a major public health interest, which takes into consideration: the seriousness of the disease (e.g., heavy-disabling or life-threatening diseases) to be treated; the absence or insufficiency of an appropriate alternative therapeutic approach; and anticipation of high therapeutic benefit. In this circumstance, EMA ensures that the opinion of the CHMP is given within 150 days.

Accelerated Approval

As set out in the FDA website discussion[15] on "Accelerated Approval", under the FDA's accelerated approval regulations, the FDA may approve a drug for a serious or life-threatening illness that provides meaningful therapeutic benefit to patients over existing treatments based upon a surrogate endpoint that is reasonably likely to predict clinical benefit. This approval mechanism is provided for under 21CRF314 Subpart H and Subpart E. In this case, clinical trials are conducted in which a surrogate endpoint is used as the primary outcome for approval. A surrogate endpoint is reasonably likely to predict clinical benefit, or an effect on a clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. This surrogate endpoint substitutes for a direct measurement of how a patient feels, functions, or survives and is considered reasonably likely to predict clinical benefit. Such surrogate endpoints may be measured more easily or more rapidly than clinical endpoints. Under the Food and Drug Omnibus Reform Act of 2022 ("FDORA"), the FDA is now permitted to require, as appropriate, that such trials be underway prior to approval or within a specific time period after the date of approval for a product granted accelerated approval. A drug candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. When the Phase 4 commitment is successfully completed, the biomarker is deemed to be a surrogate endpoint. Failure to conduct required post-approval studies or confirm a clinical benefit during post-marketing studies could lead the FDA to withdraw the drug from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated regulations are subject to prior review by the FDA.

Regulatory Framework in Canada for Cannabis

The production, processing, and sale of the Corporation's CardiolRx and CRD-38 products are subject to regulation under Canada's regulatory framework for cannabis.

[13] https://www.fda.gov/forpatients/approvals/fast/default.htm
[14] http://www.ema.europa.eu/ema/index.jsp?curl=pages/regulation/general/general_content_000955.jsp&mid=WC0b01ac05809f843a
[15] https://www.fda.gov/ForPatients/Approvals/Fast/ucm405447.htm

***Cannabis Act* and Cannabis Regulations**

The *Cannabis Act* came into force on October 17, 2018. Health Canada proposed a risk-based approach to regulation, balancing the protection of health and safety of Canadians while enabling a competitive legal industry made up of large and small enterprises in all regions of Canada producing quality-controlled cannabis. On July 11, 2018, Health Canada released the regulations of cannabis in Canada Gazette, Part II, Volume 152, Number 14 – SOR/2018 144.

The impact of any further regulatory changes on the Corporation's business is unknown. See "Risk Factors – Changes in laws and regulations may make compliance challenging, costly and time consuming for us."

Licenses, Permits and Authorizations

The Regulations establish different types of authorizations based on the activity being undertaken and, in some cases, the scale of the activity. Rules and requirements for different categories of authorized activities are intended to be proportional to the public health and safety risks posed by each category of activity. The types of authorizations include: (i) cultivation; (ii) processing; (iii) sale to the public for medical purposes and non-medical purposes in provinces and territories that have not enacted a retail framework; (iv) analytical testing; (v) import/export; and (vi) research.

Security Clearances

Select personnel (including individuals occupying a "key position", such as directors, officers, large shareholders, and individuals identified by the Minister of Health) associated with certain licenses issued under the *Cannabis Act* are obliged to hold a valid security clearance issued by the Minister of Health. The Regulations enable the Minister of Health to refuse to grant security clearances to individuals with associations to organized crime or with past convictions for, or an association with, drug trafficking, corruption, or violent offences.

Reporting and Disclosure

Under the *Cannabis Act*, the Minister of Health is authorized to establish and maintain a national cannabis tracking system. The purpose of this system is to track cannabis throughout the supply chain to help prevent diversion of cannabis into, and out of, the legal market. The Regulations provide the Minister of Health with the authority to make a ministerial order that would require certain persons named in such order to report specific information about their authorized activities with cannabis, in the form and manner specified by the Minister.

Formulated Cannabis

The Regulations permit the sale to the public by licensed entities of dried cannabis, fresh cannabis, cannabis plants, cannabis seeds, edibles containing cannabis, topical cannabis and cannabis concentrates (extracts). The Regulations acknowledge that a range of product forms should be enabled to help the legal industry displace the illegal market.

A solution containing 100% pharmaceutically manufactured cannabidiol and no tetrahydrocannabinol is classified as "Cannabis" under the *Cannabis Act*. Specifically, Schedule 1 of the Cannabis Act defines "Cannabis" to include "any substance that is identical to any phytocannabinoid produced by, or found in, such a plant (cannabis), regardless of how the substance was obtained." Cannabidiol, pharmaceutically manufactured, is identical to cannabidiol found in the cannabis plant. However, our formulated products are not Cannabis Products since they are defined as drugs.

Packaging and Labeling

The Regulations set out requirements pertaining to the packaging and labelling of cannabis products. Such requirements promote informed consumer choice and allow for the safe handling and transportation of cannabis. The Regulations require all cannabis products to be packaged in a manner that is tamper-evident and child-resistant. While minor allowances for branding are permitted, Health Canada has mandated strict limits on the use of colours, graphics, and other special characteristics of packaging, and products are required to be labelled with specific information about the product, contain mandatory health warnings similar to tobacco products, and be marked with a clearly recognizable standardized cannabis symbol. All packaging is required to contain a standardized cannabis symbol for those products containing greater than 10 ppm of tetrahydrocannabinol.

Drugs Containing Cannabis

Health Canada is following a scientific, evidenced-based approach for the oversight of health products with cannabis that are approved with health claims, including prescription and non-prescription drugs, natural health products, veterinary drugs and veterinary health products, and medical devices. Health products can only be sold if they have been approved by Health Canada following a scientific review.

Provincial and Territorial Regulatory Regimes

While the *Cannabis Act* provides for the regulation of the commercial production of cannabis for recreational purposes and related matters by the federal government, the Cannabis Act states that the provinces and territories of Canada have authority to regulate other aspects of recreational cannabis (similar to what is currently the case for liquor and tobacco products), such as sale and distribution, minimum age requirements, pricing and promotion, places where cannabis can be consumed, and a range of other matters.

The government of each Canadian province and territory has in place regulatory regimes for the distribution and sale of cannabis for consumer purposes within those jurisdictions.

Corporate Social Responsibility and Environmental Social and Governance ("ESG")

As a rapidly growing, clinical-stage biotech company, we are not yet in a position to implement a broad-based ESG policy and program. However, our corporate goals are inspired by our potential to impact the care of patients who suffer with cardiovascular disease and are informed by our corporate values of acting with integrity, collaboration, innovation and embracing diversity. In 2023, our corporate goals focused on certain clinical, manufacturing, and business operations and support our desire to obtain an approval for innovative treatments for heart diseases. Each year we work hard to achieve our goals and objectives while maintaining a respectful, collaborative, and caring work environment.

While we do not formally report on our ESG policies and compliance, we publicly disclose elements of our ESG activities. Our governance policies like our board mandates, code of ethics and conduct, and our public filings are all on our website at www.cardiolrx.com.

Additional Information

Additional information about the Corporation is available on SEDAR+ at www.sedarplus.ca and on our website at www.cardiolrx.com. We do not incorporate the contents of our website or of www.sedarplus.ca into this Annual Report. Information on our website does not constitute part of this Annual Report. In addition, the SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC which can be viewed as www.sec.gov.

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The management's discussion and analysis of the Corporation for the year ended December 31, 2023 is included in this Annual Report in Exhibit 15.1.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

Directors and Management

The following table sets out, for each of our Directors and executive officers, the person's name, province or state, and country of residence, position with us, principal occupation and, if a director, the date on which the person became a director. Our Directors are expected to hold office until our next annual general meeting of Shareholders. Our Directors are elected annually and, unless re-elected, retire from office at the end of the next annual general meeting of Shareholders. As a group, the Directors and executive officers beneficially own, or control or direct, directly or indirectly, a total of 3,119,175 Common Shares, representing 4.58% of the Common Shares outstanding, as of February 29, 2024.

Directors and Executive Officers

Name and Province or State and Country of Residence	Position with the Corporation	Since	Principal Occupation
David Elsley Ontario, Canada	Director, President and Chief Executive Officer	January 19, 2017	President and Chief Executive Officer of Cardiol since January 19, 2017.
Chris Waddick Ontario, Canada	Director, Chief Financial Officer and Corporate Secretary	Chief Financial Officer and Corporate Secretary since August 16, 2018 and Director since May 19, 2022	Chief Financial Officer and Corporate Secretary of Cardiol since August 16, 2018. Executive Vice President and CFO of Active Energy Inc., a private energy company, since January 2018 and President of NRJ Consulting Inc., a consulting company, since November 2009.
Bernard Lim Ontario, Canada	Chief Operating Officer	December 3, 2020	Chief Operating Officer of Cardiol since December 3, 2020. Chair of the Board of AndersDx (UK), a technology company since 2009. Chair of the Board for Acuity Insights Inc., a technology company focused on professional screening for academic institutions since 2015. Chair of the Board of Front Line Medical, a vascular trauma medical device company since 2020.
Dr. Andrew Hamer New York, USA	Chief Medical Officer and Head of Research and Development	March 29, 2021	Chief Medical Officer of Cardiol since March 29, 2021. Served as Executive Director, Global Development-Cardiometabolic at California-based Amgen Inc.
Michael Willner[(1)(5)] Florida, USA	Director	September 7, 2021	Founder of Willner Capital, Inc., an investment company specializing in public and private equities, as well as debt instruments
Peter Pekos[(2)(5)] Ontario, Canada	Director	December 15, 2017	Founder of Dalton Pharma Services
Dr. Guillermo Torre-Amione[(2)(5)] Monterrey, Mexico	Chairman and Director	Director since August 20, 2018 and Chairman since July 7, 2021	President of TecSalud. Previously, Chief of Heart Failure Division and Medical Director of Cardiac Transplantation, Houston Methodist DeBakey Heart & Vascular Center.
Colin Stott[(1)(5)] Southport, United Kingdom	Director	December 3, 2019	Chief Operating Officer of Alterola Biotech Inc. Previously Chief Operating Officer of Alinova Biosciences Ltd. Previously Scientific Affairs Director, International and R&D Operations Director for GW Pharmaceuticals plc.
Jennifer Chao[(2)(4)(5)] New York, USA	Director	March 15, 2022	Founder of CoreStrategies Management, LLC. Biopharma securities expert witness for biopharma litigation matters. Board Director for biopharma companies. Previously Managing Director and Senior Lead Biotechnology Securities Analyst at Deutsche Bank.
Teri Loxam[(1)(3)(5)] Pennsylvania, USA	Director	May 19, 2022	Chief Financial Officer of Compass Pathways plc. Director and Audit Chair of Vaxcyte Inc. Previously Chief Financial Officer of Gameto. Previously Chief Operating Officer and Chief Financial Officer of Kira Pharmaceuticals. Previously Chief Financial Officer of SQZ Biotech.

Notes:

(1) Member of the Audit Committee
(2) Member of the Corporate Governance and Compensation Committee
(3) Chair of the Audit Committee
(4) Chair of the CG&C Committee
(5) Independent

Biographies of Directors and Executive Officers

The following are brief profiles of our executive officers and Directors, including a description of each individual's principal occupation within the past five years.

David Elsley, MBA – President, Chief Executive Officer, and Director

Mr. David Elsley is a business leader with a proven track record of developing, financing, and managing all aspects of corporate development in life sciences organizations. In 1990, Mr. Elsley founded Vasogen Inc., a biotechnology company focused on the research and commercial development of novel therapeutics for the treatment of heart failure and other inflammatory conditions. Mr. Elsley assembled a team of management, directors, and scientific advisors comprising industry professionals and thought leaders from North America and Europe. He managed and directed Vasogen's growth from start-up to an organization employing over 250 people with operations and R&D programs in Canada, the United States, and Europe. Mr. Elsley established the research and development infrastructure, partnerships, manufacturing capability, and corporate quality systems necessary to advance two anti-inflammatory therapies from concept to completion of international multi-center pivotal phase III clinical trials involving 2,500 patients. Vasogen went public on the TSX and the Nasdaq, raising over $200 million to support corporate development and reached a market capitalization of over US$1 billion. Mr. Elsley holds a Master of Business Administration from the Ivey School of Business, University of Western Ontario.

Andrew Hamer, MB, ChB – Chief Medical Officer and Head of Research and Development

Dr. Andrew Hamer brings 30 years of experience in the global life sciences industry, medical affairs, and cardiology practice to the Corporation. Most recently he served as Executive Director, Global Development-Cardiometabolic at California-based Amgen Inc., where he led the Global Development group for Repatha®, the LDL cholesterol lowering PCSK9 inhibitor evolocumab, which generated revenues of almost US$900 million in 2020. As development lead, Dr. Hamer headed the Repatha® global evidence generation team collaborating with safety, regulatory, health economics, observational research, scientific communications, publications, medical affairs, and clinical operations teams to design and execute several multi-center clinical trials in support of FDA and international regulatory filings. Prior to his five-year tenure with Amgen, Dr. Hamer served for two years as VP Medical Affairs at Capricor Therapeutics Inc., where he was responsible for the development of novel therapeutics for heart disease and for the supervision of the clinical operations of the company, including clinical trial design and execution.

Prior to joining the life sciences industry, Dr. Hamer practiced cardiology and internal medicine in New Zealand for 19 years. His distinguished career in cardiology culminated as Chief Cardiologist at Nelson Hospital, Nelson Marlborough District Health Board, Nelson, while concurrently leading cardiac services nationally in New Zealand. Dr. Hamer graduated with a medical degree (MB, ChB) from the University of Otago, New Zealand, an internationally recognized medical school which recently ranked among the top twenty universities in the world in several medical subject categories. His clinical research training took place at various centres in New Zealand and London, UK, followed by a cardiology fellowship at Deaconess Hospital, Harvard Medical School, Boston. Dr. Hamer has co-authored many high-quality peer-reviewed scientific publications reflecting his considerable experience as a clinical trialist, having served as a principal or co-investigator for 40 multi-centre clinical trials in therapies for acute coronary syndrome, heart failure, hypertension, cholesterol disorders, atrial fibrillation, and diabetes.

Chris Waddick, MBA, CPA, CA – Director, Chief Financial Officer and Corporate Secretary

Mr. Chris Waddick has thirty years of experience in financial and executive roles in the biotechnology and energy industries, with substantial knowledge of public company management and corporate governance, and in designing, building, and managing financial processes, procedures, and infrastructure. Mr. Waddick most recently served as Executive Vice President and Chief Financial Officer for a private Ontario energy company where he was retained by the shareholders to refinance the company and establish a new strategic direction, as well as the appropriate financial infrastructure. During his tenure, he implemented two corporate restructurings, drove substantial earnings growth, and significantly reduced both cost of capital and debt levels. Mr. Waddick spent more than twelve years at Vasogen Inc., a biotechnology company focused on the research and commercial development of novel therapeutics for the treatment of heart failure and other inflammatory conditions. While serving as Chief Financial Officer and Chief Operating Officer, the company grew from start up to an organization employing over 250 employees that established the necessary systems and infrastructure to advance an anti-inflammatory therapy through to the completion of an international multi-center pivotal trial involving 2,500 patients. Vasogen went public on the TSX and the NASDAQ, raising over $200 million to support corporate development and reached a market capitalization of over US$ 1 billion. Prior to Vasogen, he held progressively senior financial positions at Magna International Inc. and Union Gas Limited. Mr. Waddick is a CPA and earned a business degree from Wilfrid Laurier University and a Master of Business Administration from York University.

Bernard Lim, BSc, PgDip, CEng (UK) – Chief Operating Officer

Mr. Bernard Lim is a senior executive with a proven track record of over thirty years in the life sciences industry spanning biotechnology, diagnostics, medical devices, and high-technology companies in North America and Europe. He was founder and CEO of a highly successful drug delivery company that he led from R&D through to commercialization and its eventual acquisition by Eli Lily. As Chair of the Board of Acuity Insights, he guided the company's spinout from the university and its subsequent rapid growth to become market leader in the US and Canada. As Chair of the Board of AndersDx, a private UK-based technology company, he led its growth to a profitable enterprise. He is also currently Chair of the Board of Front Line Medical Technologies, a vascular trauma company. Previously, Bernard was board director of Aventamed (Ireland), Senior Vice President, Operations for Vasogen, as well as head of UK operations for a technology multinational where he scaled its operations exponentially and delivered multifold improvements in quality and financial performance. He was also CEO of a glaucoma, Alzheimer's and an *in-vitro* diagnostics company and prior to that was head of R&D for a leading neonatology and pediatrics company.

Guillermo Torre-Amione, MD, PhD – Chairman and Director

Board certified in Cardiovascular Disease and Advanced Heart Failure/Transplant Cardiology, Dr. Guillermo Torre-Amione is former chief of the Heart Failure Division and former medical director of Cardiac Transplantation at the Houston Methodist DeBakey Heart & Vascular Center. He is a senior member at The Methodist Hospital Research Institute, full professor of medicine at the Weill Cornell Medical College of Cornell University, New York, and, more recently, became President of TecSalud, an academic medical center and medical school of the Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) in Mexico. Dr. Torre-Amione spearheads the Gene and Judy Campbell Laboratory for Cardiac Transplant Research, where his primary areas of research include heart failure, cardiac transplantation, and the role of the immune response in modulating the progression of heart failure. He initiated a series of clinical studies that led to an FDA-approved phase II clinical trial of neurostimulation in heart failure, a novel approach to the treatment of patients with advanced heart failure. Dr. Torre-Amione received his medical degree from the ITESM and a doctorate degree in immunology from the University of Chicago. He has published more than 170 manuscripts in peer-reviewed journals. He currently divides his time between his clinical and academic activities at The Methodist Hospital and ITESM. Prior to being appointed to Cardiol's Board of Directors, Dr. Torre-Amione was a member of the Corporation's Scientific Advisory Board.

Peter Pekos, BSc, MSc – Director

Mr. Peter Pekos is a veteran of the pharmaceutical services industry. In 1986, he was a founder of Dalton Pharma Services (Dalton). Over a period of 30 years, he directed Dalton's growth based on strong client relationships. Dalton provides pharma and biotech clients with an array of integrated services in a world-class 42,000 square foot facility, with more than 110 employees, in the heart of one of North America's largest biomedical clusters. This includes premium contract chemistry research, a full range of analytical support, medicinal chemistry, formulation, cGMP manufacture of solid dosage forms, and cGMP aseptic fill-in vials and syringes. Previously Mr. Pekos was President and CEO of Dalton, guiding the evolution of the company to best serve the changing needs of its clients throughout the major global economies, including the world's largest pharmaceutical companies. In 1983, he obtained a Chemistry/Biochemistry Double Specialist Degree with a Minor in Biology from the University of Toronto. In 1986, he completed a master's degree in synthetic chemistry at York University, and with his Professor, Doug Butler, founded Dalton with a very modest amount of capital. The company used incubator facilities at York University, and initially manufactured and sold specialty chemical compounds. Mr. Pekos also founded Ashbury Biologicals. Inc., a phyto-pharmaceutical company, Jupiter Consumer Products, a company that targeted the development of adult-focused confections, and several other technology-based companies focused on advanced materials and pharmaceutical development tools. Mr. Pekos is currently on the board and was founding Chairman of ventureLAB, a Regional Innovation Center located at IBM's York Region campus. VentureLAB guides government program delivery to support the innovation ecosystem for biotechnology and related industries in southern Ontario.

Colin G. Stott, BSc (Hons) – Director

Mr. Colin Stott is a veteran of the pharmaceutical and biotech industries, having almost 30 years' experience in pre-clinical and clinical development, with specific expertise in the development of cannabinoid-based medicines, and 19 years' experience in the field. Currently Chief Operating Officer of Alterola Biotech Inc., Mr. Stott is the former Scientific Affairs Director, International and R&D Operations Director for GW Pharmaceuticals plc ("GW Pharma"), a world leader in the development of cannabinoid therapeutics. As R&D Operations Director at GW Pharma for over 16 years, he was a key player in the development of their discovery and development pipeline, and was closely involved in the Marketing Authorization Application submission and approval of Sativex® and the New Drug Application submission of Epidiolex®, which was approved by the U.S. Food and Drug Administration as an orphan drug for the treatment of rare forms of paediatric epilepsy in June 2018, and the European Medicines Agency in September 2019 (as Epidyolex®). More recently, as Scientific Affairs Director, International, he was part of the Medical Affairs team responsible for the preparation of the international launch of Epidiolex®. Mr. Stott holds a BSc (Hons) in Medicinal & Pharmaceutical Chemistry and a Diploma in Industrial Studies from Loughborough University of Technology, U.K., as well as a Post Graduate Diploma in Clinical Research from the Welsh School of Pharmacy, Cardiff University, U.K. He has published over 20 research papers and is a named inventor on 17 international patent applications.

Michael J. Willner, Esq. – Director

Mr. Michael J. Willner has practiced as both an Attorney and a Certified Public Accountant. He graduated from Emory University Law School as a member of the Emory Law Review. Subsequently, he practiced real estate and corporate law with New York City-based Milbank, Tweed, Hadley & McCloy, one of the nation's most prominent international law firms. Prior to his legal career, Mr. Willner was employed by the former Arthur Andersen & Company, a national accounting firm, where he practiced in Arthur Andersen's tax department.

Mr. Willner has been a very active and successful opportunistic investor for over forty years and is the founder of Willner Capital, Inc., an investment company specializing in public and private equities, as well as debt instruments. Willner Capital primarily uses fundamental analysis as an evaluation method and event-driven strategies. Over the past ten years, Willner Capital has made significant investments in both the biotechnology and pharmaceutical cannabinoid industries, focusing primarily on clinical-stage companies that seek to address significant unmet medical needs. Mr. Willner has been quoted in the New York Times business section and has served as a moderator and participant on numerous panel discussions and advisory boards regarding his investments in the pharmaceutical side of the cannabinoid industry.

Jennifer Chao – Director

Ms. Chao has over 25 years of experience in the biotech and life sciences industries focused primarily on finance and corporate strategy. She is Managing Partner of CoreStrategies Management, LLC, a company she founded in 2008 to provide transformational corporate and financial strategies to biotech/life science companies for maximizing core valuation. Ms. Chao also serves as a biopharma securities expert witness for high-level biopharma litigation matters, working with large economic consulting firms and law firms; cases have involved material and fair disclosure, valuation, and insider trading. She currently serves on the board of directors of Endo Pharmaceuticals and is a member of the Audit Committee and Compliance Committee. Ms. Chao also serves on the board of directors of Edesa Biotech as Chair of Nominating and Corporate Governance, and a member of the Audit Committee. Prior to joining Endo, Ms. Chao served as Chairman of the Board of BioSpecifics Technologies Corp. (BioSpecifics) from October 2019 until its acquisition by Endo for approximately US$660 million in December 2020. She also served as Chair of BioSpecifics' Compensation Committee and as a member of the Audit Committee, Strategy Committee, Intellectual Property Committee, and Nominating and Corporate Governance Committee from 2015 to 2020.

Additionally, from 2004 to 2008, Ms. Chao was Managing Director and Senior Lead Biotechnology Securities Analyst at Deutsche Bank, responsible for U.S. large- and small- to mid-cap biotechnology companies with global client coverage; and was known for differentiated fundamentals securities analysis and high visibility coverage of game changing technologies, paradigm shifting treatment algorithms, industry trends and portfolio risk/reward management. Prior to that, Ms. Chao served as Managing Director and Senior Lead Biotechnology Analyst at RBC Capital Markets and VP, Senior Biotechnology Analyst at Leerink Swann & Co. Ms. Chao was a research fellow at Massachusetts General Hospital/Harvard Medical School, as a recipient of the BioMedical Research Career Award, and received her B.A. in Politics and Greek Classics from New York University.

Teri Loxam – Director

Teri Loxam has over 25 years of experience in the pharmaceutical, life sciences, and TMT industries with diverse roles spanning strategy, investor relations, finance, and communications. Ms. Loxam is the Chief Financial Officer of Compass Pathways plc (Nasdaq: CMPS), a biotechnology company dedicated to accelerating patient access to evidence-based innovation in mental health. Ms. Loxam previously served as Chief Financial Officer of Gameto, a biotechnology company using cell engineering to develop therapeutics for diseases of the female reproductive system. In this role, Ms. Loxam oversaw the financial function, as well as playing a key role in overall company strategy. Prior to joining Gameto, Ms. Loxam was Chief Operating Officer and Chief Financial Officer at Kira Pharmaceuticals, a clinical-stage biotech company developing transformative therapies for people with complement-mediated diseases. Prior to joining Kira, Ms. Loxam served as Chief Financial Officer at SQZ Biotech where she led the company's financial operations, investor relations and communications/public relations functions. While at SQZ, she was instrumental in helping the company raise over $200M in private and public funding, including taking the company public through an IPO on the NYSE in October 2020. Prior to joining SQZ, Ms. Loxam held various positions at Merck, IMAX Corporation, and Bristol-Myers Squibb across strategy, investor relations, treasury, and communications. She started her career as a marine biologist and worked at Sea World of San Diego before making a transition into business. Ms. Loxam is a member of the board of directors and audit chair of Vaxcyte, Inc. (Nasdaq: PCVX). She holds an MBA from the University of California, Irvine, and a Bachelor of Science degree in Biology from the University of Victoria, B.C., Canada.

Corporate Cease-Trade Orders

None of our Directors or executive officers has, within the ten years prior to the date of this Annual Report, been a director, chief executive officer, or chief financial officer of any company (including Cardiol) that, while such person was acting in that capacity (or after such person ceased to act in that capacity but resulting from an event that occurred while that person was acting in such capacity) was the subject of a cease-trade order, an order similar to a cease-trade order, or an order that denied the company access to any exemption under securities legislation, in each case for a period of more than 30 consecutive days.

Corporate Bankruptcies

Other than as provided below, none of our Directors or executive officers has, within the ten years prior to the date of this Annual Report, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager, or trustee appointed to hold its assets, been a director or executive officer of any company, that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager, or trustee appointed to hold its assets.

Ms. Chao was a director of Endo International in August 2022 when it voluntarily filed a petition for Chapter 11 bankruptcy protection in the US Bankruptcy Court for the Southern District of New York. In connection with the Chapter 11 filing, Endo entered into a Restructuring Support Agreement with Senior Secured Debtholders.

Penalties or Sanctions

No Director or executive officer of the Corporation or Shareholder holding sufficient securities of the Corporation to affect materially the control of the Corporation has:

- been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or
- been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor making an investment decision.

Conflicts of Interest

Other than as described below, to the best of our knowledge, there are no known existing or potential conflicts of interest among us and our Directors, officers, or other members of Management as a result of their outside business interests except that certain of our Directors and officers serve as directors and officers of other companies, and therefore it is possible that a conflict may arise between their duties to us and their duties as a director or officer of such other companies.

Peter Pekos, one of our Directors, founded Dalton in 1986 and was its President and CEO in 2023 prior to retiring. Cardiol and Dalton are parties to the Dalton Services Agreement pursuant to which Cardiol has subcontracted the manufacturing of its drug product candidates to Dalton. See "Commercial Relationships – Dalton".

6.B. Compensation

Compensation of Directors

The Corporation's policy with respect to Directors' compensation was developed by Management and approved by the Board, to be managed and refined in the future, as necessary, by the CG&C Committee. Directors of the Corporation who are also officers or employees of the Corporation are not compensated for their service on the Board. The following table sets out certain information respecting the compensation paid to Directors who were not NEOs for the financial year ended December 31, 2023. Mr. Elsley and Mr. Waddick were Directors and NEOs during the year ended December 31, 2023. Any compensation received by them in their capacities as Directors of the Corporation is reflected in the Summary Compensation Table in this Annual Report.

Director Compensation Table

The following table sets forth compensation paid to Directors in the financial year ending December 31, 2023, and who were not also officers, employees, or NEOs of the Corporation.

Name and principal position	Year	Fees earned ($)	Share based Awards ($)	Option based Awards ($)	Non-equity incentive compensation ($)	Pension value ($)	All other compensation ($)	Total compensation ($)
Dr. Guillermo Torre-Amione	2023	112,683	Nil	Nil	Nil	Nil	Nil	112,683
Mr. Peter Pekos	2023	58,000	Nil	Nil	Nil	Nil	Nil	58,000
Mr. Colin Stott	2023	60,000	Nil	Nil	Nil	Nil	Nil	60,000
Mr. Michael Willner	2023	71,523	Nil	Nil	Nil	Nil	Nil	71,523
Ms. Jennifer Chao	2023	76,921	Nil	Nil	Nil	Nil	Nil	76,921
Ms. Teri Loxam	2023	82,319	Nil	Nil	Nil	Nil	Nil	82,319

Management Compensation Table

The following table sets out certain information respecting the compensation paid for the financial year ended December 31, 2023 to NEOs of the Corporation:

Name and principal position	Year	Salary ($)	Share based Awards ($)	Option based Awards ($)	Non-equity incentive compensation ($) (f)		Pension value ($)	All other compensation ($)	Total compensation ($)
					Annual incentive plans (f1)	Long-term incentive plans (f2)			
Mr. David Elsley President and Chief Executive Officer	2023	525,000	Nil	Nil	223,100	Nil	Nil	Nil	748,100
Mr. Chris Waddick Chief Financial Officer and Corporate Secretary	2023	220,000	Nil	Nil	74,800	Nil	Nil	Nil	294,800
Bernard Lim Chief Operating Officer	2023	385,000	Nil	Nil	130,900	Nil	Nil	Nil	515,900
Dr. Andrew Hamer Chief Medical Officer and Head of Research and Development	2023	556,793	Nil	Nil	189,770	Nil	Nil	Nil	746,653

6.C. Board Practices

Our Board of Directors are elected by the shareholders at each Annual General Meeting (or Annual Special Meeting) and typically hold office until the next meeting, at which time they may be re-elected or replaced. The date of expiration of the current term of office for all Directors is the date of the 2024 Annual General Meeting (or Annual Special Meeting) of the Shareholders. Casual vacancies on the Board are filled by the remaining Directors and the persons filling those vacancies hold office until the next Annual General Meeting (or Annual Special Meeting), at which time they may be re-elected or replaced. The officers are appointed by the Board of Directors and hold office indefinitely at the pleasure of the Board of Directors.

Employment, Consulting and Directors' Service Contracts

The Corporation does not have any contracts with any of its Directors which provide for benefits upon the termination of employment.

Audit Committee

Charter of the Audit Committee

The full text of the current Terms of Reference for the Audit Committee is attached as Exhibit 15.2 to this Annual Report.

Composition of the Audit Committee

The Corporation's Audit Committee consists of three Directors, all of whom are independent pursuant to Nasdaq's independence standards. They are also all financially literate, including within the meaning of NI 52-110. The members of the Audit Committee are Teri Loxam (Chair), Michael Willner, and Colin Stott.

Relevant Education and Experience

See the respective biographies of each member of the Audit Committee in "Directors and Management – Biographies of Directors and Executive Officers" for a description of the experience that is relevant to the performance of their responsibilities as Audit Committee members.

Reliance on Certain Exemptions

At no time since the commencement of Cardiol's most recently completed financial year has the Corporation relied on any of the exemptions provided in NI 52-110.

Audit Committee Oversight

At no time since the commencement of the Corporation's most recently completed financial year have any recommendations by the Audit Committee respecting the appointment and/or compensation of the Corporation's external auditors not been adopted by the Board of Directors of Cardiol.

Pre-Approval Policies and Procedures

The policy and procedures relating to the pre-approval of non-audit services provided to the Corporation are described in the Terms of Reference for the Audit Committee attached as Exhibit 15.2 to this Annual Report.

The Corporate Governance and Compensation Committee

The Corporate Governance and Compensation Committee is currently composed of three independent board members: Jennifer M. Chao (Chair), Dr. Guillermo Torre-Amione, and Mr. Peter Pekos. The education and related experience (as applicable) of each current member are described in the biographies above. Refer to Exhibit 11.2 for Corporate Governance and Compensation Committee Charter.

6.D. Employees

As of December 31, 2023, Cardiol had 17 employees and 5 management consultants providing management services to Cardiol.

6.E. Share Ownership

The following table indicates information as of February 29, 2024, regarding the beneficial ownership of our Common Shares, for:

- each person who is known by us to beneficially own more than 5% of our Common Shares;
- each named executive officer;
- each of our Directors; and
- all of our Directors and executive officers as a group.

Unless otherwise indicated in the footnotes to the table, and subject to community property laws where applicable, the following persons have sole voting and investment control with respect to the shares beneficially owned by them. In accordance with SEC rules, if a person has a right to acquire beneficial ownership of any Common Shares on or within 60 days of February 29, 2024, upon conversion or exercise of outstanding securities or otherwise, the shares are deemed beneficially owned by that person and are deemed to be outstanding solely for the purpose of determining the percentage of our shares that person beneficially owns. These shares are not included in the computations of percentage ownership for any other person. As of February 29, 2024, we had 76 record holders of our Common Shares, with 17 record holders in Canada, representing 93.00% of our outstanding Common Shares, 42 record holders in the United States, representing 3.24% of our outstanding Common Shares, and 17 record holders in other countries, representing 3.76% of our outstanding Common Shares.

Except as otherwise indicated, the address of each of the persons in this table is 602-2265 Upper Middle Road East, Oakville, Ontario L6H 0G5.

Name and Address of Beneficial Owner	Shares Beneficially Owned	Percentage of Shares Beneficially Owned
5% and Greater Shareholders:		
MMCAP International Inc. SPC[1]	4,553,300	6.53 %
Directors and Named Executive Officers:		
David Elsley[2]	1,371,167	2.01 %
Christopher Waddick[3]	623,891	* %
Bernard Lim[4]	408,990	* %
Andrew Hamer[5]	239,380	* %
Guillermo Torre-Amione[6]	157,321	* %
Peter Pekos[7]	535,447	* %
Colin Stott[8]	142,500	* %
Michael Willner[9]	886,341	1.30 %
Jennifer Chao[10]	40,000	* %
Teri Loxam[11]	80,000	* %
All executive officers and Directors as a group (10 persons)	4,485,037	6.56 %

* Indicates beneficial ownership of less than 1%.

(1) According to Schedule 13G filed with the SEC on February 13, 2024, consists of 2,953,300 Common Shares and 1,600,000 Common Shares underlying warrants. MMCAP International Inc. SPC has shared voting and dispositive power with MM Asset Management Inc. with respect to such securities. The principal business office of MMCAP International Inc. SPC is c/o Mourant Governance Services (Cayman) Limited, 94 Solaris Avenue, Camana Bay, P.O. Box 1348, Grand Cayman, KY1-1108, Cayman Islands.

(2) Consists of 1,154,500 Common Shares and 216,667 Common Shares underlying stock options.

(3) Consists of 110,000 Common Shares and 513,891 Common Shares underlying restricted share units.

(4) Consists of 30,000 Common Shares and 378,990 Common Shares underlying restricted share units.

(5) Consists of 239,380 Common Shares.

(6) Consists of 89,164 Common Shares and 68,157 Common Shares underlying restricted share units.

(7) Consists of 467,290 Common Shares and 68,157 Common Shares underlying restricted share units.

(8) Consists of 82,500 Common Shares and 60,000 Common Shares underlying restricted share units.

(9) Consists of 786,341 Common Shares and 100,000 Common Shares underlying stock options.

(10) Consists of 40,000 Common Shares underlying stock options.

(11) Consists of 60,000 Common Shares and 20,000 Common Shares underlying stock options.

Omnibus Equity Incentive Plan

The Omnibus Equity Incentive Plan is administered by the Board, and the Board has the authority to interpret the Omnibus Equity Incentive Plan, including in respect of any award granted thereunder. The Omnibus Equity Incentive Plan permits the Board to approve awards of Options, RSUs, PSUs, DSUs or other Share-Based Awards to eligible participants.

Common Shares Subject to the Omnibus Equity Incentive Plan

The Omnibus Equity Incentive Plan is a rolling plan which, subject to the adjustment provisions provided for therein (including a subdivision or consolidation of Common Shares), provides that the aggregate maximum number of Common Shares that may be issued upon the exercise or settlement of awards granted under the Omnibus Equity Incentive Plan shall not exceed 15% of the Corporation's issued and outstanding Common Shares from time to time (including Common Shares reserved for issuance in respect of 260,000 Options outstanding under the Equity Compensation Plan and in respect of any other Security Based Compensation Arrangement). The Omnibus Equity Incentive Plan is considered an "evergreen" plan, since the Common Shares covered by awards which have been exercised, settled, or terminated shall be available for subsequent grants under the Omnibus Equity Incentive Plan and the number of awards available to grant increases as the number of issued and outstanding Common Shares increases.

Outstanding Securities Awarded:

As of February 29, 2024, the total number of Common Shares issuable upon exercise of any awards granted under the Omnibus Equity Incentive Plan is 4,090,958 Shares (representing approximately 6.00% of the Common Shares outstanding). This assumes that each outstanding PSU and RSU is redeemed for Common Shares.

Remaining Securities Available for Grant:

As of February 29, 2024, the number of Common Shares available for issuance pursuant to future awards granted under the Omnibus Equity Incentive Plan is 5,874,348 Shares (representing approximately 8.62% of the Common Shares outstanding).

Insider Participation Limit

The Omnibus Equity Incentive Plan provides that the aggregate number of Common Shares (a) issuable to insiders at any time (under all of the Corporation's security-based compensation arrangements) cannot exceed 10% of the Corporation's issued and outstanding Common Shares and (b) issued to insiders within any one year period (under all of the Corporation's security-based compensation arrangements) cannot exceed 10% of the Corporation's issued and outstanding Common Shares.

Administration of the Omnibus Equity Incentive Plan

The Plan Administrator (as defined in the Omnibus Equity Incentive Plan) is determined by the Board, and is initially the Board. The Omnibus Equity Incentive Plan may in the future be administered by a committee of the Board. That committee may in turn sub delegate certain functions to an officer or director. The Plan Administrator determines which Directors, officers, consultants, and employees are eligible to receive awards under the Omnibus Equity Incentive Plan, the time or times at which awards may be granted, the conditions under which awards may be granted or forfeited to the Corporation, the number of Common Shares to be covered by any award, the exercise price of any award, whether restrictions or limitations are to be imposed on the Common Shares issuable pursuant to grants of any award, and the nature of any such restrictions or limitations, any acceleration of exercisability or vesting, or waiver of termination regarding any award, based on such factors as the Plan Administrator may determine.

Eligibility

All Directors, employees, and consultants of the Corporation, its subsidiary and future subsidiaries, if any, are eligible to participate in the Omnibus Equity Incentive Plan (referred to as "Participants"). The extent to which any such individual is entitled to receive a grant of an award pursuant to the Omnibus Equity Incentive Plan will be determined in the sole and absolute discretion of the Plan Administrator.

Types of Awards

Awards of Options, RSUs, PSUs, DSUs, and other share-based awards may be made under the Omnibus Equity Incentive Plan, as further summarized below. All of the awards described below are subject to the conditions, limitations, restrictions, exercise price, vesting, settlement, and forfeiture provisions determined by the Plan Administrator, in its sole discretion, subject to such limitations provided in the Omnibus Equity Incentive Plan and will generally be evidenced by an award agreement. In addition, subject to the limitations provided in the Omnibus Equity Incentive Plan and in accordance with applicable law, the Plan Administrator may accelerate or defer the vesting or payment of awards, cancel, or modify outstanding awards, and waive any condition imposed with respect to awards or Common Shares issued pursuant to awards.

Options

An Option entitles a holder thereof to purchase a prescribed number of treasury Common Shares at an exercise price set at the time of the grant. The Plan Administrator will establish the exercise price at the time each Option is granted, which exercise price must in all cases be not less than the five-day volume weighted average closing price (the "5-day VWAP") of the Common Shares on the TSX for the five trading days immediately preceding the date of grant (for the purposes of this section, the "Market Price"). Subject to any accelerated termination as set forth in the Omnibus Equity Incentive Plan, each Option expires on its respective expiry date. The Plan Administrator will have the authority to determine the vesting terms applicable to grants of Options. Once an Option becomes vested, it shall remain vested and shall be exercisable until expiration or termination of the Option, unless otherwise specified by the Plan Administrator, or as otherwise set forth in any written employment agreement, award agreement or other written agreement between the Corporation and the Participant. The Plan Administrator has the right to accelerate the date upon which any Option becomes exercisable. The Plan Administrator may provide at the time of granting an Option that the exercise of that Option is subject to restrictions, in addition to those specified in the Omnibus Equity Incentive Plan, such as vesting conditions relating to the attainment of specified performance goals.

Unless otherwise specified by the Plan Administrator at the time of granting an Option and set forth in the particular award agreement, an exercise notice must be accompanied by payment of the exercise price. A Participant may, with the consent of the Corporation, in lieu of exercising an Option pursuant to an exercise notice, elect to surrender such Option to the Corporation (a "Cashless Exercise") in consideration for an amount from the Corporation equal to (i) the Market Price of the Common Shares issuable on the exercise of such Option (or portion thereof) as of the date such Option (or portion thereof) is exercised, less (ii) the aggregate exercise price of the Option (or portion thereof) surrendered relating to such Common Shares (the "In-the-Money Amount") by written notice to the Corporation indicating the number of Options such participant wishes to exercise using the Cashless Exercise, and such other information that the Corporation may require. Subject to the provisions of the Omnibus Equity Incentive Plan, the Corporation will satisfy payment of the In-the-Money Amount by delivering to the participant such number of Common Shares having a fair market value equal to the In-the-Money Amount.

Restricted Share Units

An RSU is a unit equivalent in value to a Share credited by means of a bookkeeping entry in the books of the Corporation which entitles the holder to receive one Share (or the value thereof) for each RSU after a specified vesting period. The Plan Administrator may, from time to time, subject to the provisions of the Omnibus Equity Incentive Plan and such other terms and conditions as the Plan Administrator may prescribe, grant RSUs to any participant in respect of a payment for services rendered by the applicable participant in a taxation year.

The number of RSUs (including fractional RSUs) granted at any particular time under the Omnibus Equity Incentive Plan will be calculated by dividing (a) the amount of the payment that is to be paid in RSUs, as determined by the Plan Administrator, by (b) the greater of (i) the Market Price of a Share on the date of grant and (ii) such amount as determined by the Plan Administrator in its sole discretion. The Plan Administrator shall have the authority to determine any vesting terms applicable to the grant of RSUs.

Upon settlement, holders will redeem each vested RSU for one Share in respect of each vested RSU (or, at the election of the holder and subject to the approval of the Plan Administrator, a cash payment or a combination of Common Shares and cash). Any such cash payments made by the Corporation shall be calculated by multiplying the number of RSUs to be redeemed for cash by the Market Price per Share as at the settlement date.

Performance Share Units

A PSU is a unit equivalent in value to a Share credited by means of a bookkeeping entry in the books of the Corporation which entitles the holder to receive one Share (or the value thereof) for each PSU after specific performance-based vesting criteria determined by the Plan Administrator, in its sole discretion, have been satisfied. The performance goals to be achieved during any performance period, the length of any performance period, the amount of any PSUs granted, the effect of termination of a participant's service and the amount of any payment or transfer to be made pursuant to any PSU will be determined by the Plan Administrator and by the other terms and conditions of any PSU, all as set forth in the applicable award agreement. The Plan Administrator may, from time to time, subject to the provisions of the Omnibus Equity Incentive Plan and such other terms and conditions as the Plan Administrator may prescribe, grant PSUs to any participant in respect of a bonus or similar payment in respect of services rendered by the applicable participant in a taxation year (the "PSU Service Year").

The Plan Administrator shall have the authority to determine any vesting terms applicable to the grant of PSUs. Upon settlement, holders will redeem each vested PSU for the following at the election of such holder but subject to the approval of the Plan Administrator: (a) one Share in respect of each vested PSU, (b) a cash payment, or (c) a combination of Common Shares and cash. Any such cash payments made by the Corporation to a participant shall be calculated by multiplying the number of PSUs to be redeemed for cash by the Market Price per Share as at the settlement date. Subject to the provisions of the Omnibus Equity Incentive Plan and except as otherwise provided in an award agreement, no settlement date for any PSU shall occur, and no Share shall be issued or cash payment shall be made in respect of any PSU any later than the final business day of the third calendar year following the applicable PSU Service Year.

Deferred Share Units

A DSU is a unit equivalent in value to a Share credited by means of a bookkeeping entry in the books of the Corporation which entitles the holder to receive one Share (or, at the election of the holder and subject to the approval of the Plan Administrator, the cash value thereof) for each DSU on a future date. The Board may fix from time to time a portion of the total compensation (including annual retainer) paid by the Corporation to a director in a calendar year for service on the Board that are to be payable in the form of DSUs. In addition, a Participant may, with the Corporation's consent, be given, subject to the provisions of the Omnibus Equity Incentive Plan, the right to elect to receive a portion of the compensation owing to them in the form of DSUs.

Share-based Awards

The Plan Administrator may grant other types of equity-based or equity-related awards (including the grant or offer for sale of unrestricted Common Shares) in such amounts and subject to such terms and conditions, including, but not limited to, being subject to performance criteria, or in satisfaction of such obligations, as the Plan Administrator shall determine. Such awards may involve the issuance of actual Common Shares to Participants, or payment in cash or otherwise of amounts based on the value of Common Shares.

Dividend Equivalents

Except as otherwise determined by the Plan Administrator or as set forth in the particular award agreement, RSUs, PSUs, and DSUs shall be credited, in accordance with the terms of the Omnibus Equity Incentive Plan, with dividend equivalents in the form of additional RSUs, PSUs, and DSUs, as applicable, as of each dividend payment date in respect of which normal cash dividends are paid on Common Shares.

Blackout Periods

In the event an award expires, at a time when a scheduled blackout is in place or an undisclosed material change or material fact in the affairs of the Corporation exists, the expiry of such award will be the date that is ten business days after which such scheduled blackout terminates or there is no longer such undisclosed material change or material fact.

Term

While the Omnibus Equity Incentive Plan does not stipulate a specific term for awards granted thereunder, as discussed below, awards may not expire beyond ten years from its date of grant, except where Shareholder approval is received or where an expiry date would have fallen within a blackout period of the Corporation. All awards must vest and settle in accordance with the provisions of the Omnibus Equity Incentive Plan and any applicable award agreement, which award agreement may include an expiry date for a specific award.

Financial Assistance

The Omnibus Equity Compensation Plan does not provide for the Corporation to give financial assistance to facilitate the purchases under the plan.

Termination of Employment or Services

The following describes the impact of certain events upon the participants under the Omnibus Equity Plan Incentive Plan, including termination for cause, resignation, termination without cause, disability, death or retirement, subject, in each case, to the terms of a Participant's applicable employment agreement, award agreement or other written agreement:

- Termination for Cause / Resignation: Any Option or other award held by the Participant that has not been exercised, surrendered, or settled as of the Termination Date (as defined in the Omnibus Equity Incentive Plan) shall be immediately forfeited and cancelled as of the Termination Date.

- Termination without Cause: Any unvested Option or other award which would otherwise vest or become exercisable in accordance with its terms based solely on the Participant remaining in the service of the Corporation on or prior to the date that is 90 days after the Termination Date shall immediately vest. Any vested Options may be exercised by the Participant within the time period contemplated by the Omnibus Equity Incentive Plan.

- Death or Disability: Any award that is held by the Participant that has not vested as of the date of the death or disability (as defined under the Omnibus Equity Incentive Plan) of such Participant shall vest on such date. Any vested Options may be exercised by the Participant, or Participant's beneficiary or legal representative (as applicable), within the time period contemplated by the Omnibus Equity Incentive Plan.

- Retirement: Any (i) outstanding award that vests or becomes exercisable based solely on the Participant remaining in the service of the Corporation or its subsidiary will become 100% vested, and (ii) outstanding award that vests based on the achievement of Performance Goals (as defined in the Omnibus Equity Incentive Plan) that has not previously become vested shall continue to be eligible to vest based upon the actual achievement of such Performance Goals. Any vested Options may be exercised by the Participant within the time period contemplated by the Omnibus Equity Incentive Plan.

Change in Control

Under the Omnibus Equity Incentive Plan, except as may be set forth in an employment agreement, award agreement or other written agreement between the Corporation or a subsidiary of the Corporation and a participant:

(a) If within 12 months following the completion of a transaction resulting in a Change in Control (as defined in the Omnibus Equity Inventive Plan), a Participant's employment, consultancy or directorship is terminated by the Corporation or a subsidiary of the Corporation without Cause (as defined in the Omnibus Equity Incentive Plan), without any action by the Plan Administrator:

  (i) any unvested awards held by the participant at Termination Date shall immediately vest; and

  (ii) any vested awards may be exercised, surrendered to the Corporation, or settled by the participant at any time during the period that terminates on the earlier of: (A) the expiry date of such award; and (B) the date that is 90 days after the Termination Date. Any award that has not been exercised, surrendered, or settled at the end of such period being immediately forfeited and cancelled.

(b) Unless otherwise determined by the Plan Administrator, if, as a result of a Change in Control, the Common Shares will cease trading on the TSX, the Corporation may terminate all of the awards, other than an Option held by a participant that is a resident of Canada for the purposes of the *Income Tax Act* (Canada), granted under the Omnibus Equity Incentive Plan at the time of and subject to the completion of the Change in Control transaction by paying to each holder at or within a reasonable period of time following completion of such Change in Control transaction an amount for each Award equal to the fair market value of the award held by such participant as determined by the Plan Administrator, acting reasonably.

Non-Transferability of Awards

Except as permitted by the Plan Administrator and to the extent that certain rights may pass to a beneficiary or legal representative upon death of a participant, by will or as required by law, no assignment or transfer of awards, whether voluntary, involuntary, by operation of law or otherwise, vests any interest or right in such awards whatsoever in any assignee or transferee and immediately upon any assignment or transfer, or any attempt to make the same, such awards will terminate and be of no further force or effect. To the extent that certain rights to exercise any portion of an outstanding award pass to a beneficiary or legal representative upon the death of a participant, the period in which such award can be exercised by such beneficiary or legal representative shall not exceed one year from the Participant's death.

Amendments to the Omnibus Equity Incentive Plan

The Plan Administrator may also from time to time, without notice and without approval of the holders of voting Common Shares, amend, modify, change, suspend or terminate the Omnibus Equity Incentive Plan or any awards granted pursuant thereto as it, in its discretion, determines appropriate, provided that (a) no such amendment, modification, change, suspension or termination of the Omnibus Equity Incentive Plan or any award granted pursuant thereto may materially impair any rights of a participant or materially increase any obligations of a participant under the Omnibus Equity Incentive Plan without the consent of such participant, unless the Plan Administrator determines such adjustment is required or desirable in order to comply with any applicable securities laws or stock exchange requirements, and (b) any amendment that would cause an award held by a U.S. taxpayer to be subject to the income inclusion under Section 409A of the United States Internal Revenue Code of 1986, as amended, shall be null and void *ab initio*.

Notwithstanding the above, and subject to the rules of the TSX, the approval of Shareholders will be required to effect any of the following amendments to the Omnibus Equity Incentive Plan:

(a) increasing the number of Common Shares reserved for issuance under the Omnibus Equity Incentive Plan, except pursuant to the provisions in the Omnibus Equity Incentive Plan which permit the Plan Administrator to make equitable adjustments in the event of transactions affecting the Corporation or its capital;

(b) increasing or removing the 10% limits on Common Shares issuable or issued to insiders;

(c) reducing the exercise price of an option award (for this purpose, a cancellation or termination of an award of a participant prior to its expiry date for the purpose of reissuing an award to the same participant with a lower exercise price shall be treated as an amendment to reduce the exercise price of an award) except pursuant to the provisions in the Omnibus Equity Incentive Plan which permit the Plan Administrator to make equitable adjustments in the event of transactions affecting the Corporation or its capital;

(d) extending the term of an Option award beyond the original expiry date (except where an expiry date would have fallen within a blackout period applicable to the participant or within ten business days following the expiry of such a blackout period);

(e) permitting an Option award to be exercisable beyond ten years from its date of grant (except where an expiry date would have fallen within a blackout period);

(f) permitting awards to be transferred to a person;

(g) changing the eligible Participants; and

(h) deleting or otherwise limiting the amendments which require approval of the Shareholders.

Except for the items listed above, amendments to the Omnibus Equity Incentive Plan will not require Shareholder approval. Such amendments include (but are not limited to): (a) amending the general vesting provisions of an award, (b) amending the provisions for early termination of awards in connection with a termination of employment or service, (c) adding covenants of the Corporation for the protection of the Participants, (d) amendments that are desirable as a result of changes in law in any jurisdiction where a Participant resides, and (e) curing or correcting any ambiguity or defect or inconsistent provision or clerical omission or mistake or manifest error.

Equity Compensation Plan

The Corporation's Equity Compensation Plan dated June 1, 2020 is a "rolling" stock option plan that allows the Corporation to grant Share-Based Awards as well. "Award" means, individually or collectively, a grant under this Equity Compensation Plan of either options or share-based awards, in each case subject to the terms of the Equity Compensation Plan. A description of the Equity Compensation Plan in accordance with the disclosure requirements of the TSX is set out below. Due to adoption of the Omnibus Equity Incentive Plan, no further Options or share-based awards will be granted under the Equity Incentive Plan.

Eligible Participants: Directors, Employees, and Service Providers (as those terms are defined in the Equity Compensation) are eligible to be granted options and share-based awards under the Equity Compensation Plan and are Participants.

Plan Maximum: The number of Common Shares which may be issued pursuant to options granted under the Equity Compensation Plan may not exceed 10% of the issued Common Shares from time to time. Common Shares covered by an option that have been exercised, terminated, or expired shall again be available for an option grant. The maximum number of Share-Based Awards granted or issued in any fiscal year shall not exceed 3% of the issued and outstanding Common Shares of the corporation on the first day of such fiscal year.

Outstanding Securities Awarded: As of February 29, 2024, the total number of Common Shares issuable upon exercise of options granted under the Equity Compensation Plan is 260,000 Common Shares (representing approximately 0.38% of the Common Shares outstanding).

Remaining Securities Available for Grant: Due to adoption of the Omnibus Equity Incentive Plan, no further Options or share-based awards will be granted under the Equity Compensation Plan.

Limitations on Grants: The aggregate number of Common Shares issuable to insiders of the Corporation within any one-year period under the Equity Compensation Plan, or when combined with all of the Corporation's other security-based compensation arrangements, shall not exceed 13% of the Corporation's total issued and outstanding Common Shares. The number of Common Shares which may be issuable pursuant to exercise of Options shall not exceed 10% of issued Common Shares from time to time. The maximum number of Share-Based Awards granted or issued in any fiscal year shall not exceed 3% of the issued Common Shares, on the first day of such fiscal year. The aggregate number of Common Shares reserved for issuance to insiders of the Corporation at any time under the Equity Compensation Plan, or when combined with all of the Corporation's other security-based compensation arrangements, shall not exceed 10% of the Corporation's total issued and outstanding Common Shares.

Exercise Price: The exercise price of the Common Shares covered by each Option is determined by the Board. While the Common Shares are listed on the TSX, the exercise price shall not be less than the "Market Price" of the Common Shares at the time the option is granted. "Market Price" is defined in the Equity Compensation Plan as the closing price of the Common Shares on the TSX, or another stock exchange where the majority of the trading volume and value of the Common Shares occurs, on the day immediately preceding the relevant date.

Vesting: The Equity Compensation Plan provides that an option may be exercised (in each case to the nearest full share) during the term of the Option as follows: (a) one-third on the first anniversary of the date of the Option certificate relating to the options; (b) one-third on the second anniversary of the date of the option certificate; and (c) the remaining one-third shall vest on the third anniversary of the date of the option certificate.

Term of Options: Subject to the termination and change of control provisions noted below, the term of any option granted under the Equity Compensation Plan is determined by the Board and may not exceed ten years from the date of grant. Should the expiry date for an option fall within a blackout period or within nine business days following the expiration of a blackout period, such expiry date shall be automatically extended without any further act or formality to that date which is the tenth business day after the end of the blackout period, such tenth business day to be considered the expiry date for such option for all purposes under the Equity Compensation Plan. A "blackout period" is a period during which designated persons cannot trade Common Shares of the Corporation pursuant to any policy of the Corporation respecting restrictions on trading.

Termination: If the Participant is a director, Employee, or Service Provider of the Corporation and ceases to be such, other than by reason of death, then the expiry date of the Option is 90 days following the termination date, provided that, the Board has the discretion to waive the 90-day termination requirement, to permit the Participant to exercise any options for the full term of the Options, unless the Participant is terminated as a result of certain specified circumstances (including termination for cause for Employees and Service Providers) in which case the expiry date will be the date the Participant is terminated.

In the event of the death of a Participant, the Participant's Option may be exercised only within one year next succeeding such death and then only (i) by the person or persons to whom the Participant's rights under the Option shall pass by the Participant's will or the laws of descent and distribution, and (ii) to the extent that the Participant was entitled to exercise the Option at the date of death.

Change of Control: In the event of an actual or potential change of control, the Board has the right to deal with any Awards in the manner it deems equitable and appropriate in the circumstances, including the right to: (i) determine that any Awards will remain in full force and effect in accordance with their terms after the change of control; (ii) cause any Awards to be converted or exchanged for options to acquire shares of another entity involved in the change of control, having the same value and terms and conditions as the Awards; (iii) accelerate the vesting of any unvested Awards; (iv) provide Participants with the right to surrender any Awards for an amount per underlying Share equal to the positive difference, if any, between the fair market value of the Share on the date of surrender and the Award exercise price of such Awards; and (v) accelerate the date by which any Awards must be exercised.

Assignability: The benefits, rights, and Awards accruing to any Participant in accordance with the terms and conditions of the Equity Compensation Plan are not transferable or assignable. During the lifetime of a Participant any benefits, rights, and Awards may only be exercised by the Participant.

Amendment Provisions: The Equity Compensation Plan provides that the Board may from time to time amend the Equity Compensation Plan and the terms and conditions of any Award granted thereunder, provided that any such amendment, modification, or change to the provisions of the Equity Compensation Plan shall: (a) not adversely alter or impair any Award previously granted except as permitted by the adjustment provisions in the Equity Compensation Plan; (b) be subject to any regulatory approvals, where required, including the approval of the TSX, where necessary; (c) be subject to Shareholder approval in accordance with the rules of the TSX in circumstances where the amendment, modification, or change to the Equity Compensation Plan would (i) reduce the exercise price of an option held by an insider of the Corporation; (ii) extend the term of an Award held by an insider of the Corporation beyond the original term of the Award (other than pursuant to the blackout-period provisions); (iii) amend to remove or to exceed the insider participation limits in the Equity Compensation; (iv) increase the fixed maximum percentage of issued and outstanding Common Shares which may be issued pursuant to the Equity Compensation Plan or change from a fixed maximum percentage of issued and outstanding Common Shares to a fixed maximum number of Common Shares; or (v) amend the amendment provisions and (d) not be subject to Shareholder approval in circumstances where the amendment, modification, or change to the Equity Compensation Plan or Award would (i) be of a "housekeeping nature"; (ii) be necessary for Awards to qualify for favourable treatment under applicable tax laws; (iii) alter, extend, or accelerate any vesting terms or condition in the Equity Compensation Plan or any option; (iv) introduce, amend or modify any mechanics for exercising any Award (including relating to a cashless exercise feature or an automatic exercise feature); (v) change the term of an Award or change any termination provision in the Equity Compensation Plan or any Award (for example, relating to termination of employment, resignation, retirement, or death), provided that such change does not entail an extension beyond the original term of such option (other than such period being extended by virtue of the blackout provisions); (vi) introduce a share appreciation right feature payable in cash or Common Shares, provided that such feature provides for a full deduction of the number of underlying Common Shares from the Equity Compensation Plan maximum as applicable; (vii) change the application of the adjustment or change of control provisions; (viii) add a form of financial assistance or amend a financial assistance provision which is adopted; or (ix) change the eligible participants under the Equity Compensation Plan.

Financial Assistance: The Equity Compensation Plan does not provide for the Corporation to give financial assistance to facilitate the purchase of Common Shares under the Equity Compensation Plan.

Taxes and Source Deductions: The Equity Compensation Plan provides that the Corporation or any subsidiary may take such reasonable steps for the deduction and withholding of any taxes and other required source deductions that the Corporation or the subsidiary, as the case may be, is required by any law or regulation of any governmental authority whatsoever to withhold, deduct, or remit in connection with the Equity Compensation Plan, any exercise or surrender of any option, or a portion thereof, by a Participant or any issuance of Common Shares to a Participant.

In addition, the delivery of any Common Shares to be issued to a Participant on the exercise or termination of options by the Participant, may be made conditional upon the Participant (or other person) reimbursing or compensating the Corporation or making arrangements satisfactory to the Corporation for the payment to it in a timely manner of all taxes required to be remitted for the account of the Participant.

During the 2021 fiscal year, the Corporation adopted the Omnibus Equity Incentive Plan which replaced the Equity Compensation Plan. No further grants will be made under the Equity Compensation Plan.

6.F. Disclosure of a registrant's action to recover erroneously awarded compensation

Not applicable.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

7.A. Major Shareholders

See Item 6.E. above.

7.B. Related Party Transactions

Except as otherwise set out herein, there are no material interests, direct or indirect, of any Director, executive officer, person who beneficially owns, or controls or directs, directly or indirectly, more than 10% of the outstanding Common Shares, or any known associates or affiliates of such persons, in any transaction within the last three completed financial years or during the current financial year which has materially affected or is reasonably expected to materially affect the Corporation.

We have entered into employment contracts with each of our senior management members (see Item 10.C).

Since the beginning of the fiscal year ended December 31, 2023, the Corporation entered into research and development transactions worth $1,012,929 in the aggregate to be paid over a period of approximately one year with Dalton Chemical Laboratories, Inc. operating as Dalton, that is an entity related to a Director (Peter Pekos). Mr. Pekos was the CEO of Dalton in 2023 prior to retiring. Cardiol entered into an exclusive master services agreement with Dalton for the exclusive supply of pharmaceutical cannabidiol which is filed as Exhibit 4.4 hereto, and Cardiol has subcontracted the manufacturing of its drug product candidates to Dalton.

7.C. Interests of Experts and Counsel

Not applicable.

ITEM 8. FINANCIAL INFORMATION

8.A. Consolidated Statements and Other Financial Information

The audited consolidated financial statements for the years ended December 31, 2021, 2022 and 2023 can be found under "Item 18. Financial Statements".

8.B. Significant Changes

We are not aware of any significant change that has occurred since December 31, 2023, the date of the audited consolidated financial statements included in this Annual Report, and that has not been disclosed elsewhere in this Annual Report.

ITEM 9. THE OFFER AND LISTING.

9.A. Offer and Listing Details

The Common Shares are listed and posted for trading on each of the TSX and Nasdaq under the trading symbol "CRDL".

9.B. Plan of Distribution

Not applicable.

9.C. Markets

A discussion of all stock exchanges and other regulated markets on which our securities are listed is provided under "Item 9.A. Offer and Listing Details."

9.D. Selling Shareholders

Not applicable.

9.E. Dilution

Not applicable.

9.F. Expenses of the Issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

10.A. Share Capital

Not applicable.

10.B. Memorandum and Articles of Association

Incorporation

The Corporation was incorporated under the *Business Corporations Act* (Ontario) (the "**OBCA**") on January 19, 2017. The Corporation has one wholly owned subsidiary, Cardiol Therapeutics USA Inc., incorporated under the laws of Delaware on March 30, 2022.

Objects and Purposes of the Corporation

Our articles do not contain and are not required to contain a description of our objects and purposes. There is no restriction contained in our articles on the business that we may carry on. Our corporation number in Ontario is 2556983.

Board of Directors

Pursuant to our by-laws and the OBCA, a director or officer who is a party to, or who is a director or officer of, or has a material interest in, any person who is a party to, a material contract or transaction, or proposed material contract or transaction with the Corporation, shall disclose in writing to the Corporation or request to have entered in the minutes of the meeting of Directors the nature and extent of his interest at the time and in the manner provided by the OBCA. Any such contract or transaction or proposed contract or transaction shall be referred to the Board or shareholders for approval and a director interested in a contract or transaction so referred to the Board shall not vote on any resolution to approve the same unless the contract or transaction except as provided for under the OBCA.

Directors shall be paid such remuneration for their services as the Board may determine from time to time, and will be entitled to reimbursement for traveling and other expenses properly incurred by them in attending meetings of the Board or any committee thereof. Directors are not precluded from serving the Corporation in any other capacity and receiving remuneration therefor.

There is no age limit requirement respecting the retirement or non-retirement of Directors. Under our by-laws and the OBCA, the following individuals are disqualified from being a director of the Corporation: (i) a person who is less than 18 years of age; (ii) a person who has been found under the *Substitute Decisions Act*, 1992 or under the *Mental Health Act* to be incapable of managing property or who has been found to be incapable by a court in Canada or elsewhere; and (iii) a person who has the status of a bankrupt. A director is not required to hold shares of the Corporation.

Nothing in the Corporation's by-laws limits or restricts the borrowing of money by the Corporation.

Common Shares

As of the date hereof, our authorized share capital consists of an unlimited number of Common Shares, of which 68,268,708 are issued and outstanding. Refer to "Share Capital" section in Exhibit 15.1.

Under our articles, each Common Share entitles the holder to receive notice of and attend all meetings of the shareholders. Each Common Share carries the right to one vote. The holders of Common Shares are entitled to receive any dividends declared by the Corporation in respect of the Common Shares at such time and in such amount as may be determined by the Board of Directors, in its discretion. In the event of the liquidation, dissolution, or winding-up of the Corporation, whether voluntary or involuntary, holders of Common Shares are also entitled to participate, ratably, in the distribution of the assets of the Corporation, subject to the rights of the holders of any other class of shares ranking in priority to the Common Shares. No Common Shares have been issued subject to call or assessment. The Common Shares must be issued as fully paid and non-assessable, and are not subject to further capital calls by the Corporation.

10.C. Material Contracts

The following is a summary of the material contracts of Cardiol for the two years immediately preceding the filing date of this Annual Report:

1. Employment agreement, by and among the Corporation and Andrew Hamer, effective as of May 30, 2022, pursuant to which the Corporation employs Andrew Hamer as Chief Medical Officer.

Copies of the material contracts set out above are included as exhibits in Item 19 of this Annual Report.

10.D. Exchange Controls

There are currently no government laws, decrees, regulations or other legislation of Canada or the United States that restrict the export or import of capital (including the availability of cash and cash equivalents) or that affect the remittance of dividends, distributions, interest or other payments to non-residents of Canada or the United States holding our Common Shares. Any remittances of dividends to United States residents and to other non-residents are, however, subject to withholding tax. See “Taxation” below.

10.E. Taxation

Material U.S. Federal Income Tax Considerations for U.S. Holders

The following is a summary of the material U.S. federal income tax consequences relating to the ownership and disposition of Common Shares by U.S. Holders (as defined below). This discussion applies to U.S. Holders that purchase Common Shares and hold such Common Shares as capital assets (generally, property held for investment). This discussion is based on the Code, U.S. Treasury regulations promulgated thereunder and administrative and judicial interpretations thereof, all as in effect on the date hereof and all of which are subject to change, possibly with retroactive effect. This discussion does not address all of the U.S. federal income tax consequences that may be relevant to specific U.S. Holders in light of their particular circumstances or to U.S. Holders subject to special treatment under U.S. federal income tax law (such as certain financial institutions, banks, insurance companies, broker-dealers and traders in securities or other persons that generally mark their securities to market for U.S. federal income tax purposes, tax-exempt entities or government organizations, retirement plans, regulated investment companies, real estate investment trusts, certain former citizens or residents of the United States, persons who hold Common Shares as part of a “straddle, ” “hedge, ” “conversion transaction,” “synthetic security” or integrated investment, persons required to accelerate the recognition of any item of gross income with respect to the Common Shares as a result of such income being recognized on an applicable financial statement, persons that have a “functional currency” other than the U.S. dollar, persons that own directly, indirectly or through attribution 10% or more of the voting power or value of our shares, corporations that accumulate earnings to avoid U.S. federal income tax, partnerships and other pass-through entities (or arrangements treated as a partnership for U.S. federal income tax purposes), and investors in such pass-through entities). This discussion does not address any U.S. state or local or non-U.S. tax consequences or any U.S. federal estate, gift or alternative minimum tax consequences.

As used in this discussion, the term “U.S. Holder” means a beneficial owner of Common Shares that is, for U.S. federal income tax purposes, (1) an individual who is a citizen or resident of the United States, (2) a corporation (or entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia, (3) an estate the income of which is subject to U.S. federal income tax regardless of its source or (4) a trust (x) with respect to which a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all of its substantial decisions or (y) that has elected under applicable U.S. Treasury regulations to be treated as a domestic trust for U.S. federal income tax purposes.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds Common Shares, the U.S. federal income tax consequences relating to an investment in the Common Shares will depend in part upon the status and activities of such entity or arrangement and the particular partner. Any such entity or arrangement should consult its own tax advisor regarding the U.S. federal income tax consequences applicable to it and its partners of the purchase, ownership and disposition of Common Shares.

Persons considering an investment in Common Shares should consult their own tax advisors as to the particular tax consequences applicable to them relating to the purchase, ownership and disposition of Common Shares, including the applicability of U.S. federal, state and local tax laws and non-U.S. tax laws.

Passive Foreign Investment Company Consequences

In general, a corporation organized outside the United States will be treated as a PFIC for any taxable year in which either (1) at least 75% of its gross income is "passive income", or (2) at least 50% of the average value of its gross assets, determined on a quarterly basis, are assets that produce passive income or are held for the production of passive income. Passive income for this purpose generally includes, among other things, dividends, interest, royalties, rents, and gains from the sale or exchange of property that gives rise to passive income. Assets that produce or are held for the production of passive income generally include cash, even if held as working capital (subject to a limited exception for working capital held for expenses reasonably expected to be paid within 90 days) or raised in a public offering, marketable securities, and other assets that may produce passive income. Generally, in determining whether a non-U.S. corporation is a PFIC, a proportionate share of the income and assets of each corporation in which it owns, directly or indirectly, at least a 25% interest (by value) is taken into account.

Based upon the current and expected composition of our income and assets, we believe that we were a PFIC for the taxable year ended December 31, 2023 and expect that we may be a PFIC for the current taxable year. Because our PFIC status must be determined annually with respect to each taxable year and will depend on the composition and character of our assets and income, including our use of proceeds from offerings, and the value of our assets (which may be determined, in part, by reference to the market value of Common Shares, which may be volatile) over the course of such taxable year, we may be a PFIC in any taxable year. Because there are uncertainties in the application of the relevant rules and PFIC status is a factual determination made annually after the close of each taxable year, there can be no assurance that we will not be a PFIC for any future taxable year. In addition, it is possible that the U.S. Internal Revenue Service may challenge our classification of certain income and assets as non-passive, which may result in us being or becoming a PFIC in the current or subsequent years.

If we are a PFIC in any taxable year during which a U.S. Holder owns Common Shares, the U.S. Holder could be liable for additional taxes and interest charges under the "PFIC excess distribution regime" upon (1) a distribution paid during a taxable year that is greater than 125% of the average annual distributions paid in the three preceding taxable years, or, if shorter, the U.S. Holder's holding period for the Common Shares, and (2) any gain recognized on a sale, exchange or other disposition, including a pledge, of the Common Shares, whether or not we continue to be a PFIC. Under the PFIC excess distribution regime, the tax on such distribution or gain would be determined by allocating the distribution or gain ratably over the U.S. Holder's holding period for Common Shares. The amount allocated to the current taxable year (i.e., the year in which the distribution occurs or the gain is recognized) and any year prior to the first taxable year in which we are a PFIC will be taxed as ordinary income earned in the current taxable year. The amount allocated to other taxable years will be taxed at the highest marginal rates in effect for individuals or corporations, as applicable, to ordinary income for each such taxable year, and an interest charge, generally applicable to underpayments of tax, will be added to the tax.

If we are a PFIC for any year during which a U.S. Holder holds Common Shares, we must generally continue to be treated as a PFIC by that holder for all succeeding years during which the U.S. Holder holds the Common Shares, unless (i) we cease to meet the requirements for PFIC status and the U.S. Holder makes a "deemed sale" election with respect to the Common Shares or (ii) for the period immediately preceding our cessation in meeting the tests described above the Common Shares were subject to a mark-to-market election or (iii) the U.S. Holder makes a timely and effective "qualified electing fund" election ("**QEF Election**") with respect to all taxable years during such U.S. Holder's holding period in which we are a PFIC. If the deemed sale election is made, the U.S. Holder will be deemed to sell the Common Shares it holds at their fair market value on the last day of the last taxable year in which we qualified as a PFIC, and any gain recognized from such deemed sale would be taxed under the PFIC excess distribution regime. After the deemed sale election, the U.S. Holder's Common Shares would not be treated as shares of a PFIC unless we subsequently become a PFIC.

If we are a PFIC for any taxable year during which a U.S. Holder holds Common Shares and we own a non-U.S. corporate subsidiary that is also a PFIC (i.e., a lower-tier PFIC), such U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC and would be taxed under the PFIC excess distribution regime on distributions by the lower-tier PFIC and on gain from the disposition of shares of the lower-tier PFIC even though such U.S. Holder would not receive the proceeds of those distributions or dispositions. Each U.S. Holder is advised to consult its tax advisors regarding the application of the PFIC rules to any non-U.S. subsidiaries which we may own in the future.

For taxable years in which we are a PFIC, a U.S. Holder will not be subject to tax under the PFIC excess distribution regime on distributions or gain recognized on Common Shares if such U.S. Holder makes a valid "mark-to-market" election for our Common Shares. A mark-to-market election is available to a U.S. Holder only for "marketable stock." Our Common Shares will be marketable stock as long as they remain listed on the Nasdaq or the TSX and are regularly traded, other than in de minimis quantities, on at least 15 days during each calendar quarter.

If a mark-to-market election is in effect, a U.S. Holder generally would take into account, as ordinary income each year, the excess of the fair market value of Common Shares held at the end of such taxable year over the adjusted tax basis of such Common Shares. The U.S. Holder would also take into account, as an ordinary loss each year, the excess of the adjusted tax basis of such Common Shares over their fair market value at the end of the taxable year, but only to the extent of the excess of amounts previously included in income over ordinary losses deducted as a result of the mark-to-market election. The U.S. Holder's tax basis in Common Shares would be adjusted to reflect any income or loss recognized as a result of the mark-to-market election. Any gain from a sale, exchange or other disposition of Common Shares in any taxable year in which we are a PFIC would be treated as ordinary income and any loss from such sale, exchange or other disposition would be treated first as ordinary loss (to the extent of any net mark-to-market gains previously included in income) and thereafter as capital loss.

A mark-to-market election will not apply to Common Shares for any taxable year during which we are not a PFIC, but will remain in effect with respect to any subsequent taxable year in which we become a PFIC. Such election will not apply to any non-U.S. subsidiaries that we may organize or acquire in the future. Accordingly, a U.S. Holder may continue to be subject to tax under the PFIC excess distribution regime with respect to any lower-tier PFICs that we may organize or acquire in the future notwithstanding the U.S. Holder's mark-to-market election for the Common Shares.

A U.S. Holder who makes a QEF Election generally must report on a current basis its share of our net capital gain and ordinary earnings for any year in which we are a PFIC, whether or not we distribute any amounts to our shareholders. However, U.S. Holders should be aware that there can be no assurance that we will satisfy the record keeping requirements that apply to a QEF, or that we will supply U.S. Holders with information that such U.S. Holders require to report under the QEF election rules, in the event that the Corporation is a PFIC and a U.S. Holder wishes to make a QEF election.

Each U.S. person that is an investor of a PFIC is generally required to file an annual information return on IRS Form 8621 containing such information as the U.S. Treasury Department may require. The failure to file IRS Form 8621 could result in the imposition of penalties and the extension of the statute of limitations with respect to U.S. federal income tax.

The U.S. federal income tax rules relating to PFICs are very complex. Prospective U.S. investors are strongly urged to consult their own tax advisors with respect to the impact of PFIC status on the purchase, ownership and disposition of Common Shares, the consequences to them of an investment in a PFIC, any elections available with respect to the Common Shares and the IRS information reporting obligations with respect to the purchase, ownership and disposition of Common Shares of a PFIC.

Distributions

Subject to the discussion above under "— Passive Foreign Investment Company Consequences," a U.S. Holder that receives a distribution with respect to Common Shares generally will be required to include the gross amount of such distribution (before reduction for any Canadian withholding taxes withheld therefrom) in gross income as a dividend when actually or constructively received to the extent of the U.S. Holder's pro rata share of our current and/or accumulated earnings and profits (as determined under U.S. federal income tax principles). To the extent a distribution received by a U.S. Holder is not a dividend because it exceeds the U.S. Holder's pro rata share of our current and accumulated earnings and profits, it will be treated first as a tax-free return of capital and reduce (but not below zero) the adjusted tax basis of the U.S. Holder's Common Shares. To the extent the distribution exceeds the adjusted tax basis of the U.S. Holder's Common Shares, the remainder will be taxed as capital gain. Because we may not account for our earnings and profits in accordance with U.S. federal income tax principles, U.S. Holders should expect all distributions to be reported to them as dividends. Distributions on Common Shares that are treated as dividends generally will constitute income from sources outside the United States for foreign tax credit purposes and generally will constitute passive category income, such that a foreign tax credit may be available with respect to the Canadian tax paid by U.S. Holders on the distributions they receive. Such dividends will not be eligible for the "dividends received deduction" generally allowed to corporate shareholders with respect to dividends received from U.S. corporations.

Dividends paid by a "qualified foreign corporation" are eligible for taxation in the case of non-corporate U.S. Holders at a reduced long-term capital gains rate rather than the marginal tax rates generally applicable to ordinary income provided that certain requirements are met. Each non-corporate U.S. Holder is advised to consult its tax advisors regarding the availability of the reduced tax rate on dividends with regard to its particular circumstances.

A non-U.S. corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) generally will be considered to be a qualified foreign corporation (a) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information provision, or (b) with respect to any dividend it pays on Common Shares that are readily tradable on an established securities market in the United States. We believe that we qualify as a resident of Canada for purposes of, and are eligible for the benefits of, the U.S.-Canada Treaty, which the IRS has determined is satisfactory for purposes of the qualified dividend rules and that it includes an exchange of information provision, although there can be no assurance in this regard. Further, our Common Shares will generally be considered to be readily tradable on an established securities market in the United States if they remain listed on the Nasdaq. Therefore, subject to the discussion above under "— Passive Foreign Investment Company Consequences", if the U.S. Treaty is applicable, or if the Common Shares are readily tradable on an established securities market in the United States, dividends paid on Common Shares will generally be "qualified dividend income" in the hands of non-corporate U.S. Holders, provided that certain conditions are met, including conditions relating to holding period and the absence of certain risk reduction transactions.

Sale, Exchange or Other Disposition of Common Shares

Subject to the discussion above under "—Passive Foreign Investment Company Consequences," a U.S. Holder generally will recognize capital gain or loss for U.S. federal income tax purposes upon the sale, exchange or other disposition of Common Shares in an amount equal to the difference, if any, between the amount realized (i.e., the amount of cash plus the fair market value of any property received) on the sale, exchange or other disposition and such U.S. Holder's adjusted tax basis in the Common Shares. Such capital gain or loss generally will be long-term capital gain taxable at a reduced rate for non-corporate U.S. Holders or long-term capital loss if, on the date of sale, exchange or other disposition, the Common Shares were held by the U.S. Holder for more than one year. Any capital gain of a non-corporate U.S. Holder that is not long-term capital gain is taxed at ordinary income rates. The deductibility of capital losses is subject to limitations. Any gain or loss recognized by a U.S. Holder from the sale or other disposition of Common Shares will generally be gain or loss from sources within the United States for U.S. foreign tax credit purposes.

Net Investment Income "Medicare" Tax

Certain U.S. Holders that are individuals, estates or trusts and whose income exceeds certain thresholds generally are subject to a 3.8% Medicare tax on all or a portion of their net investment income, which may include their gross dividend income and net gains from the disposition of Common Shares. If you are a U.S. person that is an individual, estate or trust, you are encouraged to consult your tax advisors regarding the applicability of this Medicare tax to your income and gains in respect of your investment in Common Shares.

Information Reporting and Backup Withholding

U.S. Holders may be required to file certain U.S. information reporting returns with the IRS with respect to an investment in Common Shares, including, among others, IRS Form 8938 (Statement of Specified Foreign Financial Assets). As described above under "—Passive Foreign Investment Company Consequences", each U.S. Holder who is a shareholder of a PFIC must file an annual report containing certain information. U.S. Holders paying more than US$100,000 for Common Shares may be required to file IRS Form 926 (Return by a U.S. Transferor of Property to a Foreign Corporation) reporting this payment. Substantial penalties may be imposed upon a U.S. Holder that fails to comply with the required information reporting.

Dividends on and proceeds from the sale or other disposition of Common Shares may be reported to the IRS unless the U.S. Holder establishes a basis for exemption. Backup withholding may apply to amounts subject to reporting if the holder (1) fails to provide an accurate U.S. taxpayer identification number or otherwise establish a basis for exemption, or (2) is described in certain other categories of persons. However, U.S. Holders that are corporations generally are excluded from these information reporting and backup withholding tax rules. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules generally will be allowed as a refund or a credit against a U.S. Holder's U.S. federal income tax liability if the required information is furnished by the U.S. Holder on a timely basis to the IRS.

U.S. Holders should consult their own tax advisors regarding the backup withholding tax and information reporting rules.

EACH PROSPECTIVE INVESTOR IS URGED TO CONSULT ITS OWN TAX ADVISOR ABOUT THE TAX CONSEQUENCES TO IT OF AN INVESTMENT IN COMMON SHARES IN LIGHT OF THE INVESTOR'S OWN CIRCUMSTANCES.

10.F. Dividends and Paying Agents

Not applicable.

10.G. Statement by Experts

Not applicable.

10.H. Documents on Display

Documents concerning our Corporation referred to in this Annual Report may be viewed by appointment during normal business hours at our registered and records office at 602-2265 Upper Middle Road East, Oakville, Ontario, L6H 0G5, or by fax at (905) 481-2394.

10.I. Subsidiary Information

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Corporation's activities expose it to a variety of financial risks: credit risk, liquidity risk, and market risk (including interest rate and foreign currency risk).

(i) Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The Corporation's financial instruments that are exposed to concentrations of credit risk relate primarily to cash and cash equivalents and accounts receivable.

(ii) Liquidity risk

Liquidity risk is the risk that the Corporation encounters difficulty in meeting its obligations associated with financial liabilities. Liquidity risk includes the risk that, as a result of operational liquidity requirements, the Corporation will not have sufficient funds to settle a transaction on the due date; will be forced to sell financial assets at a value which is less than what they are worth; or may be unable to settle or recover a financial asset. Liquidity risk arises from accounts payable and accrued liabilities, and the lease liability. The Corporation limits its exposure to this risk by closely monitoring their cash flow.

The following table presents the contractual maturities of the financial liabilities as of December 31, 2023:

As at December 31, 2023	Carrying amount	Payable within 1 year	1-3 years	4-5 years	Total
Accounts payable and accrued liabilities	$ 8,041,485	$ 8,041,485	$ —	$ —	$ 8,041,485
Lease liability	$ 174,340	$ 15,808	$ 115,906	$ 42,626	$ 174,340
	$ 8,215,825	$ 8,057,293	$ 115,906	$ 42,626	$ 8,215,825

(iii) Market risk

Market risk is the risk of loss that may arise from changes in market factors, such as interest rates and foreign exchange rates.

(a) Interest rate risk

The Corporation currently does not have any short-term or long-term debt that is variable interest bearing and, as such, the Corporation's current exposure to interest rate risk is minimal. However, increases in interest rates, both domestically and internationally, could negatively affect the Corporation's cost of financing its operations and investments in the case that the Corporation is required to raise short-term or long-term debt that may be needed to fund the Corporation's operations.

(b) Foreign currency risk

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in the foreign exchange rates. The Corporation enters into foreign currency purchase transactions and has assets that are denominated in foreign currencies and thus is exposed to the financial risk of earnings fluctuations arising from changes in foreign exchange rates and the degree of volatility of these rates. The Corporation does not currently use derivative instruments to reduce its exposure to foreign currency risk. The Corporation holds balances in U.S. dollars which could give rise to exposure to foreign exchange risk. Sensitivity to a plus or minus 10% change in the foreign exchange rate of the U.S. dollar against the Canadian dollar would affect the reported loss and comprehensive loss by approximately $2,770,000 (December 31, 2022 - $4,414,000).

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

12.A. Debt Securities

Not applicable.

12.B. Warrants and Rights

Not applicable.

12.C. Other Securities

Not applicable.

12.D. American Depositary Shares

Not applicable.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

Not applicable.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Not applicable.

14.E. Use of Proceeds

Not applicable.

ITEM 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

At the end of the period covered by this Annual Report, an evaluation of the effectiveness of the design and operation of the Corporation's "disclosure controls and procedures" (as such term is defined in Rules 13a-15(e) under the Exchange Act) was carried out by the Corporation's principal executive officer and principal financial officer. Based upon that evaluation, the Corporation's CEO and CFO have concluded that, as of the end of the period covered by this report, the design and operation of the Corporation's disclosure controls and procedures are effective.

It should be noted that while the Corporation's CEO and CFO believe that the Corporation's disclosure controls and procedures provide a reasonable level of assurance that they are effective, they do not expect that the Corporation's disclosure controls and procedures will prevent all errors and fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Management Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as such term is defined in Rule 13a-15(f) and Rule 15d-15(f) under the Securities Exchange Act of 1934, as amended) and has designed such internal control over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and preparation of financial statements for external purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

In designing and evaluating the Corporation's internal control over financial reporting, the Corporation's management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its reasonable judgment in evaluating the cost-benefit relationship of possible controls and procedures. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate.

Management conducted an evaluation of the effectiveness of the Corporation's internal control over financial reporting as of December 31, 2023. In making this assessment, management used the criteria set forth in "Internal Control – Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, management concluded that the Corporation's internal control over financial reporting was effective as of December 31, 2023. The material weakness that was most recently disclosed as of September 30, 2023, has been remediated and is discussed further below.

During fiscal 2023, the Corporation determined a material weakness existed in the Corporation's ICFR with respect to certain share-based compensation paid to consultants. As a result, the Corporation has implemented certain additional controls related to accounting for complex transactions and has determined that the weakness has been remediated. When applicable, the Corporation will engage external advisors with appropriate technical accounting knowledge and experience in the application of IFRS to assist with the evaluation and documentation of accounting for complex transactions.

Attestation Report of Independent Auditor

In accordance with the JOBS Act enacted on April 5, 2012, the Corporation qualifies as an "emerging growth company," which entitles the Corporation to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not EGCs. Specifically, the JOBS Act defers the requirement to have the Corporation's independent auditor assess the Corporation's internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act. As such, the Corporation is exempted from the requirement to include an auditor attestation report in this Annual Report for so long as the Corporation remains an EGC, which may be for as long as five years following its initial registration in the United States.

Changes in Internal Control over Financial Reporting

Except as otherwise discussed above in "Management Report on Internal Controls Over Financial Reporting", during the three months and year ended December 31, 2023, there were no changes in the Corporation's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Corporation's internal control over financial reporting.

ITEM 16. [RESERVED]

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

The Corporation's Audit Committee, which consists exclusively of independent Directors in accordance with Nasdaq listing requirements, is comprised of Ms. Teri Loxam (Chair), Mr. Colin Scott and Mr. Michael J. Willner. The Board of Directors has determined that each meets the independence requirements for Directors, including the heightened independence standards for members of the audit committee under Rule 10A-3 under the Exchange Act. The Board has determined that Ms. Teri Loxam is "financially literate" within the meaning of Nasdaq listing requirements and an "audit committee financial expert" as defined by Rule 10A-3 under the Exchange Act. For a description of the education and experience of each member of the Audit Committee, see "Item 6A. Directors, Senior Management and Employees."

ITEM 16B. CODE OF ETHICS

The Corporation has adopted a Code of Business Conduct and Ethics, attached hereto as Exhibit 11.1, applicable to all of its Directors, officers and employees, including its CEO and CFO, which is a "code of ethics" as defined in section 406(c) of the Sarbanes-Oxley Act. The Code of Business Conduct and Ethics sets out the fundamental values and standards of behavior that the Corporation expects from our Directors, officers, and employees with respect to all aspects of its business.

If the Corporation grants any waiver of the Code of Business Conduct and Ethics, whether explicit or implicit, to a director or executive officer, it will be promptly disclosed as required by any applicable law or applicable rules and guidelines of any stock exchange on which the securities of the Corporation are listed.

The Corporate Governance and Compensation Committee is responsible for reviewing and evaluating the Code of Business Conduct and Ethics periodically and will recommend any necessary or appropriate changes thereto to the Board for consideration. The Corporate Governance and Compensation will also assist the Board of Directors with the monitoring of compliance with the Code of Business Conduct and Ethics.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth information regarding the amount billed and accrued to the Corporation by BDO Canada LLP, for the fiscal years ended December 31, 2022 and 2023:

Services	2022	2023
Audit Fees[1]	$ 248,000	$ 233,300
Audit-Related Fees[2]	$ nil	$ nil
Tax Fees[3]	$ 8,000	$ nil
Other Fees[4]	$ nil	$ nil
Total Fees	**$ 256,000**	**$ 233,300**

Notes:

(1) "Audit fees" means the aggregate fees billed for professional services rendered by our principal accounting firm for the audit of the Corporation's annual financial statements and the review of its comparative interim financial statements.

(2) "Audit-related fees" means the aggregate fees billed for professional services rendered by the Corporation's principal accounting firm for the assurance and related services, which mainly included the audit and review of financial statements and are not reported under "Audit fees" above.

(3) "Tax fees" means the aggregate fees billed for professional services rendered by the Corporation's principal accounting firm for tax compliance, tax advice and tax planning.

(4) "Other fees" means the aggregate fees incurred in each of the fiscal years listed for the professional tax services rendered by the Corporation's principal accounting firm other than services reported under "Audit fees," "Audit-related fees" and "Tax fees."

The policy of the Corporation's Audit Committee is to pre-approve all non-audit services provided by BDO Canada LLP, its independent registered public accounting firm, including audit services, audit-related services, tax services, and other services as described above. Pursuant to this policy, the Audit Committee pre-approved all of the services provided to us by BDO Canada LLP during the year ended December 31, 2023.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Not applicable.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

As a Canadian corporation listed on Nasdaq, we are not required to comply with certain Nasdaq corporate governance standards. Section 5615(a)(3) of the Nasdaq Stock Market Rules permits Nasdaq to grant exemptions to a foreign private issuer for certain provisions of the Rule 5600 series, Rule 5250(b)(3) and Rule 5250(d). We are organized under the laws of Ontario, Canada, and our Common Shares are listed for trading on the Toronto Stock Exchange ("TSX"). We comply with the applicable laws of Canada and rules and regulations of the TSX, including rules related to corporate governance practices. A description of the significant ways in which our corporate governance practices differ from those followed by U.S. domestic companies pursuant to the Nasdaq Stock Market Rules is as follows:

Quorum Requirements: Rule 5620(c) of the Nasdaq Stock Market Rules requires that the minimum quorum requirement for any meeting of a company's shareholders be 33 1/3% of the outstanding voting shares. In addition, Rule 5620(c) requires that an issuer listed on Nasdaq state its quorum requirement in its bylaws. Our quorum requirement for a meeting of shareholders is set forth in our By-Law No. 1, which requires at least one person holding or representing by proxy not less than 25% percent of our outstanding common shares entitled to vote at the meeting.

The foregoing is consistent with the applicable laws in Canada and the rules of the TSX.

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

ITEM 16I. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

ITEM 16J. INSIDER TRADING POLICIES

Not applicable.

ITEM 16K. CYBERSECURITY

Risk Management and Strategy

We have implemented and maintain various information security processes designed to identify, assess and manage material risks from cybersecurity threats to our critical computer networks, third party hosted services, communications systems, hardware and software, and our critical data, including intellectual property, confidential information that is proprietary, strategic or competitive in nature, and other data related to our ongoing research and development initiatives, which we refer to as Information Systems and Data.

Our information technology function helps identify, assess and manage our cybersecurity threats and risks. Our information technology function identifies and assesses risks from cybersecurity threats by monitoring and evaluating our threat environment using various methods including, for example, automated vulnerability scanning tools of the network, third-party cybersecurity audits, and use of external intelligence feeds.

Depending on the environment, we implement and maintain various technical, physical, and organizational measures, processes, standards and policies designed to manage and mitigate material risks from cybersecurity threats to our Information Systems and Data, including, for example, vulnerability management, disaster recovery and business continuity plan, incident response policy, system monitoring, data encryption and access controls.

Our assessment and management of material risks from cybersecurity threats are integrated into our overall risk management processes. For example, our information technology function works with Management to prioritize our risk management processes and mitigate cybersecurity threats that are more likely to lead to a material impact to our business and our Management evaluates material risks from cybersecurity threats against our overall business objectives and reports to the Board.

We use third-party service providers to assist us from time to time in identifying, assessing, and managing material risks from cybersecurity threats, including, for example, threat intelligence providers, cybersecurity software providers, managed cybersecurity service providers and cybersecurity testing firms.

We use third-party service providers to perform a variety of functions throughout our business, such as application providers, hosting companies and CROs. We manage cybersecurity risks associated with our use of these providers using several approaches, as deemed necessary, including security questionnaires, review of compliance reports, audits and the imposition of information security contractual obligations on vendors.

As of the date of this Annual Report, we are not aware of any risks from cybersecurity threats that have materially affected or are reasonably likely to materially affect us, including our business strategy, results of operations and financial condition.

For a description of the risks from cybersecurity threats that may materially affect us and how they may do so, see our Risk Factors in Item 3.D. of this Annual Report.

Governance

Our Board of Directors addresses our cybersecurity risk management as part of its general oversight function. The Board is responsible for overseeing our cybersecurity risk management processes, including oversight and mitigation of risks from cybersecurity threats.

Our cybersecurity risk assessment and management processes are implemented and maintained by certain members of Management of the Corporation, including our CFO, our Director of Finance and our Director of Information Technology. Management is responsible for hiring appropriate personnel, helping to integrate cybersecurity risk considerations into our overall risk management strategy, and communicating key priorities to relevant personnel. Our Management and, where applicable, the Board are responsible for approving budgets, helping prepare for cybersecurity incidents, approving cybersecurity processes, and reviewing security assessments and other security-related reports.

Our cybersecurity incident response is designed to escalate certain cybersecurity incidents to members of Management depending on the circumstances and severity of such incident, including escalation to our and President and CEO and CFO, and when necessary, to the Board. Our CEO and CFO are part of our incident response team to help us mitigate and remediate cybersecurity incidents of which they are notified. In addition, our incident response and vulnerability management policies include reporting to the Board for certain cybersecurity incidents.

PART III

ITEM 17: FINANCIAL STATEMENTS

Refer to Item 18. Financial Statements.

ITEM 18: FINANCIAL STATEMENTS

Audited Annual Consolidated Financial Statements for the years ended December 31, 2023, 2022 and 2021:

Report of Independent Registered Public Accounting Firm, dated April 1, 2024 (BDO Canada LLP; Oakville, Canada; PCAOB ID# 01227);
Consolidated Statements of Financial Position as at December 31, 2023 and 2022;
Consolidated Statements of Loss and Comprehensive Loss for the years ended December 31, 2023, 2022 and 2021;
Consolidated Statements of Changes in Equity for the years ended December 31, 2023, 2022 and 2021;
Consolidated Statements of Cash Flows for the years ended December 31, 2023, 2022 and 2021;
Notes to the Consolidated Financial Statements.

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CARDIOL THERAPEUTICS INC.
CONSOLIDATED FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2023, 2022 AND 2021
(EXPRESSED IN CANADIAN DOLLARS)

Tel: 298 881-1111
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BDO Canada LLP
360 Oakville Place Drive, Suite 500
Oakville, ON L6H 6K8

Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Cardiol Therapeutics Inc.
Oakville, Canada

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of Cardiol Therapeutics Inc. and its subsidiary (the "Corporation") as at December 31, 2023 and 2022, the related consolidated statements of loss and comprehensive loss, changes in equity, and cash flows for each of the three years in the period ended December 31, 2023, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Corporation as at December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

These consolidated financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on the Corporation's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Corporation in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Corporation is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Corporation's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ BDO Canada LLP

Chartered Professional Accounts, Licensed Public Accountants

We have served as the Corporation's auditor since 2018.

Oakville, ON Canada
April 1, 2024

Cardiol Therapeutics Inc.

Consolidated Statements of Financial Position
(Expressed in Canadian Dollars)

	As at December 31, 2023	As at December 31, 2022
ASSETS		
Current assets		
Cash and cash equivalents (note 6)	**$ 34,931,778**	$ 59,469,868
Accounts receivable	**142,745**	209,923
Other receivables	**137,127**	270,274
Prepaid expenses (note 17)	**941,442**	1,487,913
Total current assets	**36,153,092**	61,437,978
Non-current assets		
Property and equipment (note 7)	**337,058**	295,738
Intangible assets (note 8)	**210,358**	294,802
Total assets	**$ 36,700,508**	$ 62,028,518
EQUITY AND LIABILITIES		
Current liabilities		
Accounts payable and accrued liabilities (note 17)	**$ 8,041,485**	$ 9,334,158
Current portion of lease liability (note 9)	**15,808**	50,447
Derivative liability (note 10)	**238,176**	419,901
Total current liabilities	**8,295,469**	9,804,506
Non-current liabilities		
Lease liability (note 9)	**158,532**	22,424
Total liabilities	**8,454,001**	9,826,930
Equity		
Share capital (note 11)	**148,519,136**	147,545,399
Warrants (note 13)	**3,517,867**	3,517,867
Contributed surplus	**18,786,306**	15,586,832
Deficit	**(142,576,802)**	(114,448,510)
Total equity	**28,246,507**	52,201,588
Total equity and liabilities	**$ 36,700,508**	$ 62,028,518

The accompanying notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Commitments (notes 8 and 15)

Subsequent events (note 12)

Approved on behalf of the Board:

"*David Elsley*", Director "*Guillermo Torre-Amione*", Director

Cardiol Therapeutics Inc.

Consolidated Statements of Loss and Comprehensive Loss
(Expressed in Canadian Dollars)

	Year Ended December 31, 2023	Year Ended December 31, 2022	Year Ended December 31, 2021
Revenue			
Sales	**$ —**	$ —	$ 78,760
Operating expenses (notes 12, 16, 17)			
General and administration	**$ 15,561,217**	$ 22,373,798	$ 27,873,140
Research and development	**14,224,287**	18,962,080	10,870,421
Loss before other income (expenses)	**(29,785,504)**	(41,335,878)	(38,664,801)
Interest income (note 6)	**2,038,465**	1,237,632	106,001
Gain (loss) on foreign exchange	**(712,717)**	2,761,935	1,892,023
Change in derivative liability (note 10)	**181,725**	6,241,221	4,916,304
Other income (note 18)	**149,739**	164,443	112,229
Net loss and comprehensive loss for the year	**$ (28,128,292)**	$ (30,930,647)	$ (31,638,244)
Basic and diluted net loss per share (note 14)	**$ (0.44)**	$ (0.49)	$ (0.73)
Weighted average number of common shares outstanding	**64,463,087**	62,505,982	43,222,819

The accompanying notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Cardiol Therapeutics Inc.

Consolidated Statements of Cash Flows
(Expressed in Canadian Dollars)

	Year Ended December 31, 2023	Year Ended December 31, 2022	Year Ended December 31, 2021
Operating activities			
Net loss and comprehensive loss for the year	**$ (28,128,292)**	$ (30,930,647)	$ (31,638,244)
Non-cash adjustments for:			
Depreciation of property and equipment	**163,911**	135,464	135,977
Amortization of intangible assets	**84,444**	84,444	84,444
Share-based compensation (note 12)	**4,156,762**	5,013,185	8,497,830
Change in derivative liability	**(181,725)**	(6,241,221)	(4,916,304)
Unrealized foreign exchange (gain) loss on cash	**(762,039)**	(2,919,786)	11,129
Accretion on lease liability	**15,926**	9,226	12,929
Shares for services	**16,449**	525,200	4,112,647
Research expenses settled through warrant exercise	**—**	1,355,775	83,421
Changes in non-cash working capital items:			
Accounts receivable	**67,178**	(144,184)	(59,946)
Other receivables	**133,147**	71,114	(127,258)
Prepaid expenses	**546,471**	1,346,279	(2,147,333)
Inventory	**—**	—	17,968
Accounts payable and accrued liabilities	**(1,292,673)**	4,474,806	2,393,090
Net cash used in operating activities	**(25,180,441)**	(27,220,345)	(23,539,650)
Investing activities			
Purchase of property and equipment	**(64,312)**	(74,709)	(12,916)
Net cash used in investing activities	**(64,312)**	(74,709)	(12,916)
Financing activities			
Issuance of units	**—**	—	84,083,757
Share issuance costs	**—**	—	(5,240,756)
Issuance of warrants, net of issuance costs	**—**	—	8,147
Proceeds from stock options exercised	**—**	—	2,837,083
Proceeds from warrants exercised	**—**	—	11,801,263
Payment of lease liability	**(55,376)**	(53,934)	(51,916)
Net cash provided by (used in) financing activities	**(55,376)**	(53,934)	93,437,578
Net change in cash and cash equivalents	**(25,300,129)**	(27,348,988)	69,885,012
Cash and cash equivalents, beginning of year	**59,469,868**	83,899,070	14,025,187
Impact of foreign exchange on cash and cash equivalents	**762,039**	2,919,786	(11,129)
Cash and cash equivalents, end of year	**$ 34,931,778**	$ 59,469,868	$ 83,899,070

The accompanying notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Cardiol Therapeutics Inc.

Consolidated Statements of Changes in Equity
(Expressed in Canadian Dollars)

	Share capital			Contributed		
	Number	Amount	Warrants	surplus	Deficit	Total
Balance, December 31, 2020	**32,860,291**	**$ 51,923,471**	**$ 4,460,728**	**$ 8,765,773**	**$ (51,879,619)**	**$ 13,270,353**
Issuance of units	22,462,000	68,714,131	3,792,200	—	—	72,506,331
Issuance of warrants, net of issuance costs	—	—	8,147	—	—	8,147
Share issuance costs	—	(5,003,222)	(237,534)	—	—	(5,240,756)
Fair value of expired warrants	—	—	(75,886)	75,886	—	—
Options exercised	998,333	2,837,083	—	—	—	2,837,083
Fair value of options exercised	—	1,357,160	—	(1,357,160)	—	—
Warrants exercised	3,675,283	11,656,287	144,976	—	—	11,801,263
Fair value of warrants exercised	—	3,999,272	(3,999,272)	—	—	—
Shares for services	1,227,092	4,112,647	—	—	—	4,112,647
Share-based compensation (note 12)	—	—	—	8,497,830	—	8,497,830
Fair value of warrants earned	—	—	83,421	—	—	83,421
Performance share units exercised	700,000	3,322,000	—	(3,322,000)	—	—
Net loss and comprehensive loss for the year	—	—	—	—	(31,638,244)	(31,638,244)
Balance, December 31, 2021	**61,922,999**	**$ 142,918,829**	**$ 4,176,780**	**$ 12,660,329**	**$ (83,517,863)**	**$ 76,238,075**
Restricted share units exercised	376,622	526,682	—	(526,682)	—	—
Warrants exercised	503,672	2,014,688	(2,014,688)	—	—	—
Shares for services	239,243	525,200	—	—	—	525,200
Share-based compensation (note 12)	—	—	—	5,013,185	—	5,013,185
Fair value of warrants earned	—	—	1,355,775	—	—	1,355,775
Performance share units exercised	1,000,000	1,560,000	—	(1,560,000)	—	—
Net loss and comprehensive loss for the year	—	—	—	—	(30,930,647)	(30,930,647)
Balance, December 31, 2022	**64,042,536**	**$ 147,545,399**	**$ 3,517,867**	**$ 15,586,832**	**$ (114,448,510)**	**$ 52,201,588**
Restricted share units exercised	704,743	957,288	—	(957,288)	—	—
Shares for services	5,000	16,449	—	—	—	16,449
Share-based compensation (note 12)	—	—	—	4,156,762	—	4,156,762
Performance share units exercised	600,000	—	—	—	—	—
Net loss and comprehensive loss for the year	—	—	—	—	(28,128,292)	(28,128,292)
Balance, December 31, 2023	**65,352,279**	**$ 148,519,136**	**$ 3,517,867**	**$ 18,786,306**	**$ (142,576,802)**	**$ 28,246,507**

The accompanying notes to the consolidated financial statements are an integral part of these consolidated financial statements.

1. Nature of operations

Cardiol Therapeutics Inc. was incorporated under the laws of the Province of Ontario on January 19, 2017. The Corporation's registered and legal office is located at 2265 Upper Middle Rd. E., Suite 602, Oakville, Ontario, L6H 0G5, Canada.

Cardiol Therapeutics Inc. and its subsidiary (the "Corporation" or "Cardiol") 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 Corporation'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.

On December 20, 2018, the Corporation completed its initial public offering on the Toronto Stock Exchange (the "TSX"). As a result, the Corporation's common shares commenced trading on that date on the TSX under the symbol "CRDL", and on May 12, 2021, warrants commenced trading under the symbol "CRDL.WT.A". On August 10, 2021, the Corporation's common shares commenced trading on The Nasdaq Capital Market under the symbol "CRDL".

2. Material accounting policy information

(a) Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and interpretations of the International Financial Reporting Interpretations Committee ("IFRIC").

These consolidated financial statements have been prepared on a historical cost basis. In addition, these consolidated financial statements have been prepared using the accrual basis of accounting except for cash flow information.

The policies applied in these consolidated financial statements are based on IFRSs issued and outstanding as of April 1, 2024 the date the Board of Directors approved the statements.

(b) Change in accounting policies

(i) Amendment IAS 8 - Definition of accounting estimates

The Corporation adopted this amendment on January 1, 2023. The amendment introduces a definition of accounting estimates, clarifying the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. The amendment is effective for annual periods beginning on or after January 1, 2023. The adoption of this amendment had no impact on the consolidated financial statements of the Corporation.

(ii) Amendments to IAS 1 - Presentation of financial statements

The Corporation adopted these amendments on January 1, 2023. The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their significant accounting policies with a requirement to disclose their material accounting policies. The amendments provide guidance on how entities may apply the concept of materiality in making decisions about accounting policy disclosures. The adoption of these amendments had no significant impact on the consolidated financial statements of the Corporation.

(c) Basis of consolidation

These consolidated financial statements consolidate the accounts of Cardiol Therapeutics Inc. and its wholly owned subsidiary, Cardiol Therapeutics USA Inc. ("Cardiol USA"), incorporated under the laws of Delaware. Control exists when the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The subsidiary is fully consolidated from the date on which control is obtained and is de-consolidated from the date control ceases. Intercompany transactions and balances are eliminated.

2. Material accounting policy information (continued)

(d) Functional and presentation currency

These consolidated financial statements are presented in Canadian dollars, being the functional currency of the Corporation. The functional currency for the Corporation is determined by the currency of the primary economic environment in which it operates (the "functional currency").

At the end of each reporting year, monetary assets and liabilities denominated in foreign currencies are translated at the rates of exchange prevailing at that date; non-monetary assets and liabilities carried at fair value that are denominated in foreign currencies are translated at the rates of exchange prevailing at the date when fair value was determined; and non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are not retranslated. Such exchange differences arising from retranslation at year-end are recognized in the statement of loss and comprehensive loss.

(e) Financial instruments

Recognition

The Corporation recognizes a financial asset or financial liability on the statement of financial position when it becomes party to the contractual provisions of the financial instrument. Financial assets are initially measured at fair value and are derecognized either when the Corporation has transferred substantially all the risks and rewards of ownership of the financial asset, or when cash flows expire. Financial liabilities are initially measured at fair value and are derecognized when the obligation specified in the contract is discharged, cancelled, or expired.

A write-off of a financial asset (or a portion thereof) constitutes a derecognition event. A write-off occurs when the Corporation has no reasonable expectations of recovering the contractual cash flows on a financial asset.

Classification and Measurement

The Corporation determines the classification of its financial instruments at initial recognition. Financial assets and financial liabilities are classified according to the following measurement categories:

- those to be measured subsequently at fair value, either through profit or loss ("FVTPL") or through other comprehensive income ("FVTOCI"); and,
- those to be measured subsequently at amortized cost.

The classification and measurement of financial assets after initial recognition at fair value depends on the business model for managing the financial asset and the contractual terms of the cash flows. Financial assets that are held within a business model whose objective is to collect the contractual cash flows, and that have contractual cash flows that are solely payments of principal and interest on the principal outstanding, are generally measured at amortized cost at each subsequent reporting period. All other financial assets are measured at their fair values at each subsequent reporting period, with any changes recorded through profit or loss or through other comprehensive income (which designation is made as an irrevocable election at the time of recognition).

After initial recognition at fair value, financial liabilities are classified and measured at either:

- amortized cost;
- FVTPL, if the Corporation has made an irrevocable election at the time of recognition, or when required (for items such as instruments held for trading or derivatives); or,
- FVTOCI, when the change in fair value is attributable to changes in the Corporation's credit risk.

The Corporation reclassifies financial assets when and only when its business model for managing those assets changes. Financial liabilities are not reclassified.

2. Material accounting policy information (continued)

(e) Financial instruments (continued)

Classification and Measurement (continued)

Transaction costs that are directly attributable to the acquisition or issuance of a financial asset or financial liability classified as subsequently measured at amortized cost are included in the fair value of the instrument on initial recognition. Transaction costs for financial assets and financial liabilities classified at fair value through profit or loss are expensed in profit or loss.

The Corporation's financial assets consist of cash and cash equivalents and accounts receivable, which are classified and measured at amortized cost. The Corporation's financial liabilities consist of accounts payable and accrued liabilities, and lease liability which are classified and measured at amortized cost, and derivative liabilities which are classified and measured at FVTPL.

Impairment

The Corporation assesses all information available, including on a forward-looking basis the expected credit losses associated with any financial assets carried at amortized cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk. To assess whether there is a significant increase in credit risk, the Corporation compares the risk of a default occurring on the asset as at the reporting date with the risk of default as at the date of initial recognition based on all information available, and reasonable and supportive forward-looking information.

(f) Impairment of non-financial assets

At the end of each reporting period, the Corporation reviews the carrying amounts of its non-financial assets to determine whether there is any indication that those assets have suffered an impairment loss. Where such an indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. The recoverable amount is the higher of an asset's fair value less cost to sell and its value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. An impairment loss is recognized immediately in the statement of loss and comprehensive loss.

(g) Property and equipment

Property and equipment are stated at cost, less accumulated depreciation and accumulated impairment losses. The initial cost of an asset comprises its purchase price or construction cost, any costs directly attributable to bringing the asset into operation, the initial estimate of the rehabilitation obligation, and for qualifying assets, borrowing costs. The purchase price or construction cost is the aggregate amount paid and fair value of any other consideration given to acquire the asset. When parts of an item of property and equipment have different useful lives, they are accounted for as separate items (major components) of property and equipment.

Property and equipment are amortized as follows:

Computer equipment	30% per annum
Office equipment	20% per annum
Equipment	30% per annum
Right-of-use asset	straight-line basis over the term of the lease
Leasehold improvements	straight-line basis over the term of the lease

2. Material accounting policy information (continued)

(g) Property and equipment (continued)

An item of property and equipment and any significant part initially recognized is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the statement of loss and comprehensive loss when the asset is derecognized. The assets' residual values, useful lives, and methods of depreciation are reviewed each reporting period, and adjusted prospectively if appropriate.

(h) Cash and cash equivalents

Cash and cash equivalents in the statements of financial position comprise cash at banks and short-term bank deposits with original maturity of three months or less. The Corporation's cash is invested with major financial institutions in business accounts that are available on demand by the Corporation for its programs.

(i) Research and development costs

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is expensed as incurred. Development activities involve a plan or design for the production of new or substantially improved products and processes. A development expenditure is capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable and the Company intends to and has sufficient resources to complete development and to use or sell the asset. These criteria are usually met when a regulatory filing has been made in a major market and approval is considered highly probable. The expenditure capitalized includes the cost of materials, direct labour, and overhead costs that are directly attributable to preparing the asset for its intended use.

During the years ended December 31, 2023, 2022 and 2021, no development expenditures were capitalized.

(j) Income taxes

Income tax on the profit or loss for the years presented comprises current and deferred tax. Income tax is recognized in profit or loss except to the extent that it relates to items recognized directly in equity, in which case it is recognized in equity.

Current tax expense is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at year end, adjusted for amendments to tax payable with regards to previous years.

Deferred tax is provided using the asset and liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Temporary differences are not provided for goodwill not deductible for tax purposes and the initial recognition of assets or liabilities that affect neither accounting nor taxable profit. The amount of deferred tax provided is based on the expected manner of realization or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the financial position reporting date.

A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be utilized. To the extent that the Corporation does not consider it probable that a deferred tax asset will be recovered, it provides a valuation allowance against that excess.

(k) Loss per share

The Corporation presents basic and diluted loss per share data for its common shares, calculated by dividing the loss attributable to common shareholders of the Corporation by the weighted average number of common shares outstanding during the year. Diluted loss per share is determined by adjusting the loss attributable to common shareholders and the weighted average number of common shares outstanding for the effects of all instruments outstanding that may add to the total number of common shares.

2. Material accounting policy information (continued)

(l) Intangible assets

Intangible assets are stated at cost, less accumulated amortization and accumulated impairment losses. Intangible assets with finite useful lives are amortized over their estimated useful lives. The exclusive global license's useful life is 9 years.

(m) Share-based transactions

The fair value of share-based transactions are recognized as an expense with a corresponding increase in equity. An individual is classified as an employee when the individual is an employee for legal or tax purposes (direct employee) or provides services similar to those performed by a direct employee, including directors of the Corporation.

The fair value of awards issued to employees are measured at the grant date and recognized on a graded-vesting basis over the period during which the awards vest. Awards issued to non-employees are measured at the fair value of the goods or services received or the fair value of the equity instruments issued if it is determined the fair value of the goods or services cannot be reliably measured, and are recorded at the date the goods or services are received. The fair value of the awards granted to employees is measured using the Black-Scholes option pricing model, taking into account the terms and conditions upon which the awards were granted. Consideration paid for the shares on the exercise of share-based payment is credited to share capital. At each financial position reporting date, the amount recognized as an expense is adjusted to reflect the actual number of awards that are expected to vest.

(n) Investment tax credits

The investment tax credits ("ITC") are amounts considered recoverable from the Canadian federal and provincial governments under the Scientific Research & Experimental Development ("SR&ED") incentive program. The amounts claimed under the program represent amounts based on management estimates of eligible research and development costs incurred during the year. Realization is subject to government approval. Refundable ITCs claimed relating to qualifying expenditures are recorded to other income.

3. Significant accounting judgements and estimates

The preparation of these consolidated financial statements requires management to make certain estimates, judgments, and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and reported amounts of expenses during the reporting period. Actual outcomes could differ from these estimates. These consolidated financial statements include estimates that, by their nature, are uncertain. The impacts of such estimates are pervasive throughout the consolidated financial statements and may require accounting adjustments based on future occurrences. Revisions to accounting estimates are recognized in the period in which the estimate is revised and in future periods, if the revision affects both current and future periods. These estimates are based on historical experience, current and future economic conditions, and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Critical accounting estimates

Significant assumptions about the future that management has made that could result in a material adjustment to the carrying amounts of assets and liabilities, in the event that actual results differ from assumptions made, relate to, but are not limited to, the following:

- the inputs used in the Black-Scholes valuation model, including unobservable assumptions when the Corporation was private at the time of issuance of certain equity instruments (share price and volatility), in accounting for share-based payment transactions;
- the valuation of performance share units;
- the valuation of the derivative liability;
- the estimate of the percentage of completion of certain research and development agreements;
- the valuation of income tax accounts; and
- the initial valuation and estimated useful lives of intangible assets.

Critical accounting judgments

- management applied judgment in determining the functional currency of the Corporation as Canadian dollars;
- management applied judgment in determining whether performance conditions on share-based awards were market or non-market, and whether the fair value of the goods or services provided by certain non-employees could be reliably measured;
- management applied judgment in determining the Corporation's ability to continue as a going concern. The Corporation has incurred significant losses since inception. Management determined that a material going concern uncertainty does not exist due to the sufficient working capital to support their planned expenditure levels. Further financing may come from product sales, licensing arrangements, research and commercial development partnerships, government grants, and/or corporate finance arrangements; and
- management's assessment that no impairment exists for intangible assets, based on the facts and circumstances that existed during the period.

4. Capital risk management

The Corporation manages its capital to ensure sufficient financial flexibility to achieve the ongoing business objectives including research activities, funding of future growth opportunities and pursuit of acquisitions.

The Corporation monitors its capital structure and makes adjustments according to market conditions in an effort to meet its objectives given the current outlook of the business and industry in general. The Corporation may manage its capital structure by issuing new shares, repurchasing outstanding shares, adjusting capital spending, or disposing of assets. The capital structure is reviewed by management and the Board of Directors on an ongoing basis.

The Corporation considers its capital to be equity, comprising share capital, warrants, and contributed surplus less accumulated deficit, which at December 31, 2023 totaled $28,246,507 (December 31, 2022 - $52,201,588).

The Corporation manages capital through its financial and operational forecasting processes. The Corporation reviews its working capital and forecasts its future cash flows based on operating expenditures, and other investing and financing activities. The forecast is updated based on activities related to its research programs and reviewed with the Board of Directors of the Corporation.

The Corporation is not currently subject to any capital requirements imposed by a lending institution or regulatory body. The Corporation expects that its capital resources will be sufficient to discharge its liabilities as of the current statement of financial position date.

5. Financial instruments and risk management

Fair value

The Corporation provides information about its financial instruments measured at fair value at one of three levels according to the relative reliability of the inputs used to estimate the fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The three levels of the fair value hierarchy are as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than quotes prices included in Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices); and
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The Corporation's derivative liabilities are measured at fair value Level 3 (see note 10). The fair value of all other financial instruments approximates their carrying amounts due to the relatively short period to maturity.

Financial risks

The Corporation's activities expose it to a variety of financial risks: credit risk, liquidity risk, and market risk (including interest rate and foreign currency risk).

There were no changes to credit risk, liquidity risk, or market risk for the year ended December 31, 2023.

Risk management is carried out by the Corporation's management team under policies approved by the Board of Directors. The Board of Directors also provides regular guidance for overall risk management.

5. Financial instruments and risk management (continued)

Financial risks (continued)

(i) Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The Corporation's financial instruments that are exposed to concentrations of credit risk relate primarily to cash and cash equivalents and accounts receivable.

The Corporation mitigates its risk by maintaining its funds with large reputable financial institutions, from which management believes the risk of loss to be minimal. Accounts receivable includes interest receivable relating to guaranteed investment certificates held with large reputable financial institutions, as well as trade receivables. The Corporation's management considers that all the above financial assets are of good credit quality.

(ii) Liquidity risk

Liquidity risk is the risk that the Corporation encounters difficulty in meeting its obligations associated with financial liabilities. Liquidity risk includes the risk that, as a result of operational liquidity requirements, the Corporation will not have sufficient funds to settle a transaction on the due date; will be forced to sell financial assets at a value which is less than what they are worth; or may be unable to settle or recover a financial asset. Liquidity risk arises from accounts payable and accrued liabilities, and the lease liability. The Corporation limits its exposure to this risk by closely monitoring their cash flow.

The following table presents the contractual maturities of the financial liabilities as of December 31, 2023:

As at December 31, 2023	Carrying amount	Payable within 1 year	1-3 years	4-5 years	Total
Accounts payable and accrued liabilities	$ 8,041,485	$ 8,041,485	$ —	$ —	$ 8,041,485
Lease liability	491,433	80,416	214,444	196,573	491,433
	$ 8,532,918	$ 8,121,901	$ 214,444	$ 196,573	$ 8,532,918

(iii) Market risk

Market risk is the risk of loss that may arise from changes in market factors, such as interest rates and foreign exchange rates.

(a) Interest rate risk

The Corporation currently does not have any short-term or long-term debt that is variable interest bearing and, as such, the Corporation's current exposure to interest rate risk is minimal.

(b) Foreign currency risk

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in the foreign exchange rates. The Corporation enters into foreign currency purchase transactions and has assets that are denominated in foreign currencies and thus is exposed to the financial risk of earnings fluctuations arising from changes in foreign exchange rates and the degree of volatility of these rates. The Corporation does not currently use derivative instruments to reduce its exposure to foreign currency risk.

The Corporation holds balances in U.S. dollars which could give rise to exposure to foreign exchange risk. Sensitivity to a plus or minus 10% change in the foreign exchange rate of the U.S. dollar against the Canadian dollar would affect the reported loss and comprehensive loss by approximately $2,770,000 (December 31, 2022 - $4,414,000, December 31, 2021 - $5,875,000).

(Expressed in Canadian Dollars)

6. Cash and cash equivalents

Interest earned on cash and cash equivalents for the year ended December 31, 2023 amounted to $2,038,465 (year ended December 31, 2022 -$1,237,632, December 31, 2021 - $106,001).). As at December 31, 2022, Cash and cash equivalents included a cashable Guaranteed Investment Certificate totaling $61,875 earning interest of 0.5% per annum and maturing on December 4, 2023. The Guaranteed Investment Certificate was redeemed prior to maturity without penalty during the year ended December 31, 2023.

7. Property and equipment

Cost	Right-of-use asset	Equipment	Leasehold improvements	Office equipment	Computer equipment	Total
Balance, December 31, 2021	$ 200,319	$ 130,770	$ 237,248	$ 65,716	$ 79,823	$ 713,876
Additions	—	41,094	—	1,148	32,467	74,709
Balance, December 31, 2022	200,319	171,864	237,248	$ 66,864	$ 112,290	$ 788,585
Additions	140,919	47,945	—	—	16,367	205,231
Balance, December 31, 2023	$ 341,238	$ 219,809	$ 237,248	$ 66,864	$ 128,657	$ 993,816

Accumulated Depreciation	Right-of-use asset	Equipment	Leasehold improvements	Office equipment	Computer equipment	Total
Balance, December 31, 2021	$ 103,509	$ 75,211	$ 105,872	$ 25,659	$ 47,132	$ 357,383
Depreciation for the year	40,068	19,750	50,840	8,069	16,737	135,464
Balance, December 31, 2022	$ 143,577	$ 94,961	$ 156,712	$ 33,728	$ 63,869	$ 492,847
Depreciation for the year	53,091	36,761	50,840	6,627	16,592	163,911
Balance, December 31, 2023	$ 196,668	$ 131,722	$ 207,552	$ 40,355	$ 80,461	$ 656,758

Carrying value	Right-of-use asset	Equipment	Leasehold improvements	Office equipment	Computer equipment	Total
Balance, December 31, 2022	$ 56,742	$ 76,903	$ 80,536	$ 33,136	$ 48,421	$ 295,738
Balance, December 31, 2023	$ 144,570	$ 88,087	$ 29,696	$ 26,509	$ 48,196	$ 337,058

8. Intangible assets

Cost	Exclusive global license agreement
Balance, December 31, 2021, December 31, 2022, and December 31, 2023	$ 767,228

Accumulated Amortization	Exclusive global license agreement
Balance, December 31, 2021	$ 387,982
Amortization for the year	84,444
Balance, December 31, 2022	$ 472,426
Amortization for the year	84,444
Balance, December 31, 2023	$ 556,870

Carrying Value	Exclusive global license agreement
Balance, December 31, 2022	$ 294,802
Balance, December 31, 2023	$ 210,358

8. Intangible assets (continued)

Exclusive global agreement ("Meros License Agreement")

In 2017, the Corporation was granted by Meros Polymers Inc. ("Meros") the sole, exclusive, irrevocable license to patented nanotechnologies for use with any drugs to diagnose, or treat, cardiovascular disease, cardiopulmonary disease, and cardiac arrhythmias. Meros is focused on the advancement of nanotechnologies developed at the University of Alberta.

Under the Meros License Agreement, Cardiol agreed to certain milestones and milestone payments, including the following: (i) payment of $100,000 upon enrolling the first patient in a Phase IIB clinical trial designed to investigate the safety and indications of efficacy of one of the licensed technologies; (ii) payment of $500,000 upon enrolling the first patient in a Pivotal Phase III clinical trial designed to investigate the safety and efficacy of one of the licensed technologies; (iii) $1,000,000 upon receiving regulatory approval from the FDA for any therapeutic and/or prophylactic treatment incorporating the licensed technologies. No milestone payments have been earned or made to date. Cardiol also agreed to pay Meros the following royalties:

(a) 5% of worldwide proceeds of net sales of the licensed technologies containing cannabinoids, excluding non-royalty sub-license income in (b) below, that Cardiol receives from human and animal disease indications and derivatives as outlined in the Meros License Agreement;

(b) 7% of any non-royalty sub-license income that Cardiol receives from human and animal disease indications and derivatives for licensed technologies containing cannabinoids as outlined in the Meros License Agreement;

(c) 3.7% of worldwide proceeds of net sales that Cardiol receives from the licensed technology in relation to human and animal cardiovascular and/or cardiopulmonary disease, heart failure, and/or cardiac arrhythmia diagnosis and/or treatments using the drugs, excluding cannabinoids included in (a) above, outlined in the Meros License Agreement; and

(d) 5% of any non-royalty sub-license income that Cardiol receives in relation to any human and animal heart disease, heart failure and/or arrhythmias indications, excluding cannabinoids included in (b) above, as outlined in the Meros License Agreement.

In addition, as part of the consideration under the Meros License Agreement, Cardiol (i) issued to Meros 1,020,000 common shares; and (ii) issued to Meros 1,020,000 special warrants convertible automatically into common shares for no additional consideration upon the first patient being enrolled in a Phase 1 clinical trial using the licensed technologies as described in the Meros License Agreement. As of December 31, 2023, and the date of these financial statements, this condition has not been met.

(Expressed in Canadian Dollars)

9. Lease liability

	Carrying Value
Balance, December 31, 2021	$ 117,579
Repayments	(53,934)
Accretion	9,226
Balance, December 31, 2022	$ 72,871
Additions (i)	140,919
Repayments	(55,376)
Accretion	15,926
Balance, December 31, 2023	$ 174,340
Current portion	15,808
Long-term portion	$ 158,532

(i) When measuring the lease liability for the property lease that was classified as an operating lease, the Corporation discounted the lease payments using its incremental borrowing rate. The original property lease expires on May 31, 2024, and the lease payments were discounted with a 9% interest rate. During the year ended December 31, 2023, the property lease was extended to October 30, 2028. The lease liability was revalued as of the extension date with lease payments discounted with a 15% interest rate.

10. Derivative liability

On November 5, 2021, the Corporation issued 8,175,000 warrants as part of a unit financing. Each warrant is exercisable into one common share at the price of USD$3.75 per share for a period of three years from closing. The original estimated fair value of $11,577,426 was assigned to the 8,175,000 warrants issued by using a fair value market technique incorporating the Black-Scholes option pricing model, with the following assumptions: a risk-free interest rate of 1.01%; an expected volatility factor of 81%; an expected dividend yield of 0%; and an expected life of 3 years. The only significant unobservable input is the volatility, which could cause an increase or decrease in fair value. The warrants have been classified as a derivative liability on the statement of financial position and are re-valued at each reporting date, as the warrants were issued in a currency other than the Corporation's functional currency. As at December 31, 2023, the fair value of the derivative liability was $238,176 (December 31, 2022 - $419,901), resulting in a decrease in the value of the derivative liability for the year ended December 31, 2023 of $181,725 (year ended December 31, 2022 - decrease in fair value of $6,241,221, year ended December 31, 2021 - decrease in fair value of $4,916,304).

Significant assumptions used in determining the fair value of the derivative warrant liabilities are as follows:

	Year Ended December 31, 2023	Year Ended December 31, 2022
Share price	USD$ 0.84	USD$ 0.51
Exercise price	USD$ 3.75	USD$ 3.75
Risk-free interest rate	3.91 %	4.06 %
Expected volatility	90 %	91 %
Expected life in years	0.85	1.85
Expected dividend yield	Nil	Nil

(Expressed in Canadian Dollars)

11. Share capital

a) Authorized share capital

The authorized share capital consists of an unlimited number of common shares. The common shares do not have a par value. All issued shares are fully paid.

b) Common shares issued

	Number of common shares	Amount
Balance, December 31, 2020	32,860,291	$ 51,923,471
Shares for services (i)	1,227,092	4,112,647
Stock options exercised (note 12)	998,333	2,837,083
Fair value of stock options exercised (note 12)	—	1,357,160
Issuance of units (ii, iii)	22,462,000	84,083,757
Fair value of warrants (ii, iii)	—	(15,369,626)
Share issuance costs (ii, iii)	—	(5,003,222)
Warrants exercised (note 13)	3,675,283	11,656,287
Fair value of warrants exercised (note 13)	—	3,999,272
Performance share units exercised (note 12)	700,000	3,322,000
Balance, December 31, 2021	61,922,999	$ 142,918,829
Shares for services (iv)	239,243	525,200
Restricted share units exercised (note 12)	376,622	526,682
Warrants exercised (note 13)	503,672	2,014,688
Performance share units exercised (note 12)	1,000,000	1,560,000
Balance, December 31, 2022	64,042,536	$ 147,545,399
Shares for services (v)	5,000	16,449
Restricted share units exercised (note 12)	704,743	957,288
Performance share units exercised (note 12)	600,000	—
Balance, December 31, 2023	65,352,279	$ 148,519,136

(i) During the year ended December 31, 2021, the Corporation issued 1,227,092 shares for services with a combined value of $4,112,647. The fair value of the shares were determined to be equal to the value of the services rendered.

(ii) On May 12, 2021, the Corporation completed its short form base shelf prospectus offering by issuing 6,112,000 common share units at $3.60 per unit for gross proceeds of $22,003,200, as well as an additional 433,400 warrants at $0.02 per warrant for $8,668. Each unit consisted of one common share and one-half of one common share purchase warrant. Each whole warrant is exercisable into one common share at the price of $4.60 per share for a period of three years from closing. The underwriters were paid cash fees of $1,025,590.

The fair value of $3,792,200 was assigned to the 3,056,000 warrants issued as part of the units as estimated by using a fair value market technique incorporating the Black-Scholes option pricing model, using the following assumptions: a risk-free interest rate of 0.53%; an expected volatility factor of 81%; an expected dividend yield of 0%; and an expected life of 3 years.

(iii) On November 5, 2021, the Corporation completed its short form base shelf prospectus offering by issuing 16,350,000 common share units at USD$3.07 per unit for gross proceeds of USD$50,194,500 ($62,080,558). Each unit consisted of one common share and one-half of one common share purchase warrant. Each whole warrant is exercisable into one common share at the price of USD$3.75 per share for a period of three years from closing. The underwriters were paid cash fees of USD$3,011,670 ($3,724,833).

11. Share capital (continued)

b) Common shares issued (continued)

The fair value of $11,577,426 was assigned to the 8,175,000 warrants issued as part of the units as estimated by using a fair value market technique incorporating the Black-Scholes option pricing model (see note 10) on the statement of financial position and re-valued at each reporting date.

(iv) During the year ended December 31, 2022, the Corporation issued 239,243 common shares with a fair value of $525,000. The fair value of the shares was determined to be equal to the value of the services rendered. Included in shares for services is $244,213 related to vesting of previously issued shares.

(v) During the year ended December 31, 2023, the Corporation issued 5,000 common shares with a fair value of $3,550. The fair value of the shares was determined to be equal to the value of the services rendered. Included in shares for services is $12,899 related to vesting of previously issued shares.

c) 2022 At-The-Market ("ATM") Program

In June 2022, the Corporation announced it entered into an equity distribution agreement with Canaccord Genuity LLC and Cantor Fitzgerald & Co. (the "Sales Agents") acting as co-agents in connection with the 2022 at-the-market offering program (the "2022 ATM Program"). Under the terms of the 2022 ATM Program, the Corporation could from time to time, sell common shares having an aggregate value of USD$50,000,000 through the Sales Agents on the Nasdaq Capital Market. As at December 31, 2023 and the date of these consolidated financial statements, the Corporation has not issued any shares under the 2022 ATM Program.

Subsequent to December 31, 2023, the 2022 ATM program expired with no shares having been issued under it.

12. Share-based payments

The Corporation has adopted an Omnibus Equity Incentive Plan in accordance with the policies of the TSX, which permits the grant or issuance of options, Restricted Share Units ("RSUs"), Performance Share Units ("PSUs") and Deferred Share Units ("DSUs"), as well as other share-based payment arrangements. The maximum number of shares that may be issued upon the exercise or settlement of awards granted under the plan may not exceed 15% of the Corporation's issued and outstanding shares from time to time. The Board of Directors determines the price per common share and the number of common shares which may be allotted to directors, officers, employees, and consultants, and all other terms and conditions of the option, subject to the rules of the TSX.

During the year ended December 31, 2023, the total expenses related to share-based compensation amounted to $4,156,762 (year ended December 31, 2022 - $5,013,185, year ended December 31, 2021 - $8,497,830). All outstanding awards are settleable with common shares and not cash.

(Expressed in Canadian Dollars)

12. Share-based payments (continued)

(a) Stock Options

	Number of stock options	Weighted average exercise price ($)
Balance, December 31, 2020	2,861,300	$ 3.78
Issued	2,666,666	4.04
Expired	(227,833)	3.86
Exercised (i)	(998,333)	2.84
Balance, December 31, 2021	4,301,800	$ 4.16
Issued	602,500	1.84
Expired	(423,334)	4.37
Cancelled (note 12(c))	(2,512,490)	4.06
Balance, December 31, 2022	1,968,476	$ 3.52
Issued	880,000	1.58
Expired	(1,115,976)	3.65
Balance, December 31, 2023	1,732,500	$ 2.44

(i) The weighted average share price on date of exercise was $4.54.

At the grant date, the fair value of stock options issued was estimated using the Black-Scholes option pricing model based on the following weighted average assumptions:

	Year Ended December 31, 2023	Year Ended December 31, 2022	Year Ended December 31, 2021
Fair value of stock options at grant date	$ 0.64	$ 1.34	$ 2.33
Share price	$ 1.09	$ 2.34	$ 4.04
Exercise price	$ 1.58	$ 1.84	$ 4.04
Risk-free interest rate	3.91 %	2.44 %	0.73 %
Expected volatility	89 %	98 %	93 %
Expected life in years	4.09	5.00	3.71
Expected dividend yield	Nil	Nil	Nil

(Expressed in Canadian Dollars)

12. Share-based payments (continued)

(a) Stock Options (continued)

The following table reflects the actual stock options issued and outstanding as of December 31, 2023:

Expiry date	Exercise price ($)	Weighted average remaining contractual life (years)	Number of options outstanding	Number of options vested (exercisable)
February 23, 2025	3.54	1.15	20,000	20,000
April 10, 2025	0.75	1.28	100,000	50,000
August 19, 2025	2.12	1.64	100,000	100,000
August 30, 2025	5.00	1.67	80,000	80,000
April 1, 2026	5.77	2.25	60,000	60,000
September 10, 2026	1.32	2.70	100,000	25,000
November 29, 2026	2.38	2.92	250,000	—
December 8, 2026	3.59	2.94	325,000	216,667
January 11, 2027	2.18	3.03	220,000	73,333
March 14, 2027	2.07	3.20	60,000	20,000
May 12, 2027 (i)	1.46	3.36	100,000	33,334
September 12, 2027	1.61	3.70	207,500	69,168
June 25, 2028 (ii)	1.32	4.49	80,000	80,000
October 23, 2028	1.20	4.82	30,000	—
	2.44	2.89	1,732,500	827,502

(i) Subsequent to December 31, 2023, 30,000 unexercised options expired.

(ii) Subsequent to December 31, 2023, 80,000 unexercised options expired.

(b) Performance Share Units

The Corporation has 2,000,000 outstanding PSUs as at December 31, 2023 (December 31, 2022 - 600,000, December 31, 2021 - 1,200,000). Grants of PSUs require completion of certain performance criteria specific to each grant. These PSUs have an expiry date of December 31, 2024. As at December 31, 2023, nil PSUs were vested (exercisable). Subsequent to December 31, 2023, 1,300,000 PSUs vested and were redeemed.

During the year ended December 31, 2023, 600,000 PSUs vested and were exercised by certain consultants of the Corporation for a total value of $nil (December 31, 2022 - 1,000,000 PSUs vested and were redeemed for a total value of $1,560,000). During the year ended December 31, 2023, the weighted average share price on date of exercise was $1.39 (December 31, 2022 - $1.45).

During the year ended December 31, 2022, 1,200,000 PSUs granted to certain consultants of the Corporation expired. Upon expiry, $1,121,400 of previously recognized share-based compensation was reversed through general and administration.

The weighted average fair value of PSUs granted during the year ended December 31, 2023 was $0.39 (December 31, 2022 - $1.56, December 31, 2021 - $3.43). As the fair value of the services for all PSUs issued cannot be reliably measured, the fair value was determined on the basis of the equity issued. The fair value of PSUs granted during the year ended December 31, 2023 was determined based on the Corporation's share price, adjusted by the estimated likelihood of the performance conditions being met. The fair value of PSUs granted during the year ended December 31, 2022 and December 31, 2021 was determined based on the Corporation's share price.

(Expressed in Canadian Dollars)

12. Share-based payments (continued)

(c) Restricted Share Units

The total outstanding RSUs at December 31, 2023 is 3,544,887 (December 31, 2022 - 2,312,963, December 31, 2021 - nil). Of the outstanding RSUs, 2,747,795 have fully vested as of December 31, 2023. The fair value of RSUs granted during the year ended December 31, 2023, December 31, 2022, and December 31, 2021 was determined based on the Corporations share price.

During the year ended December 31, 2023, the Corporation granted 2,100,000 RSUs carrying a value of $2,522,250 for a weighted average fair value of $1.20. During the year ended December 31, 2023, 704,743 RSUs vested and were redeemed (December 31, 2022 - 376,622) and 163,333 unvested RSUs expired. During the year ended December 31, 2023, the weighted average share price on date of exercise was $1.16 (December 31, 2022 - $0.79). Subsequent to December 31, 2023, 1,516,429 RSUs were redeemed.

During the year ended December 31, 2022, the Corporation cancelled 2,512,490 stock options held by certain employees, consultants, officers, and directors of the Corporation and issued 2,600,000 RSUs of the Corporation to replace the cancelled stock options. The cancelled stock options were revalued as of the grant date of the RSUs using the Black-Scholes option pricing model with weighted average assumptions that correspond to their times to maturity. The following weighted average assumptions were used for the calculation:

Fair value of stock options at RSU grant date	$	0.47
Share price	$	1.41
Exercise price	$	4.06
Risk-free interest rate		3.60 %
Expected volatility		85 %
Expected life in years		3.13
Expected dividend yield		Nil

RSUs were measured at the Corporation's share price of $1.41 on September 30, 2022. The incremental fair value of 1,387,155 RSUs which vested immediately, with a cumulative value of $1,427,235, is included in share-based compensation. The incremental fair value of 1,212,845 unvested RSUs, with a value of $1,065,520, will vest in line with the options they replaced, with the exception of 400,000 RSUs that have modified vesting conditions from the stock options they replaced. An additional 89,585 RSUs were granted with a value of $90,955 during the year ended December 31, 2022. The weighted average fair value of RSUs granted in 2022 was $1.40.

13. Warrants

	Number of warrants		Amount
Balance, December 31, 2020	4,521,605	$	4,460,728
Issued (i), (note 11 (ii), (iii))	11,792,602		3,707,789
Expired	(186,746)		(75,886)
Exercised	(3,675,283)		(3,999,272)
Earned (ii)	—		83,421
Balance, December 31, 2021	12,452,178	$	4,176,780
Expired(ii)	(320,328)		—
Exercised(ii)	(503,672)		(2,014,688)
Earned (ii)	—		1,355,775
Balance,December 31,2022 and December 31,2023	11,628,178	$	3,517,867

(Expressed in Canadian Dollars)

13. Warrants (continued)

(i) 128,203 warrants with a fair value of $144,976 carrying an exercise price of $3.25 and an original expiry date of June 4, 2022, are included in this amount as a result of the exercise of 256,409 warrants carrying a price of $2.50. At the grant date, the fair value of the warrants issued was estimated using the Black-Scholes option pricing model based on the following weighted average assumptions:

	Year Ended December 31, 2021
Fair value of warrants at grant date	$ 1.13
Share price	$ 3.88
Exercise price	$ 3.25
Risk-free interest rate	0.16 %
Expected volatility	83 %
Expected life in years	1.10
Expected dividend yield	Nil

(ii) During the year ended December 31, 2022, 338,943 warrants with a fair value of $1,355,775 (year ended December 31, 2021 - 20,856 warrants with a fair value of $83,421) were earned pursuant to a development agreement. The total 503,672 earned warrants pursuant to this agreement were exercised in August 2022. The remaining 320,328 unearned warrants expired on August 31, 2022.

The following table reflects the actual warrants issued and outstanding as of December 31, 2023, excluding 1,020,000 special warrants convertible automatically into common shares for no additional consideration in accordance with the original escrow release terms as described in the Meros License Agreement (see note 8):

Expiry date	Exercise price ($)	Remaining contractual life (years)	Warrants exercisable
May 12, 2024	4.60	0.36	3,453,178
November 5, 2024[1]	4.97	0.85	8,175,000
	4.86	0.71	11,628,178

(1) Warrants carry an exercise price of USD$3.75. This amount was translated to CAD for presentation purposes at the December 31, 2023 rate of 1.32. These warrants are classified as a derivative liability on the statement of financial position (see note 10).

14. Loss per share

For the year ended December 31, 2023, basic and diluted loss per share has been calculated based on the loss attributable to common shareholders of $28,128,292 (year ended December 31, 2022 - $30,930,647, year ended December 31, 2021 - $31,638,244) and the weighted average number of common shares outstanding of 64,463,087 (year ended December 31, 2022 - 62,505,982, year ended December 31, 2021 - 43,222,819). Diluted loss per share did not include the effect of stock options, PSUs, RSUs, and warrants as they are anti-dilutive.

Cardiol Therapeutics Inc.
Notes to Consolidated Financial Statements
Years Ended December 31, 2023, 2022 and 2021
(Expressed in Canadian Dollars)

15. Commitments

(i) The Corporation has leased premises with third parties. The minimum committed lease payments, which include the lease liability payments shown as base rent, are approximately as follows:

	Base rent	Variable rent	Total
2024	$ 41,532	$ 38,884	$ 80,416
2025	55,376	51,846	107,222
2026	55,376	51,846	107,222
2027	55,376	51,846	107,222
2028	46,146	43,205	89,351
	$ 253,806	$ 237,627	$ 491,433

(ii) The Corporation has signed various agreements with consultants to provide services. Under the agreements, the Corporation has the following remaining commitments.

2024	$ 494,503

(iii) Pursuant to the terms of agreements with various other contract research organizations, the Corporation is committed for contract research services for 2024 at a cost of approximately $441,032.

16. Other expenses

The following details highlight certain components of the research and development and general and administration expenses classified by nature. Remaining research and development and operating expenses include personnel costs and expenses paid to third parties:

	Year Ended December 31, 2023	Year Ended December 31, 2022	Year Ended December 31, 2021
Research and development expenses			
Non-cash share-based compensation	**349,850**	631,490	599,145
General and administration expenses			
Depreciation of property and equipment	**163,911**	135,464	135,977
Amortization of intangible assets	**84,444**	84,444	84,444
Non-cash share-based compensation	**3,806,912**	4,381,695	7,898,685

17. Related party transactions

(a) The Corporation entered into the following transactions with related parties:

(i) Included in research and development expense is $1,233,301 for the year ended December 31, 2023 (year ended December 31, 2022 - $2,182,869, year ended December 31, 2021 - $1,354,866) paid to a company related to a director. As at December 31, 2023, $416,792 (December 31, 2022 - $985,022) was owed to this company and this amount was included in accounts payable and accrued liabilities, and $nil (December 31, 2022 - $9,413) was paid to this company and was included in prepaid expenses.

(Expressed in Canadian Dollars)

17. Related party transactions (continued)

(b) Key management personnel are those persons having authority and responsibility for planning, directing, and controlling the activities of the Corporation directly or indirectly, including any directors (executive and non-executive) of the Corporation. Remuneration of directors and key management personnel of the Corporation, except as noted in (a) above, was as follows:

	Year Ended December 31, 2023	Year Ended December 31, 2022	Year Ended December 31, 2021
Salaries and benefits	**$ 2,779,707**	$ 2,459,109	$ 2,503,893
Share-based payments	**$ 985,174**	2,680,442	1,188,462
	$ 3,764,881	$ 5,139,551	$ 3,692,355

As at December 31, 2023, $nil (December 31, 2022 - $nil) was owed to key management personnel and this amount was included in accounts payable and accrued liabilities.

18. Income taxes

The income tax allowance differs from the amount resulting from the application of the combined Canadian income tax rate as follows:

	Year Ended December 31, 2023	Year Ended December 31, 2022	Year Ended December 31, 2021
Loss before income taxes	**$ (28,128,292)**	$ (30,930,647)	$ (31,638,244)
Statutory income tax rate	**26.50 %**	26.50 %	26.50 %
Expected income tax recovery	**(7,453,997)**	$ (8,196,621)	$ (8,384,135)
Non-taxable income or non-deductible expenses	**791,087**	$ 756,834	$ 511,078
Tax rate differential and other	**(73,479)**	$ 85,064	$ 168,007
Unapplied non-capital losses	**6,736,389**	$ 7,354,723	$ 7,705,050
	$ —	$ —	$ —

During the year ended December 31, 2023, the Corporation received refundable investment tax credits ("ITCs"), for qualifying scientific research and experimental development ("SRED") expenses, of $149,739 related to its 2021 Canadian income tax return (December 31, 2022 - $164,443 related to its 2020 Canadian income tax return, December 31, 2021 - $93,076 related to its 2018 Canadian income tax return). The Corporation intends to claim non-refundable ITCs on its 2023 Canadian income tax returns. The amount of the qualifying SRED expenses and ITCs are unknown at the date of the audit report.

Deferred taxes are a result of temporary differences that arise due to the differences between the income tax values and the carrying amount of assets and liabilities. The significant components of the deferred tax assets and liabilities not recognized as at December 31, 2023, 2022 and 2021 are as follows:

	Year Ended December 31, 2023	Year Ended December 31, 2022	Year Ended December 31, 2021
Unrecognized deferred tax assets: Non-capital losses carried forward	**$ 117,277,753**	$ 91,857,418	$ 64,266,641
Share issue costs	**354,182**	496,824	744,506
Scientific Research & Experimental Development	**7,707,728**	5,080,385	2,037,231
Total unrecognized deferred tax asset	**$ 125,339,663**	$ 97,434,627	$ 67,048,378

(Expressed in Canadian Dollars)

18. Income taxes (continued)

The tax losses expire between 2036 and 2043. The other temporary differences do not expire under current legislation.

2036	**$ 1,368,251**
2037	**5,394,543**
2038	**636,497**
2039	**9,573,962**
2040	**15,090,248**
2041	**26,175,446**
2042	**33,618,471**
2043	**25,420,335**
	$ 117,277,753

As at December 31, 2023, the Corporation had scientific research and experimental development deduction carryforward balance of $7,707,728 (December 31, 2022 - $5,080,385, December 31, 2021 - $2,037,231).

ITEM 19. EXHIBITS

The following Exhibits are being filed as part of this Annual Report, or are incorporated by reference where indicated:

Exhibit Number	Description
1.1	Articles of Incorporation of Cardiol Therapeutics Inc. (incorporated herein by reference to exhibit 4.1 to the Corporation's Form S-8 (File No. 333-258940) filed with the SEC on August 19, 2021, as amended January 18, 2022)
1.2	Articles of Amendment of Cardiol Therapeutics Inc. (February 13, 2017) (incorporated herein by reference to exhibit 4.2 to the Corporation's Form S-8 (File No. 333-258940) filed with the SEC on August 19, 2021, as amended January 18, 2022)
1.3	Articles of Amendment of Cardiol Therapeutics Inc. (August 29, 2018) (incorporated herein by reference to exhibit 4.3 to the Corporation's Form S-8 (File No. 333-258940) filed with the SEC on August 19, 2021, as amended January 18, 2022)
1.4	By Law No. 1 of Cardiol Therapeutics Inc. (incorporated herein by reference to exhibit 4.4 to the Corporation's Form S-8 (File No. 333-258940) filed with the SEC on August 19, 2021, as amended January 18, 2022)
2.1*	Warrant Indenture dated May 12, 2021 between the Corporation and Computershare Trust Company of Canada
2.2	Warrant Indenture dated November 5, 2021 between the Corporation and Computershare Trust Company of Canada (incorporated herein by reference to exhibit 99.1 to the Corporation's Form 6-K (File No. 001-40712) filed with the SEC on November 5, 2021)
2.3	Description of Securities (incorporated herein by reference from the description of the Corporation's common shares contained in the Registration Statement on Form F-10 (No. 333- 257764) filed July 8, 2021, as amended on August 3, 2021)
4.1†	Amended and Restated Equity Compensation Plan (incorporated herein by reference to exhibit 4.5 to the Corporation's Form S-8 (File No. 333-258940) filed with the SEC on August 19, 2021, as amended January 18, 2022)
4.2†	Omnibus Equity Incentive Plan(incorporated herein by reference to exhibit 4.6 to the Corporation's Form S-8 (File No. 333-258940) filed with the SEC on August 19, 2021, as amended January 18, 2022)
4.3*+	License agreement between the Corporation and Meros Polymers Inc., dated January 20, 2017
4.4*	Exclusive Master Services Agreement between the Corporation and Dalton Chemical Laboratories, Inc. o/a Dalton Pharma Services on June 12, 2017
4.5*+	Exclusive Supply Agreement between the Corporation and Noramco, Inc. dated September 28, 2018
4.6*+	Development Agreement dated August 29th, 2018 between the Corporation and Clinical Academic Research Organization, S.A. DE C.V.
4.7*†	Executive Employment Agreement between the Corporation and David Elsley on January 19, 2017
4.8*†+	Employment Agreement Addendum between the Corporation and David Elsley on December 23, 2021
4.9*†	Employment Agreement between the Corporation and Christopher Waddick, dated August 16, 2018
4.10*†	Employment Agreement Addendum between the Corporation and Christopher Waddick, dated on December 23, 2021
4.11*†	Employment Agreement Addendum between the Corporation and Christopher Waddick, dated on March 2, 2022
4.12*†	Employment Agreement between the Corporation and Bernard Lim, dated December 3, 2020
4.13*†	Employment Agreement Addendum between the Corporation and Bernard Lim, dated on December 23, 2021
4.14*†	Employment Agreement between the Corporation and Andrew Hamer, dated May 30, 2022
8.1*	Subsidiaries of the Corporation
11.1*	Code of Business Conduct and Ethics
12.1*	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer
12.2*	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer
13.1#	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2#	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
15.1*	Management Discussion and Analysis of the Corporation for the year ended December 31, 2023.
15.2*	Audit Committee Charter
15.3*	Compensation Committee Charter
15.4*	Consent of independent registered public accounting firm (BDO Canada LLP) (PCAOB ID#01227)
97.1*	Clawback Policy
101.INS*	XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document

101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (formatted as Inline eXtensible Business Reporting Language (iXBRL) and contained in Exhibit 101)

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* Filed herewith.
Furnished herewith.
† Indicates a management contract or compensatory plan or arrangement.
+ Certain identified information has been excluded from the exhibit pursuant to Item 601(a)(6) and/or Item 601(b)(10)(iv) of Regulation S-K.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Cardiol Therapeutics Inc.
/s/ Chris Waddick
By: Chris Waddick
Title: Chief Financial Officer

Date:April 1, 2024

Exhibit 2.1

Certain identified information has been excluded from the exhibit pursuant to Item 601(a)(6) of Regulation S-K due to personal privacy concerns. Redacted information is indicated by: [***]

Execution Version

CARDIOL THERAPEUTICS INC.

as the Corporation

and

COMPUTERSHARE TRUST COMPANY OF CANADA

as the Warrant Agent

WARRANT INDENTURE

Providing for the Issue of Warrants

Dated as of May 12, 2021

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WARRANT INDENTURE

THIS WARRANT INDENTURE is dated as of May 12, 2021

BETWEEN:

CARDIOL THERAPEUTICS INC., a corporation incorporated under the laws of Ontario (the "**Corporation**"),

- and -

COMPUTERSHARE TRUST COMPANY OF CANADA, a trust company existing under the laws of Canada and authorized to carry on business in all provinces of Canada (the "**Warrant Agent**")

WHEREAS the Corporation is proposing to issue up to 3,514,400 Warrants pursuant to this Indenture;

AND WHEREAS pursuant to this Indenture, each Warrant shall, subject to adjustment, entitle the holder thereof to acquire one (1) Common Share upon payment of the Exercise Price upon the terms and conditions herein set forth;

AND WHEREAS all acts and deeds necessary have been done and performed to make the Warrants, when created and issued as provided in this Indenture, legal, valid and binding upon the Corporation with the benefits and subject to the terms of this Indenture;

AND WHEREAS the foregoing recitals are made as representations and statements of fact by the Corporation and not by the Warrant Agent;

NOW THEREFORE, in consideration of the premises and mutual covenants hereinafter contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Corporation hereby appoints the Warrant Agent as warrant agent to hold the rights, interests and benefits contained herein for and on behalf of those persons who from time to time become the holders of Warrants issued pursuant to this Indenture and the parties hereto agree as follows:

ARTICLE 1
INTERPRETATION

Section 1.1 Definitions.

In this Indenture, including the recitals and schedules hereto, and in all indentures supplemental hereto:

"**Adjustment Period**" means the period from the Effective Date up to and including the Expiry Time;

"**Applicable Legislation**" means any statute of Canada or a province thereof, and the regulations under any such named or other statute, relating to warrant indentures or to the rights, duties and obligations of warrant agents under warrant indentures, to the extent that such provisions are at the time in force and applicable to this Indenture;

"**Auditors**" means BDO Canada LLP or such other firm of chartered professional accountants duly appointed as auditors of the Corporation, from time to time;

"**Authenticated**" means (a) with respect to the issuance of a Warrant Certificate, one which has been duly signed by the Corporation and authenticated by signature of an authorized officer of the Warrant Agent, (b) with respect to the issuance of an Uncertificated Warrant, one in respect of which the Warrant Agent has completed all Internal Procedures such that the particulars of such Uncertificated Warrant as required by Section 2.7 are entered in the register of holders of Warrants, "*Authenticate*", "*Authenticating*" and "*Authentication*" have the appropriate correlative meanings;

"**Book Entry Participants**" means institutions that participate directly or indirectly in the Depository's book entry registration system for the Warrants;

"**Book Entry Warrants**" means Warrants that are to be held only by or on behalf of the Depository;

"**Business Day**" means any day other than Saturday, Sunday or a statutory or civic holiday, or any other day on which banks are not open for business in the City of Toronto in the Province of Ontario, and shall be a day on which the Exchange is open for trading;

"**CDS Global Warrants**" means Warrants representing all or a portion of the aggregate number of Warrants issued in the name of the Depository represented by an Uncertificated Warrant, or if requested by the Depository or the Corporation, by a Warrant Certificate;

"**CDSX**" means the settlement and clearing system of CDS Clearing and Depository Services Inc. for equity and debt securities in Canada;

"**Certificated Warrant**" means a Warrant evidenced by a writing or writings substantially in the form of Schedule "A", attached hereto;

"**Common Shares**" means, subject to Article 4, fully paid and non-assessable Class A common shares of the Corporation as presently constituted;

"**Corporation**" means Cardiol Therapeutics Inc.;

"**Counsel**" means a barrister and/or solicitor or a firm of barristers and/or solicitors retained by the Warrant Agent or retained by the Corporation, which may or may not be counsel for the Corporation;

"**Current Market Price**" of the Common Shares at any date means the weighted average of the trading price per Common Share for such Common Shares for each day there was a closing price for the twenty (20) consecutive Trading Days ending five (5) Trading Days prior to such date on the Exchange, or, if such Common Shares are not listed on any stock exchange then on such over-the-counter market as may be selected for such purpose by the directors of the Corporation;

"**Depository**" means CDS Clearing and Depository Services Inc. or such other person as is designated in writing by the Corporation to act as depository in respect of the Warrants;

"**Dividends**" means any dividends paid by the Corporation;

"**DRS**" means the direct registration statement;

"**Effective Date**" means the date of this Indenture;

"**Exchange**" means the Toronto Stock Exchange or such other stock exchange on which trading of the Common Shares principally occurs;

"**Exchange Rate**" means the number of Common Shares subject to the right of purchase under each Warrant;

"**Exercise Date**" means, in relation to a Warrant, the Business Day on which such Warrant is validly exercised or deemed to be validly exercised in accordance with Article 3 hereof;

"**Exercise Notice**" has the meaning set forth in Section 3.2(1);

"**Exercise Price**" at any time means the price at which a Common Share may be purchased by the exercise of a Warrant, which is initially $4.60 per Common Share, payable in immediately available Canadian funds, subject to adjustment in accordance with the provisions of Section 4.1;

"**Expiry Date**" means May 12, 2024;

"**Expiry Time**" means 4:00 p.m. (Eastern time) on the Expiry Date;

"**Extraordinary Resolution**" has the meaning set forth in Section 7.12(1);

"**Internal Procedures**" means in respect of the making of any one or more entries to, changes in or deletions of any one or more entries in the register at any time (including without limitation, original issuance or registration of transfer of ownership) the minimum number of the Warrant Agent's internal procedures customary at such time for the entry, change or deletion made to be complete under the operating procedures followed at the time by the Warrant Agent;

"**Issue Date**" means in relation to a Warrant, the date of issue of the Warrant as per written order of the Corporation;

"**person**" means an individual, body corporate, partnership, trust, warrant agent, executor, administrator, legal representative or any unincorporated organization;

"**register**" means the one set of records and accounts maintained by the Warrant Agent pursuant to Section 2.9;

"**Registered Warrantholders**" means the persons who are registered owners of Warrants as such names appear on the register, and for greater certainty, shall include the Depository as well as the holders of Uncertificated Warrants appearing on the register of the Warrant Agent;

"**Regulation D**" means Regulation D as promulgated by the United States Securities and Exchange Commission under the U.S. Securities Act;

"**Regulation S**" means Regulation S as promulgated by the United States Securities and Exchange Commission under the U.S. Securities Act;

"**Shareholders**" means holders of Common Shares;

"**Tax Act**" means the *Income Tax Act* (Canada) and the regulations thereunder;

"**this Warrant Indenture**", "**this Indenture**", "**this Agreement**", "**hereto**" "**herein**", "**hereby**", "**hereof**" and similar expressions mean and refer to this Indenture and any indenture, deed or instrument supplemental hereto; and the expressions "**Article**", "**Section**", "**subsection**" and "**paragraph**" followed by a number, letter or both mean and refer to the specified article, section, subsection or paragraph of this Indenture;

"**Trading Day**" means, with respect to the Exchange, a day on which such exchange is open for the transaction of business and with respect to another exchange or an over-the-counter market means a day on which such exchange or market is open for the transaction of business;

"**Uncertificated Warrant**" means any Warrant which is not a Certificated Warrant;

"**United States**" means the United States of America, its territories and possessions, any state of the United States and the District of Columbia;

"**U.S. Accredited Investor**" means an "accredited investor" as defined in Rule 501(a) of Regulation D;

"**U.S. Exchange Act**" means the United States Securities Exchange Act of 1934, as amended;

"**U.S. Offering**" means the offer and sale of units of the Corporation (with each unit comprised of one Common Share and one half of one Warrant) issuable on the date of this Indenture to, or for the account or benefit of, persons in the United States and U.S. Persons;

"**U.S. Person**" has the meaning set forth in Rule 902(k) of Regulation S;

"**U.S. Securities Act**" means the United States Securities Act of 1933, as amended;

"**U.S. Warrantholder**" means any purchaser of units of the Corporation in the U.S. Offering or any other Warrantholder that is, or is acting for the account or benefit of, a person in the United States or a U.S. Person that did not acquire the Warrants directly from the Corporation on the date of this Indenture;

"**Warrants**" means the Common Share purchase warrants created by and authorized by and issuable under this Indenture, to be issued and countersigned hereunder as a Certificated Warrant and /or Uncertificated Warrant held through the book entry registration system on a no certificate issued basis, entitling the holder or holders thereof to purchase up to 3,514,400 Common Shares (subject to adjustment as herein provided) at the Exercise Price prior to the Expiry Time and, where the context so requires, also means the warrants issued and Authenticated hereunder, whether by way of Warrant Certificate or Uncertificated Warrant;

"**Warrant Agency**" means the principal office of the Warrant Agent in the City of Toronto, Ontario or such other place as may be designated in accordance with Section 3.5;

"**Warrant Agent**" means Computershare Trust Company of Canada, in its capacity as warrant agent of the Warrants, or its successors from time to time;

"**Warrant Certificate**" means a certificate, substantially in the form set forth in Schedule "A" hereto, to evidence those Warrants that will be evidenced by a certificate;

"**Warrantholders**", or "**holders**" without reference to Warrants, means the warrantholders as and in respect of Warrants registered in the name of the Depository and includes owners of Warrants who beneficially hold securities entitlements in respect of the Warrants through a Book Entry Participant or means, at a particular time, the persons entered in the register hereinafter mentioned as holders of Warrants outstanding at such time; and

"**Warrantholders' Request**" means an instrument signed in one or more counterparts by Registered Warrantholders entitled to acquire in the aggregate not less than 50% of the aggregate number of Common Shares which could be acquired pursuant to all Warrants then unexercised and outstanding, requesting the Warrant Agent to take some action or proceeding specified therein; and "**written order of the**

Corporation", "**written request of the Corporation**", "**written consent of the "Corporation**", "**Officer's Certificate**" and "**certificate of the Corporation**" mean, respectively, a written order, request, consent and certificate signed in the name of the Corporation by any two duly authorized signatories of the Corporation and may consist of one or more instruments so executed.

Section 1.2 Gender and Number.

Words importing the singular number or masculine gender shall include the plural number or the feminine or neuter genders, and vice versa.

Section 1.3 Headings, Etc.

The division of this Indenture into Articles and Sections, the provision of a Table of Contents and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Indenture or of the Warrants.

Section 1.4 Day not a Business Day.

If any day on or before which any action or notice is required to be taken or given hereunder is not a Business Day, then such action or notice shall be required to be taken or given on or before the requisite time on the next succeeding day that is a Business Day.

Section 1.5 Time of the Essence.

Time shall be of the essence of this Indenture.

Section 1.6 Monetary References.

Whenever any amounts of money are referred to herein, such amounts shall be deemed to be in lawful money of Canada unless otherwise expressed.

Section 1.7 Applicable Law.

This Indenture, the Warrants, the Warrant Certificates (including all documents relating thereto, which by common accord have been and will be drafted in English) shall be construed in accordance with the laws of the Province of Ontario, and the federal laws applicable therein and shall be treated in all respects as Ontario contracts. Each of the parties hereto, which shall include the Warrantholders, irrevocably attorns to the exclusive jurisdiction of the courts of the Province of Ontario with respect to all matters arising out of this Indenture and the transactions contemplated herein.

ARTICLE 2
ISSUE OF WARRANTS

Section 2.1 Creation and Issue of Warrants.

A maximum of 3,514,400 Warrants (subject to adjustment as herein provided) are hereby created and authorized to be issued in accordance with the terms and conditions hereof. By written order of the Corporation, the Warrant Agent shall deliver Warrants to Registered Warrantholders and record the name of the Registered Warrantholders on the Warrant register. Registration of interests in Warrants held by the Depository may be evidenced by a position appearing on the register for Warrants of the Warrant Agent for an amount representing the aggregate number of such Warrants outstanding from time to time.

Section 2.2 Terms of Warrants.

(1) Subject to the applicable conditions for exercise set out in Article 3 having been satisfied and subject to adjustment in accordance with Section 4.1, each Warrant shall entitle each Warrantholder thereof, upon exercise at any time after the Issue Date and prior to the Expiry Time, to acquire one (1) Common Share upon payment of the Exercise Price.

(2) No fractional Warrants shall be issued or otherwise provided for hereunder and Warrants may only be exercised in a sufficient number to acquire whole numbers of Common Shares. Any fractional Warrants shall be rounded down to the nearest whole number and no consideration shall be paid for any such fractional Warrant.

(3) Each Warrant shall entitle the holder thereof to such other rights and privileges as are set forth in this Indenture.

(4) The number of Common Shares which may be purchased pursuant to the Warrants and the Exercise Price therefor shall be adjusted upon the events and in the manner specified in Section 4.1.

Section 2.3 Warrantholder not a Shareholder.

Except as may be specifically provided herein, nothing in this Indenture or in the holding of a Warrant Certificate, entitlement to a Warrant or otherwise, shall, in itself, confer or be construed as conferring upon a Warrantholder any right or interest whatsoever as a Shareholder, including, but not limited to, the right to vote at, to receive notice of, or to attend, meetings of Shareholders or any other proceedings of the Corporation, or the right to Dividends and other allocations.

Section 2.4 Warrants to Rank Pari Passu.

All Warrants shall rank equally and without preference over each other, whatever may be the actual date of issue thereof.

Section 2.5 Form of Warrants, Certificated Warrants.

The Warrants may be issued in both certificated and uncertificated form. Each Warrant originally issued pursuant to this Indenture will be evidenced in certificated form or uncertificated. The Warrants will not be issued as CDS Global Warrants until such time as the Warrants are confirmed eligible by the Depositary to be issued in the name of the Depositary. All Warrants issued in certificated form shall be evidenced by a Warrant Certificate (including all replacements issued in accordance with this Indenture), substantially in the form set out in Schedule "A" hereto, which shall be dated as of the Issue Date, shall bear such distinguishing letters and numbers as the Corporation may, with the approval of the Warrant Agent, prescribe, and shall be issuable in any denomination excluding fractions. All Warrants issued to the Depository may be in either a certificated or uncertificated form, such uncertificated form being evidenced by a book position on the register of Warrantholders to be maintained by the Warrant Agent in accordance with Section 2.6.

Section 2.6 Book Entry Warrants.

(1) Reregistration of beneficial interests in and transfers of Warrants held by the Depository shall be made only through the book entry registration system and no Warrant Certificates shall be issued in respect of such Warrants except where physical certificates evidencing ownership in such securities are required or as set out herein or as may be requested by the Depository, as determined

by the Corporation, from time to time. Except as provided in this Section 2.6, owners of beneficial interests in any CDS Global Warrants shall not be entitled to have Warrants registered in their names and shall not receive or be entitled to receive Warrants in definitive form or to have their names appear in the register referred to in Section 2.9 herein.

(2) Notwithstanding any other provision in this Indenture, no CDS Global Warrants may be exchanged in whole or in part for Warrants registered, and no transfer of any CDS Global Warrants in whole or in part may be registered, in the name of any person other than the Depository for such CDS Global Warrants or a nominee thereof unless:

(a) the Depository notifies the Corporation that it is unwilling or unable to continue to act as depository in connection with the Book Entry Warrants and the Corporation is unable to locate a qualified successor;

(b) the Corporation determines that the Depository is no longer willing, able or qualified to discharge properly its responsibilities as holder of the CDS Global Warrants and the Corporation is unable to locate a qualified successor;

(c) the Depository ceases to be a clearing agency or otherwise ceases to be eligible to be a depository and the Corporation is unable to locate a qualified successor;

(d) the Corporation determines that the Warrants shall no longer be held as Book Entry Warrants through the Depository;

(e) such right is required by Applicable Law, as determined by the Corporation and the Corporation's Counsel;

(f) the Warrant is to be Authenticated to or for the account or benefit of a U.S. Warrantholder;

(g) the Warrantholder intends to exercise the Warrants in accordance with the terms of the Indenture; or

(h) such registration is effected in accordance with the internal procedures of the Depository and the Warrant Agent,

following which, Warrants for those holders requesting the same shall be registered and issued to the beneficial owners of such Warrants or their nominees as directed by the holder. The Corporation shall provide an Officer's Certificate giving notice to the Warrant Agent of the occurrence of any event outlined in this Section 2.6(2)(a)-(f).

(3) Subject to the provisions of this Section 2.6, any exchange of CDS Global Warrants for Warrants which are not CDS Global Warrants may be made in whole or in part in accordance with the provisions of Section 2.11, mutatis mutandis. All such Warrants issued in exchange for a CDS Global Warrant or any portion thereof shall be registered in such names as the Depository for such CDS Global Warrants shall direct and shall be entitled to the same benefits and subject to the same terms and conditions (except insofar as they relate specifically to CDS Global Warrants) as the CDS Global Warrants or portion thereof surrendered upon such exchange.

(4) Every Warrant that is Authenticated upon registration or transfer of a CDS Global Warrant, or in exchange for or in lieu of a CDS Global Warrant or any portion thereof, whether pursuant to this

Section 2.6, or otherwise, shall be Authenticated in the form of, and shall be, a CDS Global Warrant, unless such Warrant is registered in the name of a person other than the Depository for such CDS Global Warrant or a nominee thereof.

(5) Notwithstanding anything to the contrary in this Indenture, subject to Applicable Legislation, the CDS Global Warrant will be issued as an Uncertificated Warrant, unless otherwise requested in writing by the Depository or the Corporation.

(6) The rights of beneficial owners of Warrants who hold securities entitlements in respect of the Warrants through the book entry registration system shall be limited to those established by applicable law and agreements between the Depository and the Book Entry Participants and between such Book Entry Participants and the beneficial owners of Warrants who hold securities entitlements in respect of the Warrants through the book entry registration system, and such rights must be exercised through a Book Entry Participant in accordance with the rules and procedures of the Depository.

(7) Notwithstanding anything herein to the contrary, neither the Corporation nor the Warrant Agent nor any agent thereof shall have any responsibility or liability for:

(a) the electronic records maintained by the Depository relating to any ownership interests or any other interests in the Warrants or the depository system maintained by the Depository, or payments made on account of any ownership interest or any other interest of any person in any Warrant represented by an electronic position in the book entry registration system (other than the Depository or its nominee);

(a) maintaining, supervising or reviewing any records of the Depository or any Book Entry Participant relating to any such interest; or

(b) any advice or representation made or given by the Depository or those contained herein that relate to the rules and regulations of the Depository or any action to be taken by the Depository on its own direction or at the direction of any Book Entry Participant.

(8) The Corporation may terminate the application of this Section 2.6 in its sole discretion in which case all Warrants shall be evidenced by Warrant Certificates registered in the name of a Person other than the Depository.

Section 2.7 Warrant Certificate.

(1) For Warrants issued in certificated form, the form of certificate representing Warrants shall be substantially as set out in Schedule "A" hereto or such other form as is authorized from time to time by the Warrant Agent. Each Warrant Certificate shall be Authenticated on behalf of the Warrant Agent. Each Warrant Certificate shall be signed by any two duly authorized signatories of the Corporation whose signature shall appear on the Warrant Certificate and may be printed, lithographed or otherwise mechanically reproduced thereon and, in such event, certificates so signed are as valid and binding upon the Corporation as if it had been signed manually. Any Warrant Certificate which has two signatures as hereinbefore provided shall be valid notwithstanding that one or more of the persons whose signature is printed, lithographed or mechanically reproduced no longer holds office at the date of issuance of such certificate. The Warrant Certificates may be engraved, printed or lithographed, or partly in one form and partly in another, as the Warrant Agent may determine.

(2) The Warrant Agent shall Authenticate Uncertificated Warrants (whether upon original issuance, exchange, registration of transfer, partial payment, or otherwise) by completing its Internal Procedures and the Corporation shall, and hereby acknowledges that it shall, thereupon be deemed to have duly and validly issued such Uncertificated Warrants under this Indenture. Such Authentication shall be conclusive evidence that such Uncertificated Warrant has been duly issued hereunder and that the holder or holders are entitled to the benefits of this Indenture. The register shall be final and conclusive evidence as to all matters relating to Uncertificated Warrants with respect to which this Indenture requires the Warrant Agent to maintain records or accounts. In case of differences between the register at any time and any other time the register at the later time shall be controlling, absent manifest error and such Uncertificated Warrants are binding on the Corporation.

(3) Any Warrant Certificate validly issued in accordance with the terms of this Indenture in effect at the time of issue of such Warrant Certificate shall, subject to the terms of this Indenture and applicable law, validly entitle the holder to acquire Common Shares, notwithstanding that the form of such Warrant Certificate may not be in the form currently required by this Indenture.

(4) No Warrant shall be considered issued and shall be valid or obligatory or shall entitle the holder thereof to the benefits of this Indenture, until it has been Authenticated by the Warrant Agent. Authentication by the Warrant Agent, including by way of entry on the register, shall not be construed as a representation or warranty by the Warrant Agent as to the validity of this Indenture or of such Warrant Certificates or Uncertificated Warrants (except the due Authentication thereof) or as to the performance by the Corporation of its obligations under this Indenture and the Warrant Agent shall in no respect be liable or answerable for the use made of the Warrants or any of them or of the consideration thereof. Authentication by the Warrant Agent shall be conclusive evidence as against the Corporation that the Warrants so Authenticated have been duly issued hereunder and that the holder thereof is entitled to the benefits of this Indenture.

(5) No Certificated Warrant shall be considered issued and Authenticated or, if Authenticated, shall be obligatory or shall entitle the holder thereof to the benefits of this Indenture, until it has been Authenticated by signature by or on behalf of the Warrant Agent substantially in the form of the Warrant set out in Schedule "A" hereto. Such Authentication on any such Certificated Warrant shall be conclusive evidence that such Certificated Warrant is duly Authenticated and is valid and a binding obligation of the Corporation and that the holder is entitled to the benefits of this Indenture.

(6) No Uncertificated Warrant shall be considered issued and shall be obligatory or shall entitle the holder thereof to the benefits of this Indenture, until it has been Authenticated by entry on the register of the particulars of the Uncertificated Warrant. Such entry on the register of the particulars of an Uncertificated Warrant shall be conclusive evidence that such Uncertificated Warrant is a valid and binding obligation of the Corporation and that the holder is entitled to the benefits of this Indenture.

(7) The Authentication by the Warrant Agent of any Warrants whether by way of entry on the register or otherwise shall not be construed as a representation or warranty by the Warrant Agent as to the validity of the Indenture or such Warrants (except the due Authentication thereof) or as to the performance by the Corporation of its obligations under this Indenture and the Warrant Agent shall in no respect be liable or answerable for the use made of the Warrants or any of them or the proceeds thereof.

Section 2.8 Legends.

(1) Neither the Warrants nor the Common Shares issuable upon exercise of the Warrants have been or will be registered under the U.S. Securities Act or under any United States state securities laws. Each Warrant Certificate originally issued to a U.S. Warrantholder and each Warrant Certificate issued in exchange therefor or in substitution thereof shall bear the following legend or such variations thereof as the Corporation may prescribe from time to time:

"THE SECURITIES REPRESENTED HEREBY AND THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "U.S. SECURITIES ACT"), OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. THE HOLDER HEREOF, BY PURCHASING SUCH SECURITIES, AGREES FOR THE BENEFIT OF THE CORPORATION THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY (A) TO THE CORPORATION, (B) OUTSIDE THE UNITED STATES IN COMPLIANCE WITH RULE 904 OF REGULATION S UNDER THE U.S. SECURITIES ACT AND IN COMPLIANCE WITH APPLICABLE LOCAL LAWS AND REGULATIONS, (C) IN COMPLIANCE WITH THE EXEMPTION FROM REGISTRATION UNDER THE U.S. SECURITIES ACT PROVIDED BY (1) RULE 144 THEREUNDER, IF AVAILABLE, OR (2) RULE 144A THEREUNDER, IF AVAILABLE, AND, IN BOTH CASES, IN COMPLIANCE WITH APPLICABLE STATE SECURITIES LAWS, (D) IN ANOTHER TRANSACTION THAT DOES NOT REQUIRE REGISTRATION UNDER THE U.S. SECURITIES ACT OR ANY APPLICABLE STATE SECURITIES LAWS, OR (E) PURSUANT TO A REGISTRATION STATEMENT THAT HAS BEEN DECLARED EFFECTIVE UNDER THE U.S. SECURITIES ACT, AND, IN THE CASE OF (C)(1) AND (D) ABOVE, AFTER THE SELLER FURNISHES TO THE CORPORATION AN OPINION OF COUNSEL OF RECOGNIZED STANDING OR OTHER EVIDENCE IN FORM AND SUBSTANCE REASONABLY SATISFACTORY TO THE CORPORATION TO SUCH EFFECT. DELIVERY OF THIS CERTIFICATE MAY NOT CONSTITUTE "GOOD DELIVERY" IN SETTLEMENT OF TRANSACTIONS ON STOCK EXCHANGES IN CANADA."

provided that, if the Warrants are being sold outside the United States in accordance with Rule 904 of Regulation S, this legend may be removed by the transferor providing a declaration to the Corporation and the Warrant Agent in the form set forth in Schedule "C" or as the Corporation may prescribe from time to time, together with any other evidence, which may, without limitation, include an opinion of counsel of recognized standing reasonably satisfactory to the Corporation, required by the Warrant Agent, to the effect that the legend is no longer required under applicable requirements of the U.S. Securities Act.

The Warrant Agent shall be entitled to request any other documents that it may reasonably require in accordance with its internal policies for the removal of the legend set forth above.

(2) Each CDS Global Warrant originally issued in Canada and held by the Depository, and each CDS Global Warrant issued in exchange therefor or in substitution thereof shall bear or be deemed to bear the following legend or such variations thereof as the Corporation may prescribe from time to time:

"UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF CDS CLEARING AND DEPOSITORY SERVICES INC. ("**CDS**") TO CARDIOL THERAPEUTICS INC. (THE "**ISSUER**") OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IN RESPECT THEREOF IS REGISTERED IN THE NAME OF CDS & CO, OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED

REPRESENTATIVE OF CDS (AND ANY PAYMENT IS MADE TO CDS & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF CDS), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL SINCE THE REGISTERED HOLDER HEREOF, CDS & CO., HAS A PROPERTY INTEREST IN THE SECURITIES REPRESENTED BY THIS CERTIFICATE HEREIN AND IT IS A VIOLATION OF ITS RIGHTS FOR ANOTHER PERSON TO HOLD, TRANSFER OR DEAL WITH THIS CERTIFICATE."

(3) Notwithstanding any other provisions of this Indenture, in processing and registering transfers of Warrants, no duty or responsibility whatsoever shall rest upon the Warrant Agent to determine the compliance by any transferor or transferee with the terms of the legend contained in Sections 2.8(1) or 2.8(2), or with the relevant securities laws or regulations, including, without limitation, Regulation S, and the Warrant Agent shall be entitled to assume that all transfers made in compliance with the terms of this Indenture are legal and proper. The Corporation shall direct the Warrant Agent in writing as to matters related to any applicable hold periods and applicable securities legislation and legending restrictions and requirements. Notwithstanding any other provisions of this Indenture, on the issuance or transfer of any Warrants and Common Shares, no duty or responsibility whatsoever shall rest upon the Warrant Agent or transfer agent to determine or verify the compliance with any applicable laws or regulatory requirements including, without limitation, Regulation S, and the Warrant Agent shall be entitled to assume that all transfers of Warrants and Common Shares issuable upon exercise thereof made in accordance with this Indenture are permissible pursuant to all applicable laws and regulatory requirements.

(4) The Warrant Agent may assume that the address on the register of the

Warrantholder is the actual address of the Warrantholder and is also determinative of the residence of such Warrantholder and the address of any transferee to whom securities are transferred as shown on the transfer form is also determinative of the residence of such transferee.

Section 2.9 Register of Warrants.

(1) The Warrant Agent shall maintain records and accounts concerning the Warrants, whether certificated or uncertificated, which shall contain the information called for below with respect to each Warrant, together with such other information as may be required by law or as the Warrant Agent may elect to record. All such information shall be kept in one set of accounts and records which the Warrant Agent shall designate (in such manner as shall permit it to be so identified as such by an unaffiliated party) as the register of the holders of Warrants. The information to be entered for each account in the register of Warrants at any time shall include (without limitation):

(a) the name and address of the Registered Warrantholder, the date of Authentication thereof and the number of Warrants;

(b) whether such Warrant is a Certificated Warrant or an Uncertificated Warrant and, if a Warrant Certificate, the unique number or code assigned to and imprinted thereupon and, if an Uncertificated Warrant, the unique number or code assigned thereto if any;

(c) whether such Warrant has been cancelled; and

(d) a register of transfers in which all transfers of Warrants and the date and other particulars of each transfer shall be entered.

The register shall be available for inspection by the Corporation and or any Warrantholder during the Warrant Agent's regular business hours on a Business Day and upon payment to the Warrant Agent of its reasonable fees. Any Warrantholder exercising such right of inspection shall first provide an affidavit in form satisfactory to the Corporation and the Warrant Agent stating the name and address of the Warrantholder and agreeing not to use the information therein except in connection with an effort to call a meeting of Warrantholders or to influence the voting of Warrantholders at any meeting of Warrantholders.

(2) Once an Uncertificated Warrant has been Authenticated, the information set forth in the register with respect thereto at the time of Authentication may be altered, modified, amended, supplemented or otherwise changed only to reflect exercise or proper instructions to the Warrant Agent from the holder as provided herein, except that the Warrant Agent may act unilaterally to make purely administrative changes internal to the Warrant Agent and changes to correct errors. Each person who becomes a holder of an Uncertificated Warrant, by his, her or its acquisition thereof shall be deemed to have irrevocably (i) consented to the foregoing authority of the Warrant Agent to make such minor error corrections and (ii) agreed to pay to the Warrant Agent, promptly upon written demand, the full amount of all loss and expense (including without limitation reasonable legal fees of the Corporation and the Warrant Agent plus interest, at an appropriate then prevailing rate of interest to the Warrant Agent), sustained by the Corporation or the Warrant Agent as a proximate result of such error if but only if and only to the extent that such present or former holder realized any benefit as a result of such error and could reasonably have prevented, forestalled or minimized such loss and expense by prompt reporting of the error or avoidance of accepting benefits thereof whether or not such error is or should have been timely detected and corrected by the Warrant Agent; provided, that no person who is a bona fide purchaser shall have any such obligation to the Corporation or to the Warrant Agent.

Section 2.10 Issue in Substitution for Warrant Certificates Lost, etc.

(1) If any Warrant Certificate becomes mutilated or is lost, destroyed or stolen, the Corporation, subject to applicable law, shall issue and thereupon the Warrant Agent shall certify and deliver, a new Warrant Certificate of like tenor, and bearing the same legend, if applicable, as the one mutilated, lost, destroyed or stolen in exchange for and in place of and upon cancellation of such mutilated Warrant Certificate, or in lieu of and in substitution for such lost, destroyed or stolen Warrant Certificate, and the substituted Warrant Certificate shall be in a form approved by the Warrant Agent and the Warrants evidenced thereby shall be entitled to the benefits hereof and shall rank equally in accordance with its terms with all other Warrants issued or to be issued hereunder.

(2) The applicant for the issue of a new Warrant Certificate pursuant to this Section 2.10 shall bear the cost of the issue thereof and in case of loss, destruction or theft shall, as a condition precedent to the issuance thereof, furnish to the Corporation and to the Warrant Agent such evidence of ownership and of the loss, destruction or theft of the Warrant Certificate so lost, destroyed or stolen as shall be satisfactory to the Corporation and to the Warrant Agent, in their sole discretion, and such applicant shall also be required to furnish an indemnity and surety bond in amount and form satisfactory to the Corporation and the Warrant Agent, in their sole discretion, and shall pay the reasonable charges of the Corporation and the Warrant Agent in connection therewith.

Section 2.11 Exchange of Warrant Certificates.

(1) Any one or more Warrant Certificates representing any number of Warrants may, upon compliance with the reasonable requirements of the Warrant Agent (including compliance with applicable securities legislation), be exchanged for one or more other Warrant Certificates representing the same aggregate number of Warrants, and bearing the same legend, if applicable, as represented by the Warrant Certificate or Warrant Certificates so exchanged.

(2) Warrant Certificates may be exchanged only at the Warrant Agency or at any other place that is designated by the Corporation with the approval of the Warrant Agent. Any Warrant Certificate from the holder (or such other instructions, in form satisfactory to the Warrant Agent), tendered for exchange shall be surrendered to the Warrant Agency and cancelled by the Warrant Agent.

(3) Warrant Certificates exchanged for Warrant Certificates that bear the legend set forth in Section 2.8(1) shall bear the same legend.

Section 2.12 Transfer and Ownership of Warrants.

(1) The Warrants may only be transferred on the register kept by the Warrant Agent at the Warrant Agency by the holder or its legal representatives or its attorney duly appointed by an instrument in writing in form and execution satisfactory to the Warrant Agent only upon (a) in the case of a Warrant Certificate, surrendering to the Warrant Agent at the Warrant Agency the Warrant Certificates representing the Warrants to be transferred together with a duly executed transfer form as set forth in Schedule "A" and (b) in the case of Book Entry Warrants, in accordance with procedures prescribed by the Depository under the book entry registration system, and (c) upon compliance with:

(i) the conditions herein;

(ii) such reasonable requirements as the Warrant Agent may prescribe; and

(iii) all applicable securities legislation and requirements of regulatory authorities;

and such transfer shall be duly noted in such register by the Warrant Agent. Upon compliance with such requirements, the Warrant Agent shall issue to the transferee a Warrant Certificate and to the transferee of an Uncertificated Warrant, an Uncertificated Warrant (and Uncertificated Warrants that are held as Book Entry Warrants shall be transferred and recorded through the relevant Book Entry Participant in accordance with the book entry registration system as the entitlement holder in respect of such Warrants), or the Warrant Agent shall Authenticate and deliver a Warrant Certificate upon request that part of the CDS Global Warrant be certificated. Transfers within the systems of the Depository are not the responsibility of the Warrant Agent and will not be noted on the register maintained by the Warrant Agent.

(2) If a Warrant Certificate is tendered for transfer bears the legend set forth in Section 2.8(1), the Warrant Agent shall not register such transfer unless the transferor has provided the Warrant Agent with the Warrant Certificate and (A) the transfer is made to the Corporation, (B) a declaration to the effect set forth in Schedule "C" to this Warrant Indenture, or in such other form as the Corporation may from time to time prescribe, is delivered to the Corporation and the Warrant Agent, together with any other evidence, which may, without limitation, include an opinion of counsel of recognized standing reasonably satisfactory to the Corporation, required by the Warrant Agent, to the effect that the transfer is being made pursuant to Regulation S, or (C) an opinion of counsel or other evidence, in each case reasonably satisfactory to the Corporation, that the transfer is not required to be registered under the U.S. Securities Act.

(3) Subject to the provisions of this Indenture, Applicable Legislation and applicable law, the Warrantholder shall be entitled to the rights and privileges attaching to the Warrants, and the issue of Common Shares by the Corporation upon the exercise of Warrants in accordance with the terms and conditions herein contained shall discharge all responsibilities of the Corporation and the Warrant Agent with respect to such Warrants and neither the Corporation nor the Warrant Agent shall be bound to inquire into the title of any such holder.

Section 2.13 Cancellation of Surrendered Warrants.

All Warrant Certificates surrendered pursuant to Article 3 shall be cancelled by the Warrant Agent and upon such circumstances all such Uncertificated Warrants shall be deemed cancelled and so noted on the register by the Warrant Agent. Upon request by the Corporation, the Warrant Agent shall furnish to the Corporation a cancellation certificate identifying the Warrant Certificates so cancelled, the number of Warrants evidenced thereby, the number of Common Shares, if any, issued pursuant to such Warrants and the details of any Warrant Certificates issued in substitution or exchange for such Warrant Certificates cancelled.

ARTICLE 3
EXERCISE OF WARRANTS

Section 3.1 Right of Exercise.

Subject to the provisions hereof, each Registered Warrantholder may exercise the right conferred on such holder to subscribe for and purchase one (1) Common Share for each Warrant after the Issue Date and prior to the Expiry Time and in accordance with the conditions herein.

Section 3.2 Warrant Exercise.

(1) Other than Warrants held by the Depository, Registered Warrantholders of Warrant Certificates who wish to exercise the Warrants held by them in order to acquire Common Shares must complete (i) the exercise form (the "**Exercise Notice**") attached to the Warrant Certificate(s) which form is attached hereto as Schedule "B", which may be amended by the Corporation with the consent of the Warrant Agent, if such amendment does not, in the reasonable opinion of the Corporation and the Warrant Agent, which may be based on the advice of Counsel, materially and adversely affect the rights, entitlements and interests of the Warrantholders, and deliver such certificate(s), the executed Exercise Notice and, a certified cheque, bank draft or money order payable to or to the order of the Corporation for the aggregate Exercise Price to the Warrant Agent at the Warrant Agency. The Warrants represented by a Warrant Certificate shall be deemed to be surrendered upon personal delivery of such certificate, Exercise Notice, and aggregate Exercise Price or, if such documents are sent by mail or other means of transmission, upon actual receipt thereof by the Warrant Agent at the office referred to above.

(2) The Warrants may not be exercised by or on behalf of a person in the United States or a U.S. Person unless an exemption from the registration requirements of the U.S. Securities Act and applicable state securities laws is available to the Warrantholder, and the Warrantholder follows the applicable procedures set forth in Section 3.3(2) below.

(3) A Registered Warrantholder of Uncertificated Warrants evidenced by a security entitlement in respect of Warrants must complete the Exercise Notice and deliver the executed Exercise Notice and a certified cheque, bank draft or money order payable to or to the order of the Corporation for the aggregate Exercise Price to the Warrant Agent at the Warrant Agency. The Uncertificated

Warrants shall be deemed to be surrendered upon receipt of the Exercise Notice and aggregate Exercise Price or, if such documents are sent by mail or other means of transmission, upon actual receipt thereof by the Warrant Agent at the office referred to above.

(4) A beneficial owner of Uncertificated Warrants evidenced by a security entitlement in respect of Warrants in the book entry registration system who desires to exercise his or her Warrants must do so by causing a Book Entry Participant to deliver to the Depository on behalf of the entitlement holder, notice of the owner's intention to exercise Warrants in a manner acceptable to the Depository. Forthwith upon receipt by the Depository of such notice, as well as payment for the aggregate Exercise Price, the Depository shall deliver to the Warrant Agent confirmation of its intention to exercise Warrants (a "**Confirmation**") in a manner acceptable to the Warrant Agent, including by electronic means through a book based registration system, including CDSX. An electronic exercise of the Warrants initiated by the Book Entry Participant through a book based registration system, including CDSX, shall constitute a representation to both the Corporation and the Warrant Agent that the beneficial owner at the time of exercise of such Warrants is not a U.S. Warrantholder. If the Book Entry Participant is not able to make or deliver the foregoing representations by initiating the electronic exercise of the Warrants, then such Warrants shall be withdrawn from the book based registration system, including CDSX, by the Book Entry Participant and an individually registered Warrant Certificate shall be issued by the Warrant Agent to such beneficial owner or Book Entry Participant and the exercise procedures set forth in Section 3.2(1) shall be followed (and in the case of a U.S. Warrantholder, Section 3.3(2) shall be followed).

(5) Payment representing the aggregate Exercise Price must be provided to the appropriate office of the Book Entry Participant in a manner acceptable to it. A notice in form acceptable to the Book Entry Participant and payment from such beneficial holder should be provided to the Book Entry Participant sufficiently in advance so as to permit the Book Entry Participant to deliver notice and payment to the Depository and for the Depository in turn to deliver notice and payment to the Warrant Agent prior to the Expiry Time. The Depository will initiate the exercise by way of the Confirmation and forward the aggregate Exercise Price electronically to the Warrant Agent and the Warrant Agent will execute the exercise by issuing to the Depository through the book entry registration system the Common Shares to which the exercising Warrantholder is entitled pursuant to the exercise. Any expense associated with the exercise process will be for the account of the entitlement holder exercising the Warrants and/or the Book Entry Participant exercising the Warrants on its behalf.

(6) By causing a Book Entry Participant to deliver notice to the Depository, a Warrantholder shall be deemed to have irrevocably surrendered his or her Warrants so exercised and appointed such Book Entry Participant to act as his or her exclusive settlement agent with respect to the exercise and the receipt of Common Shares in connection with the obligations arising from such exercise.

(7) Any notice which the Depository determines to be incomplete, not in proper form or not duly executed shall for all purposes be void and of no force and effect and the exercise to which it relates shall be considered for all purposes not to have been exercised thereby. A failure by a Book Entry Participant to exercise or to give effect to the settlement thereof in accordance with the Warrantholder's instructions will not give rise to any obligations or liability on the part of the Corporation or Warrant Agent to the Book Entry Participant or the Warrantholder.

(8) Any exercise form or Exercise Notice referred to in this Section 3.2 shall be signed by the Registered Warrantholder, or its executors or administrators or other legal representatives or an attorney of the Registered Warrantholder, duly appointed by an instrument in writing satisfactory to the Warrant Agent but such Exercise Notice need not be executed by the Depository.

(9) Any exercise referred to in this Section 3.2 shall require that the entire Exercise Price for Common Shares subscribed must be paid at the time of subscription and such Exercise Price and original Exercise Notice executed by the Registered Warrantholder or Confirmation from the Depository must be received by the Warrant Agent prior to the Expiry Time.

(10) Warrants may only be exercised pursuant to this Section 3.2 by or on behalf of a Registered Warrantholder who makes the certifications set forth on the Exercise Notice set out in Schedule "B" and otherwise complies with the provisions of the Exercise Notice, including, without limitation, the delivery of any opinion of counsel required thereby.

(11) If the form of Exercise Notice set forth in the Warrant Certificate shall have been amended, the Corporation shall cause the amended Exercise Notice to be forwarded to all Registered Warrantholders.

(12) Exercise Notices and Confirmations must be delivered to the Warrant Agent at any time during the Warrant Agent's actual business hours on any Business Day prior to the Expiry Time. Any Exercise Notice or Confirmations received by the Warrant Agent after business hours on any Business Day other than the Expiry Date will be deemed to have been received by the Warrant Agent on the next following Business Day.

(13) Any Warrant with respect to which an Exercise Form is not received by the Warrant Agent before the Expiry Time shall be deemed to have expired and become void and all rights with respect to such Warrants shall terminate and be cancelled.

Section 3.3 Restrictions on Exercise by U.S. Warrantholders.

(1) Subject to Section 3.3(2) below, (i) Warrants may not be exercised within the United States or by or on behalf of any person in the United States or U.S. Person; and (ii) no Common Shares issued upon exercise of Warrants may be delivered to any address in the United States.

(2) Notwithstanding Section 3.2(2) or Section 3.3(1), (i) Warrants may be exercised by or on behalf of a person in the United States or a U.S. Person, and (ii) Common Shares issued upon exercise of any such Warrants may be delivered to an address in the United States, provided that (A) (1) the person exercising the Warrants is a U.S. Warrantholder that acquired the Warrants in the U.S. Offering, (2) the person exercising the Warrants is a U.S. Accredited Investor at the time of exercise of the Warrants, (3) the representations, warranties and covenants made by the U.S. Warrantholder in the U.S. Offering remain true and correct, and (4) the U.S. Warrantholder provides a certification to the foregoing effect in the Exercise Notice; or (B) the person exercising the Warrants has delivered to the Corporation an opinion of counsel (which will not be sufficient unless it is from counsel of recognized standing and in form and substance satisfactory to the Corporation and the Warrant Agent) to the effect that an exemption from the registration requirements of the U.S. Securities Act and applicable state securities laws is available.

(3) If certificates representing Common Shares are issued upon the exercise of Certificated Warrants which bear the legend set forth in Section 2.8(1) and which are issued pursuant to Box B or C of the Exercise Form, upon such issuance of certificated Common Shares they shall bear the legend set forth in Section 2.8(1).

Section 3.4 Transfer Fees and Taxes.

If any of the Common Shares subscribed for are to be issued to a person or persons other than the Registered Warrantholder, the Registered Warrantholder shall execute the form of transfer and will comply with such reasonable requirements as the Warrant Agent may stipulate and will pay to the Corporation or the Warrant Agent on behalf of the Corporation, all applicable transfer or similar taxes and the Corporation will not be required to issue or deliver certificates evidencing Common Shares unless or until such Warrantholder shall have paid to the Corporation or the Warrant Agent on behalf of the Corporation, the amount of such tax or shall have established to the satisfaction of the Corporation and the Warrant Agent that such tax has been paid or that no tax is due.

Section 3.5 Warrant Agency.

To facilitate the exchange, transfer or exercise of Warrants and compliance with such other terms and conditions hereof as may be required, the Corporation has appointed the Warrant Agency, as the agency at which Warrants may be surrendered for exchange or transfer or at which Warrants may be exercised and the Warrant Agent has accepted such appointment. The Corporation may from time to time designate alternate or additional places as the Warrant Agency (subject to the Warrant Agent's prior approval) and will give notice to the Warrant Agent of any proposed change of the Warrant Agency. Branch registers shall also be kept at such other place or places, if any, as the Corporation, with the approval of the Warrant Agent, may designate. The Warrant Agent will from time to time when requested to do so by the Corporation or any Registered Warrantholder, upon payment of the Warrant Agent's reasonable charges, furnish a list of the names and addresses of Registered Warrantholders showing the number of Warrants held by each such Registered Warrantholder.

Section 3.6 Effect of Exercise of Warrant Certificates.

(1) Upon the exercise of Warrants Certificates or Uncertificated Warrants pursuant to and in compliance with Section 3.2 and subject to Section 3.3 and Section 3.4, the Common Shares to be issued pursuant to the Warrants exercised shall be deemed to have been issued and the person or persons to whom such Common Shares are to be issued shall be deemed to have become the holder or holders of such Common Shares within five Business Days of the Exercise Date unless the register shall be closed on such date, in which case the Common Shares subscribed for shall be deemed to have been issued and such person or persons deemed to have become the holder or holders of record of such Common Shares, on the date on which such register is reopened. It is hereby understood that in order for persons to whom Common Shares are to be issued, to become holders of Common Shares on record on the Exercise Date, beneficial holders must commence the exercise process sufficiently in advance so that the Warrant Agent is in receipt of all items of exercise at least one Business Day prior to such Exercise Date.

(2) Within five Business Days after the Exercise Date with respect to a Warrant, the Warrant Agent shall use commercially reasonable efforts to cause to be delivered or mailed to the person or persons in whose name or names the Warrant is registered or, if so specified in writing by the holder, cause to be delivered to such person or persons at the Warrant Agency where the Warrant Certificate was surrendered, a certificate or certificates for the appropriate number of Common Shares subscribed for, or any other appropriate evidence of the issuance of Common Shares to such person or persons in respect of Common Shares issued under the book entry registration system.

Section 3.7 Partial Exercise of Warrants; Fractions.

(1) The holder of any Warrants may exercise his right to acquire a number of whole Common Shares less than the aggregate number which the holder is entitled to acquire. In the event of any exercise of a number of Warrants less than the number which the holder is entitled to exercise, the holder of

Warrants upon such exercise shall, in addition, be entitled to receive, without charge therefor, a new Warrant Certificate(s), bearing the same legend, if applicable, or other appropriate evidence of Warrants, in respect of the balance of the Warrants held by such holder and which were not then exercised.

(2) Notwithstanding anything herein contained including any adjustment provided for in Section 4.1, the Corporation shall not be required, upon the exercise of any Warrants, to issue fractions of Common Shares. Warrants may only be exercised in a sufficient number to acquire whole numbers of Common Shares. Any fractional Common Shares shall be rounded down to the nearest whole number and the holder of such Warrants shall not be entitled to any compensation in respect of any fractional Common Shares which is not issued.

Section 3.8 Expiration of Warrants.

Immediately after the Expiry Time, all rights under any Warrant in respect of which the right of acquisition provided for herein shall not have been exercised shall cease and terminate and each Warrant shall be void and of no further force or effect.

Section 3.9 Accounting and Recording.

(1) The Warrant Agent shall promptly account to the Corporation with respect to Warrants exercised, and shall promptly forward to the Corporation (or into an account or accounts of the Corporation with the bank or trust company designated by the Corporation for that purpose), all monies received by the Warrant Agent on the subscription of Common Shares through the exercise of Warrants. All such monies and any securities or other instruments, from time to time received by the Warrant Agent, shall be received in trust for, and shall be segregated and kept apart by the Warrant Agent, the Warrantholders and the Corporation as their interests may appear

(2) The Warrant Agent shall record the particulars of Warrants exercised, which particulars shall include the names and addresses of the persons who become holders of Common Shares on exercise and the Exercise Date, in respect thereof. The Warrant Agent shall provide such particulars in writing to the Corporation within five Business Days of any request by the Corporation therefor.

Section 3.10 Securities Restrictions.

Notwithstanding anything herein contained, Common Shares will be issued upon exercise of a Warrant only in compliance with the securities laws of any applicable jurisdiction.

ARTICLE 4
ADJUSTMENT OF NUMBER OF COMMON SHARES AND EXERCISE PRICE

Section 4.1 Adjustment of Number of Common Shares and Exercise Price.

The subscription rights in effect under the Warrants for Common Shares issuable upon the exercise of the Warrants shall be subject to adjustment from time to time as follows:

(a) if, at any time during the Adjustment Period, the Corporation shall:

(i) subdivide, re-divide or change its outstanding Common Shares into a greater number of Common Shares;

(ii) reduce, combine or consolidate its outstanding Common Shares into a lesser number of Common Shares; or

(iii) issue Common Shares or securities exchangeable for, or convertible into, Common Shares to all or substantially all of the holders of Common Shares by way of stock dividend or other distribution (other than a distribution of Common Shares upon the exercise of Warrants or any outstanding options);

(any of such events in Section 4.1(a)(i), (ii) or (iii) being called a "**Common Share Reorganization**") then the Exercise Price shall be adjusted as of the effect on the effective date or record date of such subdivision, re-division, change, reduction, combination, consolidation or distribution, as the case may be, shall in the case of the events referred to in (i) or (iii) above be decreased in proportion to the number of outstanding Common Shares resulting from such subdivision, re-division, change or distribution, or shall, in the case of the events referred to in (ii) above, be increased in proportion to the number of outstanding Common Shares resulting from such reduction, combination or consolidation by multiplying the Exercise Price in effect immediately prior to such effective date or record date by a fraction, the numerator of which shall be the number of Common Shares outstanding on such effective date or record date before giving effect to such Common Share Reorganization and the denominator of which shall be the number of Common Shares outstanding as of the effective date or record date after giving effect to such Common Shares Reorganization (including, in the case where securities exchangeable for or convertible into Common Shares are distributed, the number of Common Share that would have been outstanding had such securities been exchanged for or converted into Common Shares on such record date or effective date). Such adjustment shall be made successively whenever any event referred to in this Section 4.1(a) shall occur. Upon any adjustment of the Exercise Price pursuant to Section 4.1(a), the Exchange Rate shall be contemporaneously adjusted by multiplying the number of Common Shares theretofore obtainable on the exercise thereof by a fraction of which the numerator shall be the Exercise Price in effect immediately prior to such adjustment and the denominator shall be the Exercise Price resulting from such adjustment;

(b) if and whenever at any time during the Adjustment Period, the Corporation shall fix a record date for the issuance of rights, options or warrants to all or substantially all the holders of its outstanding Common Shares entitling them, for a period expiring not more than 45 days after such record date, to subscribe for or purchase Common Shares (or securities convertible or exchangeable into Common Shares) at a price per Common Share (or having a conversion or exchange price per Common Share) less than 95% of the Current Market Price on such record date (a "**Rights Offering**"), the Exercise Price shall be adjusted immediately after such record date so that it shall equal the amount determined by multiplying the Exercise Price in effect on such record date by a fraction, of which the numerator shall be the total number of Common Shares outstanding on such record date plus a number of Common Shares equal to the number arrived at by dividing the aggregate price of the total number of additional Common Shares offered for subscription or purchase (or the aggregate conversion or exchange price of the convertible or exchangeable securities so offered) by the Current Market Price, and of which the denominator shall be the total number of Common Shares outstanding on such record date plus the total number of additional Common Shares offered for subscription or purchase or into which the convertible or exchangeable securities so offered are convertible or exchangeable; any Common Shares owned by or held

for the account of the Corporation shall be deemed not to be outstanding for the purpose of any such computation; such adjustment shall be made successively whenever such a record date is fixed; to the extent that no such rights or warrants are exercised prior to the expiration thereof, the Exercise Price shall be readjusted to the Exercise Price which would then be in effect if such record date had not been fixed or, if any such rights or warrants are exercised, to the Exercise Price which would then be in effect based upon the number of Common Shares (or securities convertible or exchangeable into Common Shares) actually issued upon the exercise of such rights or warrants, as the case may be. Upon any adjustment of the Exercise Price pursuant to this Section 4.1(b), the Exchange Rate will be adjusted immediately after such record date so that it will equal the rate determined by multiplying the Exchange Rate in effect on such record date by a fraction, of which the numerator shall be the Exercise Price in effect immediately prior to such adjustment and the denominator shall be the Exercise Price resulting from such adjustment. Such adjustment will be made successively whenever such a record date is fixed, provided that if two or more such record dates or record dates referred to in this Section 4.1(b) are fixed within a period of 25 Trading Days, such adjustment will be made successively as if each of such record dates occurred on the earliest of such record dates;

(c) if and whenever at any time during the Adjustment Period the Corporation shall fix a record date for the making of a distribution to all or substantially all the holders of its outstanding Common Shares of (i) securities of any class, whether of the Corporation or any other trust (other than Common Shares), (ii) rights, options or warrants to subscribe for or purchase Common Shares (or other securities convertible into or exchangeable for Common Shares), other than pursuant to a Rights Offering; (iii) evidences of its indebtedness or (iv) any property or other assets then, in each such case, the Exercise Price shall be adjusted immediately after such record date so that it shall equal the price determined by multiplying the Exercise Price in effect on such record date by a fraction, of which the numerator shall be the total number of Common Shares outstanding on such record date multiplied by the Current Market Price on such record date, less the excess, if any, of the fair market value on such record date, as determined by the Corporation (whose determination shall be conclusive), of such securities or other assets so issued or distributed over the fair market value of any consideration received therefor by the Corporation from the holders of the Common Shares, and of which the denominator shall be the total number of Common Shares outstanding on such record date multiplied by the Current Market Price; and Common Shares owned by or held for the account of the Corporation shall be deemed not to be outstanding for the purpose of any such computation; such adjustment shall be made successively whenever such a record date is fixed; to the extent that such distribution is not so made, the Exercise Price shall be readjusted to the Exercise Price which would then be in effect if such record date had not been fixed. Upon any adjustment of the Exercise Price pursuant to this Section 4.1(c), the Exchange Rate will be adjusted immediately after such record date so that it will equal the rate determined by multiplying the Exchange Rate in effect on such record date by a fraction, of which the numerator shall be the Exercise Price in effect immediately prior to such adjustment and the denominator shall be the Exercise Price resulting from such adjustment;

(d) if and whenever at any time during the Adjustment Period, there is a reclassification of the Common Shares or a capital reorganization of the Corporation other than as described in Section 4.1(a) or a consolidation, amalgamation, arrangement or merger of the Corporation with or into any other body corporate, trust, partnership or other entity, or a sale or conveyance of the property and assets of the Corporation as an entirety or substantially as an entirety to any other body corporate, trust, partnership or other entity, any Registered Warrantholder who has not exercised its right of acquisition prior to the effective date of such reclassification, capital reorganization, consolidation, amalgamation, arrangement or merger, sale or conveyance, upon the exercise of such right thereafter, shall be entitled to receive upon payment of the Exercise Price and shall accept, in lieu of the number of Common Shares that prior to such effective date the Registered Warrantholder would have been entitled to receive, the number of shares or other securities or property of the Corporation or of the body corporate, trust, partnership or other entity resulting from such merger, amalgamation or consolidation, or to which such sale or conveyance may be made, as the case may be, that such Registered Warrantholder would have been entitled to receive on such reclassification, capital reorganization, consolidation, amalgamation, arrangement or merger, sale or conveyance, if, on the effective date thereof, as the case may be, the Registered Warrantholder had been the registered holder of the number of Common Shares to which prior to such effective date it was entitled to acquire upon the exercise of the Warrants. If determined appropriate by the Warrant Agent, relying on advice of Counsel, to give effect to or to evidence the provisions of this Section 4.1(d), the Corporation, its successor, or such purchasing body corporate, partnership, trust or other entity, as the case may be, shall, prior to or contemporaneously with any such reclassification, capital reorganization, consolidation, amalgamation, arrangement, merger, sale or conveyance, enter into an indenture which shall provide, to the extent possible, for the application of the provisions set forth in this Indenture with respect to the rights and interests thereafter of the Registered Warrantholders to the end that the provisions set forth in this Indenture shall thereafter correspondingly be made applicable, as nearly as may reasonably be, with respect to any shares, other securities or property to which a Registered Warrantholder is entitled on the exercise of its acquisition rights thereafter. Any indenture entered into between the Corporation and the Warrant Agent pursuant to the provisions of this Section 4.1(d) shall be a supplemental indenture entered into pursuant to the provisions of Article 8 hereof. Any indenture entered into between the Corporation, any successor to the Corporation or such purchasing body corporate, partnership, trust or other entity and the Warrant Agent shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided in this Section 4.1 and which shall apply to successive reclassifications, capital reorganizations, amalgamations, consolidations, mergers, sales or conveyances;

(e) in any case in which this Section 4.1 shall require that an adjustment shall become effective immediately after a record date for an event referred to herein, the Corporation may defer, until the occurrence of such event, issuing to the Registered Warrantholder of any Warrant exercised after the record date and prior to completion of such event the additional Common Shares issuable by reason of the adjustment required by such event before giving effect to such adjustment; provided, however, that the Corporation shall deliver to such Registered Warrantholder an appropriate instrument evidencing such Registered

Warrantholder's right to receive such additional Common Shares upon the occurrence of the event requiring such adjustment and the right to receive any distributions made on such additional Common Shares declared in favour of holders of record of Common Shares on and after the relevant date of exercise or such later date as such Registered Warrantholder would, but for the provisions of this Section 4.1(e), have become the holder of record of such additional Common Shares pursuant to Section 4.1;

(f) in any case in which Section 4.1(a)(iii), Section 4.1(b) or Section 4.1(c) require that an adjustment be made to the Exercise Price, no such adjustment shall be made if the Registered Warrantholders of the outstanding Warrants receive, subject to any required stock exchange or regulatory approval, the rights or warrants referred to in Section 4.1(a)(iii), Section 4.1(b) or the shares, rights, options, warrants, evidences of indebtedness or assets referred to in Section 4.1(c), as the case may be, in such kind and number as they would have received if they had been holders of Common Shares on the applicable record date or effective date, as the case may be, by virtue of their outstanding Warrant having then been exercised into Common Shares at the Exercise Price in effect on the applicable record date or effective date, as the case may be;

(g) the adjustments provided for in this Section 4.1 are cumulative, and shall, in the case of adjustments to the Exercise Price be computed to the nearest whole cent and shall apply to successive subdivisions, re-divisions, reductions, combinations, consolidations, distributions, issues or other events resulting in any adjustment under the provisions of this Section 4.1, provided that, notwithstanding any other provision of this Section, no adjustment of the Exercise Price shall be required unless such adjustment would require an increase or decrease of at least 1% in the Exercise Price then in effect; provided, however, that any adjustments which by reason of this Section 4.1(g) are not required to be made shall be carried forward and taken into account in any subsequent adjustment; and

(h) after any adjustment pursuant to this Section 4.1, the term "Common Shares" where used in this Indenture shall be interpreted to mean securities of any class or classes which, as a result of such adjustment and all prior adjustments pursuant to this Section 4.1, the Registered Warrantholder is entitled to receive upon the exercise of his Warrant, and the number of Common Shares indicated by any exercise made pursuant to a Warrant shall be interpreted to mean the number of Common Shares or other property or securities a Registered Warrantholder is entitled to receive, as a result of such adjustment and all prior adjustments pursuant to this Section 4.1, upon the full exercise of a Warrant.

Section 4.2 Entitlement to Common Shares on Exercise of Warrant.

All Common Shares or shares of any class or other securities, which a Registered Warrantholder is at the time in question entitled to receive on the exercise of its Warrant, whether or not as a result of adjustments made pursuant to this Article 4 shall, for the purposes of the interpretation of this Indenture, be deemed to be Common Shares which such Registered Warrantholder is entitled to acquire pursuant to such Warrant.

Section 4.3 No Adjustment for Certain Transactions.

Notwithstanding anything in this Article 4, no adjustment shall be made in the acquisition rights attached to the Warrants if the issue of Common Shares is being made pursuant to this Indenture or in connection with (a) any share incentive plan or restricted share plan or share purchase plan in force from time to time for directors, officers, employees, consultants or other service providers of the Corporation; or (b) the satisfaction of existing instruments issued at the date hereof.

Section 4.4 Determination by Independent Firm.

In the event of any question arising with respect to the adjustments provided for in this Article 4 such question shall be conclusively determined by an independent firm of chartered accountants other than the Auditors, who shall have access to all necessary records of the Corporation, and such determination shall be binding upon the Corporation, the Warrant Agent, all holders and all other persons interested therein.

Section 4.5 Proceedings Prior to any Action Requiring Adjustment.

As a condition precedent to the taking of any action which would require an adjustment in any of the acquisition rights pursuant to any of the Warrants, including the number of Common Shares which are to be received upon the exercise thereof, the Corporation shall take any action which may, in the opinion of Counsel, be necessary in order that the Corporation has unissued and reserved in its authorized capital and may validly and legally issue as fully paid and non-assessable all the Common Shares which the holders of such Warrants are entitled to receive on the full exercise thereof in accordance with the provisions hereof.

Section 4.6 Certificate of Adjustment.

The Corporation shall from time to time immediately after the occurrence of any event which requires an adjustment or readjustment as provided in Section 4.1, deliver a certificate of the Corporation to the Warrant Agent specifying the nature of the event requiring the same and the amount of the adjustment or readjustment necessitated thereby and setting forth in reasonable detail the method of calculation and the facts upon which such calculation is based, which certificate shall, if deemed necessary by the Corporation or Warrant Agent, be supported by a certificate of the Corporation's Auditors verifying such calculation. The Warrant Agent shall rely, and shall be protected in so doing, upon the certificate of the Corporation or of the Corporation's Auditor (if applicable) and any other document filed by the Corporation pursuant to this Article 4 for all purposes.

Section 4.7 Notice of Special Matters.

The Corporation covenants with the Warrant Agent that, so long as any Warrant remains outstanding, it will give notice to the Warrant Agent and to the Registered Warrantholders of its intention to fix a record date that is prior to the Expiry Date for any matter for which an adjustment may be required pursuant to Section 4.1. Such notice shall specify the particulars of such event and the record date for such event, provided that the Corporation shall only be required to specify in the notice such particulars of the event as shall have been fixed and determined on the date on which the notice is given. The notice shall be given in each case not less than fourteen (14) days prior to such applicable record date. If notice has been given and the adjustment is not then determinable, the Corporation shall promptly, after the adjustment is determinable, file with the Warrant Agent a computation of the adjustment and give notice to the Registered Warrantholders of such adjustment computation.

Section 4.8 No Action after Notice.

The Corporation covenants with the Warrant Agent that it will not close its transfer books or take any other corporate action which might deprive the Registered Warrantholder of the opportunity to exercise its right of acquisition pursuant thereto during the period of fourteen (14) days after the giving of the certificate or notices set forth in Section 4.6 and Section 4.7.

Section 4.9 Other Action.

If the Corporation, after the date hereof, shall take any action affecting the Common Shares other than action described in Section 4.1, which in the reasonable opinion of the directors of the Corporation would materially affect the rights of Registered Warrantholders, the Exercise Price and/or Exchange Rate, the number of Common Shares which may be acquired upon exercise of the Warrants shall be adjusted in such manner and at such time, by action of the directors, acting reasonably and in good faith, in their sole discretion as they may determine to be equitable to the Registered Warrantholders in the circumstances, provided that no such adjustment will be made unless any requisite prior approval of any stock exchange on which the Common Shares are listed for trading has been obtained.

Section 4.10 Protection of Warrant Agent.

The Warrant Agent shall not:

(a) at any time be under any duty or responsibility to any Registered Warrantholder to determine whether any facts exist which may require any adjustment contemplated by Section 4.1, or with respect to the nature or extent of any such adjustment when made, or with respect to the method employed in making the same;

(b) be accountable with respect to the validity or value (or the kind or amount) of any Common Shares or of any other securities or property which may at any time be issued or delivered upon the exercise of the rights attaching to any Warrant;

(c) be responsible for any failure of the Corporation to issue, transfer or deliver Common Shares or certificates for the same upon the surrender of any Warrants for the purpose of the exercise of such rights or to comply with any of the covenants contained in this Article; and

(d) incur any liability or be in any way responsible for the consequences of any breach on the part of the Corporation of any of the representations, warranties or covenants herein contained or of any acts of the directors, officers, employees, agents or servants of the Corporation.

Section 4.11 Participation by Warrantholder.

Subject to Exchange approval, no adjustments shall be made pursuant to this Article 4 if the Registered Warrantholders are entitled to participate in any event described in this Article 4 on the same terms, mutatis mutandis, as if the Registered Warrantholders had exercised their Warrants prior to, or on the effective date or record date of, such event.

Section 4.12 Section 4.12 Regulatory Approval of Adjustments.

Notwithstanding the foregoing, any adjustment to the Exercise Price and/or Exchange Rate shall be subject to the prior written consent of the Exchange, if required.

ARTICLE 5
RIGHTS OF THE CORPORATION AND COVENANTS

Section 5.1 Optional Purchases by the Corporation.

Subject to compliance with applicable securities legislation and approval of applicable regulatory authorities, if any, the Corporation may from time to time purchase by private contract or otherwise any of the Warrants. Any such purchase shall be made at the lowest price or prices at which, in the opinion of the directors, such Warrants are then obtainable, plus reasonable costs of purchase, and may be made in such manner, from such persons and on such other terms as the Corporation, in its sole discretion, may determine. In the case of Certificated Warrants, Warrant Certificates representing the Warrants purchased pursuant to this Section 5.1 shall forthwith be delivered to and cancelled by the Warrant Agent and reflected accordingly on the register of Warrants. In the case of Uncertificated Warrants, the Warrants purchased pursuant to this Section 5.1 shall be reflected accordingly on the register of Warrants and in accordance with procedures prescribed by the Depository under the book entry registration system. No Warrants shall be issued in replacement thereof.

Section 5.2 General Covenants.

The Corporation covenants with the Warrant Agent that so long as any Warrants remain outstanding:

(a) it will reserve and keep available a sufficient number of Common Shares for the purpose of enabling it to satisfy its obligations to issue Common Shares upon the exercise of the Warrants;

(b) it will cause the Common Shares from time to time acquired pursuant to the exercise of the Warrants to be duly issued and delivered in accordance with the Warrants and the terms hereof;

(c) all Common Shares which shall be issued upon exercise of the right to acquire provided for herein shall be fully paid and non-assessable;

(d) it will use reasonable commercial efforts to maintain its existence and carry on its business in the ordinary course;

(e) generally, it will well and truly perform and carry out all of the acts or things to be done by it as provided in this Indenture;

(f) it will make all requisite filings under applicable Canadian securities legislation including those necessary to remain a reporting issuer not in default in each of the provinces and other Canadian jurisdictions where it is or becomes a reporting issuer; and

(g) the Corporation will promptly notify the Warrant Agent and the Warrantholders in writing of any default under the terms of this Warrant Indenture which remains unrectified for more than five days following its occurrence.

Section 5.3 Warrant Agent's Remuneration and Expenses.

The Corporation covenants that it will pay to the Warrant Agent from time to time reasonable remuneration for its services hereunder and will pay or reimburse the Warrant Agent upon its request for all reasonable expenses, disbursements and advances incurred or made by the Warrant Agent in the administration or execution of the duties hereby created (including the reasonable compensation and the disbursements of its Counsel and all other advisers and assistants not regularly in its employ) both before any default hereunder and thereafter until all duties of the Warrant Agent hereunder shall be finally and fully performed. Any amount owing hereunder and remaining unpaid after 30 days from the invoice date will bear interest at the then current rate charged by the Warrant Agent against unpaid invoices and shall be payable upon demand. This Section shall survive the resignation or removal of the Warrant Agent and/or the termination of this Indenture.

Section 5.4 Performance of Covenants by Warrant Agent.

If the Corporation shall fail to perform any of its covenants contained in this Indenture, the Warrant Agent may notify the Registered Warrantholders of such failure on the part of the Corporation and may itself perform any of the covenants capable of being performed by it but, subject to Section 9.2, shall be under no obligation to perform said covenants or to notify the Registered Warrantholders of such performance by it. All sums expended or advanced by the Warrant Agent in so doing shall be repayable as provided in Section 5.3. No such performance, expenditure or advance by the Warrant Agent shall relieve the Corporation of any default hereunder or of its continuing obligations under the covenants herein contained.

Section 5.5 Enforceability of Warrants.

The Corporation covenants and agrees that it is duly authorized to create and issue the Warrants to be issued hereunder and that the Warrants, when issued and Authenticated as herein provided, will be valid and enforceable against the Corporation in accordance with the provisions hereof and the terms hereof and that, subject to the provisions of this Indenture, the Corporation will cause the Common Shares from time to time acquired upon exercise of Warrants issued under this Indenture to be duly issued and delivered in accordance with the terms of this Indenture.

ARTICLE 6
ENFORCEMENT

Section 6.1 Suits by Registered Warrantholders.

All or any of the rights conferred upon any Registered Warrantholder by any of the terms of this Indenture may be enforced by the Registered Warrantholder by appropriate proceedings but without prejudice to the right which is hereby conferred upon the Warrant Agent to proceed in its own name to enforce each and all of the provisions herein contained for the benefit of the Registered Warrantholders.

Section 6.2 Suits by the Corporation.

The Corporation shall have the right to enforce full payment of the Exercise Price of all Common Shares issued by the Warrant Agent to a Registered Warrantholder hereunder and shall be entitled to demand such payment from the Registered Warrantholder or alternatively to instruct the Warrant Agent to cancel the share certificates and amend the securities register accordingly.

Section 6.3 Immunity of Shareholders, etc.

The Warrant Agent and the Warrantholders hereby waive and release any right, cause of action or remedy now or hereafter existing in any jurisdiction against any incorporator or any past, present or future shareholder, trustee, employee or agent of the Corporation or any successor entity on any covenant, agreement, representation or warranty by the Corporation herein.

Section 6.4 Waiver of Default.

Upon the happening of any default hereunder:

(a) the Registered Warrantholders of not less than 51% of the Warrants then outstanding shall have power (in addition to the powers exercisable by Extraordinary Resolution) by requisition in writing to instruct the Warrant Agent to waive any default hereunder and the Warrant Agent shall thereupon waive the default upon such terms and conditions as shall be prescribed in such requisition; or

(b) the Warrant Agent shall have power to waive any default hereunder upon such terms and conditions as the Warrant Agent may deem advisable, on the advice of Counsel, if, in the Warrant Agent's opinion, based on the advice of Counsel, the same shall have been cured or adequate provision made therefor;

provided that no delay or omission of the Warrant Agent or of the Registered Warrantholders to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver of any such default or acquiescence therein and provided further that no act or omission either of the Warrant Agent or of the Registered Warrantholders in the premises shall extend to or be taken in any manner whatsoever to affect any subsequent default hereunder of the rights resulting therefrom.

ARTICLE 7
MEETINGS OF REGISTERED WARRANTHOLDERS

Section 7.1 Right to Convene Meetings.

The Warrant Agent may at any time and from time to time, and shall on receipt of a written request of the Corporation or of a Warrantholders' Request and upon being indemnified and funded to its reasonable satisfaction by the Corporation or by the Registered Warrantholders signing such Warrantholders' Request against the costs which may be incurred in connection with the calling and holding of such meeting, convene a meeting of the Registered Warrantholders. If the Warrant Agent fails to so call a meeting within seven days after receipt of such written request of the Corporation or within 30 days after receipt of such Warrantholders' Request and the indemnity and funding given as aforesaid, the Corporation or such Registered Warrantholders, as the case may be, may convene such meeting. Every such meeting shall be held in the City of Toronto, Ontario or at such other place as may be approved or determined by the Warrant Agent.

Section 7.2 Notice.

At least 21 days' prior written notice of any meeting of Registered Warrantholders shall be given to the Registered Warrantholders in the manner provided for in Section 10.2 and a copy of such notice shall be sent by mail to the Warrant Agent (unless the meeting has been called by the Warrant Agent) and to the Corporation (unless the meeting has been called by the Corporation). Such notice shall state the time when and the place where the meeting is to be held, shall state briefly the general nature of the business to be transacted thereat and shall contain such information as is reasonably necessary to enable the Registered

Warrantholders to make a reasoned decision on the matter, but it shall not be necessary for any such notice to set out the terms of any resolution to be proposed or any of the provisions of this Section 7.2.

Section 7.3 Chairman.

An individual (who need not be a Registered Warrantholder) designated in writing by the Warrant Agent shall be chairman of the meeting and if no individual is so designated, or if the individual so designated is not present within fifteen minutes from the time fixed for the holding of the meeting, the Registered Warrantholders present in person or by proxy shall choose an individual present to be chairman.

Section 7.4 Quorum.

Subject to the provisions of Section 7.11, at any meeting of the Registered Warrantholders a quorum shall consist of Registered Warrantholder(s) present in person or by proxy and entitled to purchase at least 50% of the aggregate number of Common Shares which could be acquired pursuant to all the then outstanding Warrants. If a quorum of the Registered Warrantholders shall not be present within thirty minutes from the time fixed for holding any meeting, the meeting, if summoned by Registered Warrantholders or on a Warrantholders' Request, shall be dissolved; but in any other case the meeting shall be adjourned to the same day in the next week (unless such day is not a Business Day, in which case it shall be adjourned to the next following Business Day) at the same time and place and no notice of the adjournment need be given. Any business may be brought before or dealt with at an adjourned meeting which might have been dealt with at the original meeting in accordance with the notice calling the same. No business shall be transacted at any meeting unless a quorum be present at the commencement of business. At the adjourned meeting the Registered Warrantholders present in person or by proxy shall form a quorum and may transact the business for which the meeting was originally convened, notwithstanding that they may not be entitled to acquire at least 50% of the aggregate number of Common Shares which may be acquired pursuant to all then outstanding Warrants.

Section 7.5 Power to Adjourn.

The chairman of any meeting at which a quorum of the Registered Warrantholders is present may, with the consent of the meeting, adjourn any such meeting, and no notice of such adjournment need be given except such notice, if any, as the meeting may prescribe.

Section 7.6 Show of Hands.

Every question submitted to a meeting shall be decided in the first place by a majority of the votes given on a show of hands except that votes on an Extraordinary Resolution shall be given in the manner hereinafter provided. At any such meeting, unless a poll is duly demanded as herein provided, a declaration by the chairman that a resolution has been carried or carried unanimously or by a particular majority or lost or not carried by a particular majority shall be conclusive evidence of the fact.

Section 7.7 Poll and Voting.

(1) On every Extraordinary Resolution, and on any other question submitted to a meeting and after a vote by show of hands when demanded by the chairman or by one or more of the Registered Warrantholders acting in person or by proxy and entitled to acquire in the aggregate at least 2% of the aggregate number of Common Shares which could be acquired pursuant to all the Warrants then outstanding, a poll shall be taken in such manner as the chairman shall direct. Questions other than those required to be determined by Extraordinary Resolution shall be decided by a majority of the votes cast on the poll.

(2) On a show of hands, every person who is present and entitled to vote, whether as a Registered Warrantholder or as proxy for one or more absent Registered Warrantholders, or both, shall have one vote. On a poll, each Registered Warrantholder present in person or represented by a proxy duly appointed by instrument in writing shall be entitled to one vote in respect of each Warrant then held or represented by it. A proxy need not be a Registered Warrantholder. The chairman of any meeting shall be entitled, both on a show of hands and on a poll, to vote in respect of the Warrants, if any, held or represented by him.

Section 7.8 Regulations.

(1) The Warrant Agent, or the Corporation with the approval of the Warrant Agent, may from time to time make and from time to time vary such regulations as it shall think fit for the setting of the record date for a meeting for the purpose of determining Registered Warrantholders entitled to receive notice of and to vote at the meeting.

(2) Any regulations so made shall be binding and effective and the votes given in accordance therewith shall be valid and shall be counted. Save as such regulations may provide, the only persons who shall be recognized at any meeting as a Registered Warrantholder, or be entitled to vote or be present

at the meeting in respect thereof (subject to Section 7.9), shall be Registered Warrantholders or proxies of Registered Warrantholders.

Section 7.9 Corporation and Warrant Agent May be Represented.

The Corporation and the Warrant Agent, by their respective directors, officers, agents, and employees and the Counsel for the Corporation and for the Warrant Agent may attend any meeting of the Registered Warrantholders.

Section 7.10 Powers Exercisable by Extraordinary Resolution.

In addition to all other powers conferred upon them by any other provisions of this Indenture or by law, the Registered Warrantholders at a meeting shall, subject to the provisions of Section 7.11, have the power exercisable from time to time by Extraordinary Resolution:

(a) to agree to any modification, abrogation, alteration, compromise or arrangement of the rights of Registered Warrantholders or the Warrant Agent in its capacity as warrant agent hereunder (subject to the Warrant Agent's prior consent, acting reasonably) or on behalf of the Registered Warrantholders against the Corporation whether such rights arise under this Indenture or otherwise;

(b) to amend, alter or repeal any Extraordinary Resolution previously passed or sanctioned by the Registered Warrantholders;

(c) to direct or to authorize the Warrant Agent, subject to Section 9.2(2) hereof, to enforce any of the covenants on the part of the Corporation contained in this Indenture or to enforce any of the rights of the Registered Warrantholders in any manner specified in such Extraordinary Resolution or to refrain from enforcing any such covenant or right;

(d) to waive, and to direct the Warrant Agent to waive, any default on the part of the Corporation in complying with any provisions of this Indenture either unconditionally or upon any conditions specified in such Extraordinary Resolution;

(e) to restrain any Registered Warrantholder from taking or instituting any suit, action or proceeding against the Corporation for the enforcement of any of the covenants on the part of the Corporation in this Indenture or to enforce any of the rights of the Registered Warrantholders;

(f) to direct any Registered Warrantholder who, as such, has brought any suit, action or proceeding to stay or to discontinue or otherwise to deal with the same upon payment of the costs, charges and expenses reasonably and properly incurred by such Registered Warrantholder in connection therewith;

(g) to assent to any change in or omission from the provisions contained in this Indenture or any ancillary or supplemental instrument which may be agreed to by the Corporation, and to authorize the Warrant Agent to concur in and execute any ancillary or supplemental indenture embodying the change or omission;

(h) with the consent of the Corporation, such consent not to be unreasonably withheld, to remove the Warrant Agent or its successor in office and to appoint a new warrant agent or warrant agents to take the place of the Warrant Agent so removed; and

(i) to assent to any compromise or arrangement with any creditor or creditors or any class or classes of creditors, whether secured or otherwise, and with holders of any shares or other securities of the Corporation.

Section 7.11 Meaning of Extraordinary Resolution.

(1) The expression "Extraordinary Resolution" when used in this Indenture means, subject as hereinafter provided in this Section 7.11 and in Section 7.14, a resolution proposed at a meeting of Registered Warrantholders duly convened for that purpose and held in accordance with the provisions of this Article 7 at which there are present in person or by proxy Registered Warrantholders holding at least 50% of the aggregate number of Common Shares that could be acquired on the exercise of Warrants and passed by the affirmative votes of Registered Warrantholders holding not less than 662/3% of the aggregate number of Common Shares that could be acquired on the execise of Warrants at the meeting and voted on the poll upon such resolution.

(2) If, at the meeting at which an Extraordinary Resolution is to be considered, Registered Warrantholders holding at least 50% of the aggregate number of Common Shares that could be acquired are not present in person or by proxy within 30 minutes after the time appointed for the meeting, then the meeting, if convened by Registered Warrantholders or on a Warrantholders' Request, shall be dissolved; but in any other case it shall stand adjourned to such day, being not less than 15 or more than 60 days later, and to such place and time as may be appointed by the chairman. Not less than 14 days' prior notice shall be given of the time and place of such adjourned meeting in the manner provided for in Section 10.2. Such notice shall state that at the adjourned meeting the Registered Warrantholders present in person or by proxy shall form a quorum but it shall not be necessary to set forth the purposes for which the meeting was originally called or any other particulars. At the adjourned meeting the Registered Warrantholders present in person or by proxy shall form a quorum and may transact the business for which the meeting was originally

convened and a resolution proposed at such adjourned meeting and passed by the requisite vote as provided in Section 7.11(1) shall be an Extraordinary Resolution within the meaning of this Indenture notwithstanding that Registered Warrantholders entitled to acquire at least 50% of the aggregate number of Common Shares which may be acquired pursuant to all the then outstanding Warrants are not present in person or by proxy at such adjourned meeting.

(3) Subject to Section 7.14, votes on an Extraordinary Resolution shall always be given on a poll and no demand for a poll on an Extraordinary Resolution shall be necessary.

Section 7.12 Powers Cumulative.

Any one or more of the powers or any combination of the powers in this Indenture stated to be exercisable by the Registered Warrantholders by Extraordinary Resolution or otherwise may be exercised from time to time and the exercise of any one or more of such powers or any combination of powers from time to time shall not be deemed to exhaust the right of the Registered Warrantholders to exercise such power or powers or combination of powers then or thereafter from time to time.

Section 7.13 Minutes.

Minutes of all resolutions and proceedings at every meeting of Registered Warrantholders shall be made and duly entered in books and any such minutes as aforesaid, if signed by the chairman or the secretary of the meeting at which such resolutions were passed or proceedings had shall be prima facie evidence of the matters therein stated and, until the contrary is proved, every such meeting in respect of the proceedings of which minutes shall have been made shall be deemed to have been duly convened and held, and all resolutions passed thereat or proceedings taken shall be deemed to have been duly passed and taken.

Section 7.14 Instruments in Writing.

All actions which may be taken and all powers that may be exercised by the Registered Warrantholders at a meeting held as provided in this Article 7 may also be taken and exercised by Registered Warrantholders holding not less than 662/3% of the aggregate number of all of the then outstanding Warrants by an instrument in writing signed in one or more counterparts by such Registered Warrantholders in person or by attorney duly appointed in writing, and the expression “Extraordinary Resolution” when used in this Indenture shall include an instrument so signed.

Section 7.15 Binding Effect of Resolutions.

Every resolution and every Extraordinary Resolution passed in accordance with the provisions of this Article 7 at a meeting of Registered Warrantholders shall be binding upon all the Warrantholders, whether present at or absent from such meeting, and every instrument in writing signed by Registered Warrantholders in accordance with Section 7.14 shall be binding upon all the Warrantholders, whether signatories thereto or not, and each and every Warrantholder and the Warrant Agent (subject to the provisions for indemnity herein contained) shall be bound to give effect accordingly to every such resolution and instrument in writing.

Section 7.16 Holdings by Corporation Disregarded.

In determining whether Registered Warrantholders holding Warrants evidencing the entitlement to acquire the required number of Common Shares are present at a meeting of Registered Warrantholders for the purpose of determining a quorum or have concurred in any consent, waiver, Extraordinary Resolution,

Warrantholders' Request or other action under this Indenture, Warrants owned legally or beneficially by the Corporation shall be disregarded in accordance with the provisions of Section 10.7.

ARTICLE 8
SUPPLEMENTAL INDENTURES

Section 8.1 Provision for Supplemental Indentures for Certain Purposes.

From time to time, the Corporation (when authorized by action of the directors) and the Warrant Agent may, subject to the provisions hereof and they shall, when so directed in accordance with the provisions hereof, execute and deliver by their proper officers, indentures or instruments supplemental hereto, which thereafter shall form part hereof, for any one or more or all of the following purposes:

(a) setting forth any adjustments resulting from the application of the provisions of Article 4;

(b) adding to the provisions hereof such additional covenants and enforcement provisions as, in the opinion of Counsel, are necessary or advisable in the premises, provided that the same are not in the opinion of the Warrant Agent, relying on the advice of Counsel, prejudicial to the interests of the Registered Warrantholders;

(c) giving effect to any Extraordinary Resolution passed as provided in Section 7.11;

(d) making such provisions not inconsistent with this Indenture as may be necessary or desirable with respect to matters or questions arising hereunder or for the purpose of obtaining a listing or quotation of the Warrants on any stock exchange, provided that such provisions are not, in the opinion of the Warrant Agent, relying on the advice of Counsel, prejudicial to the interests of the Registered Warrantholders;

(e) adding to or altering the provisions hereof in respect of the transfer of Warrants, making provision for the exchange of Warrants, and making any modification in the form of the Warrant Certificates which does not affect the substance thereof;

(f) modifying any of the provisions of this Indenture, including relieving the Corporation from any of the obligations, conditions or restrictions herein contained, provided that such modification or relief shall be or become operative or effective only if, in the opinion of the Warrant Agent, relying on the advice of Counsel, such modification or relief in no way prejudices any of the rights of the Registered Warrantholders or of the Warrant Agent, and provided further that the Warrant Agent may in its sole discretion decline to enter into any such supplemental indenture which in its opinion may not afford adequate protection to the Warrant Agent when the same shall become operative;

(g) providing for the issuance of additional Warrants hereunder, including Warrants in excess of the number set out in Section 2.1 and any consequential amendments hereto as may be required by the Warrant Agent relying on the advice of Counsel; and

(h) for any other purpose not inconsistent with the terms of this Indenture, including the correction or rectification of any ambiguities, defective or inconsistent

provisions, errors, mistakes or omissions herein, provided that in the opinion of the Warrant Agent, relying on the advice of Counsel, the rights of the Warrant Agent and of the Registered Warrantholders are in no way prejudiced thereby.

Section 8.2 Successor Entities.

In the case of the consolidation, amalgamation, arrangement, merger or transfer of the undertaking or assets of the Corporation as an entirety or substantially as an entirety to or with another entity ("successor entity"), the successor entity resulting from such consolidation, amalgamation, arrangement, merger or transfer (if not the Corporation) shall expressly assume, by supplemental indenture satisfactory in form to the Warrant Agent and executed and delivered to the Warrant Agent, the due and punctual performance and observance of each and every covenant and condition of this Indenture to be performed and observed by the Corporation.

ARTICLE 9
CONCERNING THE WARRANT AGENT

Section 9.1 Trust Indenture Legislation.

(1) If and to the extent that any provision of this Indenture limits, qualifies or conflicts with a mandatory requirement of Applicable Legislation, such mandatory requirement shall prevail.

(2) The Corporation and the Warrant Agent agree that each will, at all times in relation to this Indenture and any action to be taken hereunder, observe and comply with and be entitled to the benefits of Applicable Legislation.

Section 9.2 Rights and Duties of Warrant Agent.

(1) In the exercise of the rights and duties prescribed or conferred by the terms of this Indenture, the Warrant Agent shall exercise that degree of care, diligence and skill that a reasonably prudent warrant agent would exercise in comparable circumstances. No provision of this Indenture shall be construed to relieve the Warrant Agent from liability for its own gross negligent action, wilful misconduct, bad faith or fraud under this Indenture.

(2) The obligation of the Warrant Agent to commence or continue any act, action or proceeding for the purpose of enforcing any rights of the Warrant Agent or the Registered Warrantholders hereunder shall be conditional upon the Registered Warrantholders furnishing, when required by notice by the Warrant Agent, sufficient funds to commence or to continue such act, action or proceeding and an indemnity reasonably satisfactory to the Warrant Agent to protect and to hold harmless the Warrant Agent and its officers, directors, employees and agents, against the costs, charges and expenses and liabilities to be incurred thereby and any loss and damage it may suffer by reason thereof. None of the provisions contained in this Indenture shall require the Warrant Agent to expend or to risk its own funds or otherwise to incur financial liability in the performance of any of its duties or in the exercise of any of its rights or powers unless indemnified and funded as aforesaid.

(3) The Warrant Agent may, before commencing or at any time during the continuance of any such act, action or proceeding, require the Registered Warrantholders, at whose instance it is acting to deposit with the Warrant Agent the Warrants Certificates held by them, for which Warrants the Warrant Agent shall issue receipts.

(4) Every provision of this Indenture that by its terms relieves the Warrant Agent of liability or entitles it to rely upon any evidence submitted to it is subject to the provisions of Applicable Legislation.

Section 9.3 Evidence, Experts and Advisers.

(1) In addition to the reports, certificates, opinions and other evidence required by this Indenture, the Corporation shall furnish to the Warrant Agent such additional evidence of compliance with any provision hereof, and in such form, as may be prescribed by Applicable Legislation or as the Warrant Agent may reasonably require by written notice to the Corporation.

(2) In the exercise of its rights and duties hereunder, the Warrant Agent may, if it is acting in good faith, rely as to the truth of the statements and the accuracy of the opinions expressed in statutory declarations, opinions, reports, written requests, consents, or orders of the Corporation, certificates of the Corporation or other evidence furnished to the Warrant Agent pursuant to a request of the Warrant Agent, provided that such evidence complies with Applicable Legislation and that the Warrant Agent complies with Applicable Legislation and that the Warrant Agent examines the same and determines that such evidence complies with the applicable requirements of this Indenture.

(3) Whenever it is provided in this Indenture or under Applicable Legislation that the Corporation shall deposit with the Warrant Agent resolutions, certificates, reports, opinions, requests, orders or other documents, it is intended that the truth, accuracy and good faith on the effective date thereof and the facts and opinions stated in all such documents so deposited shall, in each and every such case, be conditions precedent to the right of the Corporation to have the Warrant Agent take the action to be based thereon.

(4) The Warrant Agent may employ or retain such Counsel, accountants, appraisers or other experts or advisers as it may reasonably require for the purpose of discharging its duties hereunder and may pay reasonable remuneration for all services so performed by any of them, without taxation of costs of any Counsel, and shall not be responsible for any misconduct or negligence on the part of any such experts or advisers who have been appointed with due care by the Warrant Agent.

(5) The Warrant Agent may act and rely and shall be protected in acting and relying in good faith on the opinion or advice of or information obtained from any Counsel, accountant, appraiser, engineer or other expert or adviser, whether retained or employed by the Corporation or by the Warrant Agent, in relation to any matter arising in the administration of the agency hereof.

Section 9.4 Documents, Monies, etc. Held by Warrant Agent.

(1) Any monies, securities, documents of title or other instruments that may at any time be held by the Warrant Agent shall be placed in the deposit vaults of the Warrant Agent or of any Canadian chartered bank listed in Schedule I of the Bank Act (Canada), or deposited for safekeeping with any such bank. Any monies held pending the application or withdrawal thereof under any provisions of this Indenture, shall be held, invested and reinvested in "Permitted Investments" as directed in writing by the Corporation. "Permitted Investments" shall be treasury bills guaranteed by the Government of Canada having a term to maturity not to exceed ninety (90) days, or term deposits or bankers' acceptances of a Canadian chartered bank having a term to maturity not to exceed ninety (90) days, or such other investments that is in accordance with the Warrant Agent's standard type of investments. Unless otherwise specifically provided herein, all interest or other income received by the Warrant Agent in respect of such deposits and investments shall belong to the Corporation.

(2) Any written direction for the investment or release of funds received shall be received by the Warrant Agent by 9:00 a.m. (Vancouver time) on the Business Day on which such investment or release is to be made, failing which such direction will be handled on a commercially reasonable efforts basis and may result in funds being invested or released on the next Business Day.

(3) The Warrant Agent shall have no responsibility or liability for any diminution of any funds resulting from any investment made in accordance with this Indenture, including any losses on any investment liquidated prior to maturity in order to make a payment required hereunder.

(4) In the event that the Warrant Agent does not receive a direction or only a partial direction, the Warrant Agent may hold cash balances constituting part or all of such monies and may, but need not, invest same in its deposit department, the deposit department of one of its affiliates, or the deposit department of a Canadian chartered bank; but the Warrant Agent, its affiliates or a Canadian chartered bank shall not be liable to account for any profit to any parties to this Indenture or to any other person or entity.

Section 9.5 Actions by Warrant Agent to Protect Interest.

The Warrant Agent shall have power to institute and to maintain such actions and proceedings as it may consider necessary or expedient to preserve, protect or enforce its interests and the interests of the Registered Warrantholders.

Section 9.6 Warrant Agent Not Required to Give Security.

The Warrant Agent shall not be required to give any bond or security in respect of the execution of the agency and powers of this Indenture or otherwise in respect of the premises.

Section 9.7 Protection of Warrant Agent.

By way of supplement to the provisions of any law for the time being relating to the Warrant Agent it is expressly declared and agreed as follows:

(a) the Warrant Agent shall not be liable for or by reason of any statements of fact or recitals in this Indenture or in the Warrant Certificates (except the representation contained in Section 9.9 or in the authentication of the Warrant Agent on the Warrant Certificates) or be required to verify the same, but all such statements or recitals are and shall be deemed to be made by the Corporation;

(b) nothing herein contained shall impose any obligation on the Warrant Agent to see to or to require evidence of the registration or filing (or renewal thereof) of this Indenture or any instrument ancillary or supplemental hereto;

(c) the Warrant Agent shall not be bound to give notice to any person or persons of the execution hereof;

(d) the Warrant Agent shall not incur any liability or responsibility whatever or be in any way responsible for the consequence of any breach on the part of the Corporation of any of its covenants herein contained or of any acts of any directors, officers, employees, agents or servants of the Corporation;

(e) the Corporation hereby indemnifies and agrees to hold harmless the Warrant Agent, its affiliates, their officers, directors, employees, agents, successors and assigns (the "Indemnified Parties") from and against any and all liabilities whatsoever, losses, damages, penalties, claims, demands, actions, suits, proceedings, costs, charges, assessments, judgments, expenses and disbursements, including reasonable legal fees and disbursements of whatever kind and nature which may at any time be imposed on or incurred by or asserted against the Indemnified Parties, or any of them, whether at law or in equity, in any way caused by or arising, directly or indirectly, in respect of any act, deed, matter or thing whatsoever made, done, acquiesced in or omitted in or about or in relation to the execution of the Indemnified Parties' duties, or any other services that Warrant Agent may provide in connection with or in any way relating to this Indenture. The Corporation agrees that its liability hereunder shall be absolute and unconditional regardless of the correctness of any representations of any third parties and regardless of any liability of third parties to the Indemnified Parties, and shall accrue and become enforceable without prior demand or any other precedent action or proceeding; provided that the Corporation shall not be required to indemnify the Indemnified Parties in the event of the gross negligence or wilful misconduct of the Warrant Agent, and this provision shall survive the resignation or removal of the Warrant Agent or the termination or discharge of this Indenture; and

(f) notwithstanding the foregoing or any other provision of this Indenture, any liability of the Warrant Agent shall be limited, in the aggregate, to the amount of annual retainer fees paid by the Corporation to the Warrant Agent under this Indenture in the twelve (12) months immediately prior to the Warrant Agent receiving the first notice of the claim. Notwithstanding any other provision of this Indenture, and whether such losses or damages are foreseeable or unforeseeable, the Warrant Agent shall not be liable under any circumstances whatsoever for any (a) breach by any other party of securities law or other rule of any securities regulatory authority, (b) lost profits or (c) special, indirect, incidental, consequential, exemplary, aggravated or punitive losses or damages.

Section 9.8 Replacement of Warrant Agent; Successor by Merger.

(1) The Warrant Agent may resign its agency and be discharged from all further duties and liabilities hereunder, subject to this Section 9.8, by giving to the Corporation not less than 60 days' prior notice in writing or such shorter prior notice as the Corporation may accept as sufficient. The Registered Warrantholders by Extraordinary Resolution shall have power at any time to remove the existing Warrant Agent and to appoint a new warrant agent. In the event of the Warrant Agent resigning or being removed as aforesaid or being dissolved, becoming bankrupt, going into liquidation or otherwise becoming incapable of acting hereunder, the Corporation shall forthwith appoint a new warrant agent unless a new warrant agent has already been appointed by the Registered Warrantholders; failing such appointment by the Corporation, the retiring Warrant Agent or any Registered Warrantholder may apply to a judge of the Province of Ontario on such notice as such judge may direct, for the appointment of a new warrant agent; but any new warrant agent so appointed by the Corporation or by the Court shall be subject to removal as aforesaid by the Registered Warrantholders. Any new warrant agent appointed under any provision of this Section 9.8 shall be an entity authorized to carry on the business of a trust company in the Province of Ontario and, if required by the Applicable Legislation for any other provinces, in such other provinces. On any such appointment the new warrant agent shall be vested with the same powers, rights, duties and responsibilities as if it had been originally named herein as Warrant Agent hereunder.

(2) Upon the appointment of a successor warrant agent, the Corporation shall promptly notify the Registered Warrantholders thereof in the manner provided for in Section 10.2.

(3) Any Warrant Certificates Authenticated but not delivered by a predecessor Warrant Agent may be Authenticated by the successor Warrant Agent in the name of the predecessor or successor Warrant Agent.

(4) Any corporation into which the Warrant Agent may be merged or consolidated or amalgamated, or any corporation resulting therefrom to which the Warrant Agent shall be a party, or any corporation succeeding to substantially the corporate trust business of the Warrant Agent shall be the successor to the Warrant Agent hereunder without any further act on its part or any of the parties hereto, provided that such corporation would be eligible for appointment as successor Warrant Agent under Section 9.8(1).

Section 9.9 Acceptance of Agency.

The Warrant Agent hereby accepts the agency in this Indenture declared and provided for and agrees to perform the same upon the terms and conditions herein set forth.

Section 9.10 Warrant Agent Not to be Appointed Receiver.

The Warrant Agent and any person related to the Warrant Agent shall not be appointed a receiver, a receiver and manager or liquidator of all or any part of the assets or undertaking of the Corporation.

Section 9.11 Warrant Agent Not Required to Give Notice of Default.

The Warrant Agent shall not be bound to give any notice or do or take any act, action or proceeding by virtue of the powers conferred on it hereby unless and until it shall have been required so to do under the terms hereof; nor shall the Warrant Agent be required to take notice of any default hereunder, unless and until notified in writing of such default, which notice shall distinctly specify the default desired to be brought to the attention of the Warrant Agent and in the absence of any such notice the Warrant Agent may for all purposes of this Indenture conclusively assume that no default has been made in the observance or performance of any of the representations, warranties, covenants, agreements or conditions contained herein. Any such notice shall in no way limit any discretion herein given to the Warrant Agent to determine whether or not the Warrant Agent shall take action with respect to any default.

Section 9.12 Anti-Money Laundering.

(1) Each party to this Agreement other than the Warrant Agent hereby represents to the Warrant Agent that any account to be opened by, or interest to be held by the Warrant Agent in connection with this Agreement, for or to the credit of such party, either (i) is not intended to be used by or on behalf of any third party; or (ii) is intended to be used by or on behalf of a third party, in which case such party hereto agrees to complete and execute forthwith a declaration in the Warrant Agent's prescribed form as to the particulars of such third party.

(2) The Warrant Agent shall retain the right not to act and shall not be liable for refusing to act if, due to a lack of information or for any other reason whatsoever, the Warrant Agent, in its sole judgment, determines that such act might cause it to be in non-compliance with any applicable anti-money laundering, anti-terrorist or economic sanctions legislation, regulation or guideline. Further, should the Warrant Agent, in its sole judgment, determine at any time that its acting under this Agreement has resulted in its being in non-compliance with any applicable anti-money laundering, anti-

terrorist or economic sanctions legislation, regulation or guideline, then it shall have the right to resign on ten (10) days written notice to the other parties to this Agreement, provided (i) that the Warrant Agent's written notice shall describe the circumstances of such non-compliance; and (ii) that if such circumstances are rectified to the Warrant Agent's satisfaction within such ten (10) day period, then such resignation shall not be effective.

Section 9.13 Compliance with Privacy Code.

The parties acknowledge that the Warrant Agent may, in the course of providing services hereunder, collect or receive financial and other personal information about such parties and/or their representatives, as individuals, or about other individuals related to the subject matter hereof, and use such information for the following purposes:

(a) to provide the services required under this Indenture and other services that may be requested from time to time;

(b) to help the Warrant Agent manage its servicing relationships with such individuals;

(c) to meet the Warrant Agent's legal and regulatory requirements; and

(d) if Social Insurance Numbers are collected by the Warrant Agent, to perform tax reporting and to assist in verification of an individual's identity for security purposes.

Each party acknowledges and agrees that the Warrant Agent may receive, collect, use and disclose personal information provided to it or acquired by it in the course of this Indenture for the purposes described above and, generally, in the manner and on the terms described in its Privacy Code, which the Warrant Agent shall make available on its website, www.computershare.com, or upon request, including revisions thereto. The Warrant Agent may transfer personal information to other companies in or outside of Canada that provide data processing and storage or other support in order to facilitate the services it provides.

Further, each party agrees that it shall not provide or cause to be provided to the Warrant Agent any personal information relating to an individual who is not a party to this Indenture unless that party has assured itself that such individual understands and has consented to the aforementioned uses and disclosures.

Section 9.14 Securities Exchange Commission Certification.

The Corporation confirms that as at the date of execution of this Indenture it does not have a class of securities registered pursuant to Section 12 of the U.S. Exchange Act or have a reporting obligation pursuant to Section 15(d) of the U.S. Exchange Act.

The Corporation covenants that in the event that (i) any class of its securities shall become registered pursuant to Section 12 of the U.S. Exchange Act or the Corporation shall incur a reporting obligation pursuant to Section 15(d) of the U.S. Exchange Act, or (ii) any such registration or reporting obligation shall be terminated by the Corporation in accordance with the U.S. Exchange Act, the Corporation shall promptly deliver to the Warrant Agent an Officers' Certificate (in a form provided by the Warrant Agent) notifying the Warrant Agent of such registration or termination and such other information as the Warrant Agent may reasonably require at the applicable time. The Corporation acknowledges that the Warrant Agent is relying upon the foregoing representation and covenant in order to meet certain

obligations imposed United States Securities and Exchange Commission ("**SEC**") upon the Warrant Agent with respect to those clients of the Warrant Agent who are required to file reports under the U.S. Exchange Act.

ARTICLE 10
GENERAL

Section 10.1 Notice to the Corporation and the Warrant Agent.

(1) Unless herein otherwise expressly provided, any notice to be given hereunder to the Corporation or the Warrant Agent shall be deemed to be validly given if delivered, sent by registered letter, postage prepaid or if faxed:

(a) If to the Corporation:

Cardiol Therapeutics Inc.
2265 Upper Middle Road East Suite 602
Oakville, ON L6H 0G5

Attention: David Elsley

Email: *****

(b) If to the Warrant Agent:

Computershare Trust Company of Canada
3rd Floor, 510 Burrard Street,
Vancouver, British Columbia
V6C 3B9

Attention: General Manager, Corporate Trust

Email: *****

and any such notice delivered in accordance with the foregoing shall be deemed to have been received and given on the date of delivery or, if mailed, on the fifth Business Day following the date of mailing such notice or, if emailed, on the next Business Day following the date of transmission.

(2) The Corporation or the Warrant Agent, as the case may be, may from time to time notify the other in the manner provided in Section 10.1(1) of a change of address which, from the effective date of such notice and until changed by like notice, shall be the address of the Corporation or the Warrant Agent, as the case may be, for all purposes of this Indenture.

(3) If, by reason of a strike, lockout or other work stoppage, actual or threatened, involving postal employees, any notice to be given to the Warrant Agent or to the Corporation hereunder could reasonably be considered unlikely to reach its destination, such notice shall be valid and effective only if it is delivered to the named officer of the party to which it is addressed, as provided in Section 10.1(1), or given by facsimile or other means of prepaid, transmitted and recorded communication.

Section 10.2 Notice to Registered Warrantholders.

(1) Unless otherwise provided herein, notice to the Registered Warrantholders under the provisions of this Indenture shall be valid and effective if delivered or sent by ordinary prepaid post addressed to such holders at their post office addresses appearing on the register hereinbefore mentioned and shall be deemed to have been effectively received and given on the date of delivery or, if mailed, on the third Business Day following the date of mailing such notice. In the event that Warrants are held in the name of the Depository, a copy of such notice shall also be sent by electronic communication to the Depository and shall be deemed received and given on the day it is so sent.

(2) If, by reason of a strike, lockout or other work stoppage, actual or threatened, involving postal employees, any notice to be given to the Registered Warrantholders hereunder could reasonably be considered unlikely to reach its destination, such notice shall be valid and effective only if it is delivered to such Registered Warrantholders to the address for such Registered Warrantholders contained in the register maintained by the Warrant Agent or such notice may be given, at the Corporation's expense, by means of publication in the Globe and Mail, National Edition, or any other English language daily newspaper or newspapers of general circulation in Canada, in each two successive weeks, the first such notice to be published within 5 business days of such event, and any so notice published shall be deemed to have been received and given on the latest date the publication takes place.

Section 10.3 Ownership of Warrants.

The Corporation and the Warrant Agent may deem and treat the Registered Warrantholders as the absolute owner thereof for all purposes, and the Corporation and the Warrant Agent shall not be affected by any notice or knowledge to the contrary except where the Corporation or the Warrant Agent is required to take notice by statute or by order of a court of competent jurisdiction. The receipt of any such Registered Warrantholder of the Common Shares which may be acquired pursuant thereto shall be a good discharge to the Corporation and the Warrant Agent for the same and neither the Corporation nor the Warrant Agent shall be bound to inquire into the title of any such holder except where the Corporation or the Warrant Agent is required to take notice by statute or by order of a court of competent jurisdiction.

Section 10.4 Counterparts.

This Indenture may be executed in several counterparts, each of which when so executed shall be deemed to be an original and such counterparts together shall constitute one and the same instrument and notwithstanding their date of execution they shall be deemed to be dated as of the date hereof. Delivery of an executed copy of the Indenture by electronic facsimile transmission or other means of electronic communication capable of producing a printed copy will be deemed to be execution and delivery of this Indenture as of the date hereof.

Section 10.5 Satisfaction and Discharge of Indenture.

Upon the earlier of:

(a) the date by which there shall have been delivered to the Warrant Agent for exercise or cancellation all Warrants theretofore Authenticated hereunder, in the case of Certificated Warrants (or such other instructions, in a form satisfactory to the Warrant Agent), in the case of Uncertificated Warrants, or by way of standard processing through the Book Entry system in the case of a CDS Global Warrant; and

(b) the Expiry Time;

and if all certificates or other entry on the register representing Common Shares required to be issued in compliance with the provisions hereof have been issued and delivered hereunder or to the Warrant Agent in accordance with such provisions, this Indenture shall cease to be of further effect and the Warrant Agent, on demand of and at the cost and expense of the Corporation and upon delivery to the Warrant Agent of a certificate of the Corporation stating that all conditions precedent to the satisfaction and discharge of this Indenture have been complied with, shall execute proper instruments acknowledging satisfaction of and discharging this Indenture. Notwithstanding the foregoing, the indemnities provided to the Warrant Agent by the Corporation hereunder shall remain in full force and effect and survive the termination of this Indenture.

Section 10.6 Provisions of Indenture and Warrants for the Sole Benefit of Parties and Registered Warrantholders.

Nothing in this Indenture or in the Warrants, expressed or implied, shall give or be construed to give to any person other than the parties hereto and the Registered Warrantholders, as the case may be, any legal or equitable right, remedy or claim under this Indenture, or under any covenant or provision herein or therein contained, all such covenants and provisions being for the sole benefit of the parties hereto and the Registered Warrantholders.

Section 10.7 Common Shares or Warrants Owned by the Corporation or its Subsidiaries - Certificate to be Provided.

For the purpose of disregarding any Warrants owned legally or beneficially by the Corporation in Section 7.16, the Corporation shall provide to the Warrant Agent, from time to time, a certificate of the Corporation setting forth as at the date of such certificate:

(a) the names (other than the name of the Corporation) of the Registered Warrantholders which, to the knowledge of the Corporation, are owned by or held for the account of the Corporation; and

(b) the number of Warrants owned legally or beneficially by the Corporation;

and the Warrant Agent, in making the computations in Section 7.16, shall be entitled to rely on such certificate without any additional evidence.

Section 10.8 Severability.

If, in any jurisdiction, any provision of this Indenture or its application to any party or circumstance is restricted, prohibited or unenforceable, such provision will, as to such jurisdiction, be ineffective only to the extent of such restriction, prohibition or unenforceability without invalidating the remaining provisions of this Indenture and without affecting the validity or enforceability of such provision in any other jurisdiction or without affecting its application to other parties or circumstances.

Section 10.9 Force Majeure.

No party shall be liable to the other, or held in breach of this Indenture, if prevented, hindered, or delayed in the performance or observance of any provision contained herein by reason of act of God, riots, terrorism, acts of war, epidemics, governmental action or judicial order, earthquakes, or any other similar causes (including, but not limited to, mechanical, electronic or communication interruptions, disruptions or

failures). Performance times under this Indenture shall be extended for a period of time equivalent to the time lost because of any delay that is excusable under this Section.

Section 10.10 Assignment, Successors and Assigns.

Neither of the parties hereto may assign its rights or interest under this Indenture, except as provided in Section 9.8 in the case of the Warrant Agent, or as provided in Section 8.2 in the case of the Corporation. Subject thereto, this Indenture shall enure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.

Section 10.11 Rights of Rescission and Withdrawal for Holders.

Should a holder of Warrants exercise any legal, statutory, contractual or other right of withdrawal or rescission that may be available to it, and the holder's funds which were paid on exercise have already been released to the Corporation by the Warrant Agent, the Warrant Agent shall not be responsible for ensuring the exercise is cancelled and a refund is paid back to the holder. In such cases, the holder shall seek a refund directly from the Corporation and subsequently, the Corporation, upon surrender to the Corporation or the Warrant Agent of any underlying shares that may have been issued, or such other procedure as agreed to by the parties hereto, shall instruct the Warrant Agent in writing, to cancel the exercise transaction and any such underlying shares on the register, which may have already been issued upon the Warrant exercise. In the event that any payment is received from the Corporation by virtue of the holder being a shareholder for such Warrants that were subsequently rescinded, such payment must be returned to the Corporation by such holder. The Warrant Agent shall not be under any duty or obligation to take any steps to ensure or enforce that the funds are returned pursuant to this Section, nor shall the Warrant Agent be in any other way responsible in the event that any payment is not delivered or received pursuant to this Section. Notwithstanding the foregoing, in the event that the Corporation provides the refund to the Warrant Agent for distribution to the holder, the Warrant Agent shall return such funds to the holder as soon as reasonably practicable, and in so doing, the Warrant Agent shall incur no liability with respect to the delivery or non-delivery of any such funds.

[remainder of page intentionally left blank, signature page follows]

IN WITNESS WHEREOF the parties hereto have executed this Indenture under the hands of their proper officers in that behalf as of the date first written above.

CARDIOL THERAPEUTICS INC.

By: /s/ David Elsley
Name: David Elsley
Title: President and Chief

By: /s/ Chris Waddick
Name: Chris Waddick
Title: Chief Financial Officer

COMPUTERSHARE TRUST COMPANY OF CANADA

By: _____
Name:
Title:

By: _____
Name:
Title:

IN WITNESS WHEREOF the parties hereto have executed this Indenture under the hands of their proper officers in that behalf as of the date first written above.

CARDIOL THERAPEUTICS INC.

By: /s/ David Elsley
Name: David Elsley
Title: President and Chief

By: /s/ Chris Waddick
Name: Chris Waddick
Title: Chief Financial Officer

COMPUTERSHARE TRUST COMPANY OF CANADA

By: /s/ Nicolas Richard
Name: Nicolas Richard
Title: Corporate Trust Officer

By: /s/ Tom Liu
Name: Tom Liu
Title: Corporate Trust Officer

SCHEDULE "A"

FORM OF WARRANT

THE WARRANTS EVIDENCED HEREBY ARE EXERCISABLE AT OR BEFORE 4:00 P.M. (EASTERN TIME) ON MAY 12, 2024, AFTER WHICH TIME THE WARRANTS EVIDENCED HEREBY SHALL BE DEEMED TO BE VOID AND OF NO FURTHER FORCE OR EFFECT

For all Warrants registered in the name of the Depository, also include the following legend:

(INSERT IF BEING ISSUED TO CDS) UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF CDS CLEARING AND DEPOSITORY SERVICES INC. ("**CDS**") TO CARDIOL THERAPEUTICS INC. (THE "**ISSUER**") OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IN RESPECT THEREOF IS REGISTERED IN THE NAME OF CDS & CO., OR SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF CDS (AND ANY PAYMENT IS MADE TO CDS & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF CDS), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL SINCE THE REGISTERED HOLDER HEREOF, CDS & CO., HAS A PROPERTY INTEREST IN THE SECURITIES REPRESENTED BY THIS CERTIFICATE HEREIN AND IT IS A VIOLATION OF ITS RIGHTS FOR ANOTHER PERSON TO HOLD, TRANSFER OR DEAL WITH THIS CERTIFICATE.

For Warrants required to bear the legend set forth in Section 2.8(1), include the following legend:

"THE SECURITIES REPRESENTED HEREBY AND THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "U.S. SECURITIES ACT"), OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. THE HOLDER HEREOF, BY PURCHASING SUCH SECURITIES, AGREES FOR THE BENEFIT OF THE CORPORATION THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY (A) TO THE CORPORATION, (B) OUTSIDE THE UNITED STATES IN COMPLIANCE WITH RULE 904 OF REGULATION S UNDER THE U.S. SECURITIES ACT AND IN COMPLIANCE WITH APPLICABLE LOCAL LAWS AND REGULATIONS, (C) IN COMPLIANCE WITH THE EXEMPTION FROM REGISTRATION UNDER THE U.S. SECURITIES ACT PROVIDED BY (1) RULE 144 THEREUNDER, IF AVAILABLE, OR (2) RULE 144A THEREUNDER, IF AVAILABLE, AND, IN BOTH CASES, IN COMPLIANCE WITH APPLICABLE STATE SECURITIES LAWS, (D) IN ANOTHER TRANSACTION THAT DOES NOT REQUIRE REGISTRATION UNDER THE U.S. SECURITIES ACT OR ANY APPLICABLE STATE SECURITIES LAWS, OR (E) PURSUANT TO A REGISTRATION STATEMENT THAT HAS BEEN DECLARED EFFECTIVE UNDER THE U.S. SECURITIES ACT, AND, IN THE CASE OF (C)(1) AND (D) ABOVE, AFTER THE SELLER FURNISHES TO THE CORPORATION AN OPINION OF COUNSEL OF RECOGNIZED STANDING OR OTHER EVIDENCE IN FORM AND SUBSTANCE REASONABLY SATISFACTORY TO THE CORPORATION TO SUCH EFFECT. DELIVERY OF THIS CERTIFICATE MAY NOT CONSTITUTE "GOOD DELIVERY" IN SETTLEMENT OF TRANSACTIONS ON STOCK EXCHANGES IN CANADA."

WARRANT

To acquire Common Shares of

CARDIOL THERAPEUTICS INC.

(incorporated pursuant to the laws of the Province of Ontario)

Warrant

Certificate No. [*]

Certificate for_____Warrants, each Warrant entitling the holder to acquire one (1) Common Share (subject to adjustment as provided for in the Warrant Indenture (as defined below)

CUSIP: 14161Y135 / ISIN: CA 14161Y1354

THIS IS TO CERTIFY THAT, for value received,

_____

(the "**Warrantholder**") is the registered holder of the number of common share purchase warrants (the "**Warrants**") of Cardiol Therapeutics Inc. (the "**Corporation**") specified above, and is entitled, on exercise of these Warrants upon and subject to the terms and conditions set forth herein and in the Warrant Indenture, to purchase at any time before 4:00 p.m. (Eastern time) (the "**Expiry Time**") on May 12, 2024 (the "**Expiry Date**"), one fully paid and non-assessable Class A common share without par value in the capital of the Corporation as constituted on the date hereof (a "**Common Share**") for each Warrant subject to adjustment in accordance with the terms of the Warrant Indenture.

Capitalized terms used but not otherwise defined herein have the meaning ascribed to them in the Warrant Indenture.

The right to purchase Common Shares may only be exercised by the Warrantholder within the time set forth above by:

(a) duly completing and executing the exercise form (the "**Exercise Form**") attached hereto; and

(b) surrendering this warrant certificate (the "**Warrant Certificate**"), with the Exercise Form and all additional information required thereby, to the Warrant Agent at the principal office of the Warrant Agent, in the city of Toronto, Ontario, together with a certified cheque, bank draft or money order in the lawful money of Canada payable to or to the order of the Corporation in an amount equal to the purchase price of the Common Shares so subscribed for.

The surrender of this Warrant Certificate, the duly completed Exercise Form, all additional information required thereby, and payment as provided above will be deemed to have been effected only on personal delivery thereof to, or if sent by mail or other means of transmission on actual receipt thereof by, the Warrant Agent at its principal office as set out above.

Subject to adjustment thereof in the events and in the manner set forth in the Warrant Indenture hereinafter referred to, the exercise price payable for each Common Share upon the exercise of Warrants shall be $4.60 per Common Share (the "**Exercise Price**").

Certificates for the Common Shares subscribed for will be mailed to the persons specified in the Exercise Form at their respective addresses specified therein or, if so specified in the Exercise Form, delivered to such persons at the office where this Warrant Certificate is surrendered. If fewer Common Shares are purchased than the number that can be purchased pursuant to this Warrant Certificate, the holder hereof will be entitled to receive without charge a new Warrant Certificate in respect of the balance of the Common Shares not so purchased. No fractional Common Shares will be issued upon exercise of any Warrant.

This Warrant Certificate evidences Warrants of the Corporation issued or issuable under the provisions of a warrant indenture (which indenture together with all other instruments supplemental or ancillary thereto is herein referred to as the "**Warrant Indenture**") dated as of May 12, 2021 between the Corporation and Computershare Trust Company of Canada, as Warrant Agent, to which Warrant Indenture reference is hereby made for particulars of the rights of the holders of Warrants, the Corporation and the Warrant Agent in respect thereof and the terms and conditions on which the Warrants are issued and held, all to the same effect as if the provisions of the Warrant Indenture were herein set forth, to all of which the holder, by acceptance hereof, assents. The Corporation will furnish to the holder, on request and without charge, a copy of the Warrant Indenture.

On presentation at the principal office of the Warrant Agent as set out above, subject to the provisions of the Warrant Indenture and in compliance with the reasonable requirements of the Warrant Agent, one or more Warrant Certificates may be exchanged for one or more Warrant Certificates entitling the holder thereof to purchase in the aggregate an equal number of Common Shares as are purchasable under the Warrant Certificate(s) so exchanged.

Neither the Warrants nor the Common Shares issuable upon exercise hereof have been or will be registered under the United States Securities Act of 1933, as amended (the "**U.S. Securities Act**"), or U.S. state securities laws. The Warrants may not be exercised by or on behalf of a U.S. person or a person in the United States, unless (i) the Warrants and such Common Shares have been registered under the U.S. Securities Act and the applicable laws of any such state, or (ii) an exemption from such registration requirements is available and the requirements set forth in the Exercise Form have been satisfied. "**United States**" and "**U.S. person**" are as defined in Regulation S under the U.S. Securities Act.

The Warrant Indenture contains provisions for the adjustment of the Exercise Price payable for each Common Share issuable upon the exercise of Warrants and the number of Common Shares issuable upon the exercise of Warrants in the events and in the manner set forth therein.

The Warrant Indenture also contains provisions binding all holders of Warrants outstanding thereunder, including all resolutions passed at meetings of holders of Warrants held in accordance with the provisions of the Warrant Indenture and instruments in writing signed by Warrantholders of Warrants entitled to purchase a specific majority of the Common Shares that can be purchased pursuant to such Warrants.

Nothing contained in this Warrant Certificate, the Warrant Indenture or elsewhere shall be construed as conferring upon the Warrantholder hereof any right or interest whatsoever as a holder of Common Shares or any other right or interest except as herein and in the Warrant Indenture expressly provided. In the event of any discrepancy between anything contained in this Warrant Certificate and the terms and conditions of the Warrant Indenture, the terms and conditions of the Warrant Indenture shall govern.

Warrants may only be transferred in compliance with the conditions of the Warrant Indenture on the register to be kept by the Warrant Agent in Toronto, Ontario, or such other registrar as the Corporation, with the approval of the Warrant Agent, may appoint at such other place or places, if any, as may be designated, upon surrender of this Warrant Certificate to the Warrant Agent or other registrar accompanied by a written instrument of transfer in form and execution satisfactory to the Warrant Agent or other registrar and upon

compliance with the conditions prescribed in the Warrant Indenture and with such reasonable requirements as the Warrant Agent or other registrar may prescribe and upon the transfer being duly noted thereon by the Warrant Agent or other registrar. Time is of the essence hereof.

This Warrant Certificate will not be valid for any purpose until it has been countersigned by or on behalf of the Warrant Agent from time to time under the Warrant Indenture.

The parties hereto have declared that they have required that these presents and all other documents related hereto be in the English language. Les parties aux présentes déclarent qu'elles ont exigé que la présente convention, de même que tous les documents s'y rapportant, soient rédigés en anglais.

IN WITNESS WHEREOF the Corporation has caused this Warrant Certificate to be duly executed as of_____, 20__.

CARDIOL THERAPEUTICS INC.

By: _____
Authorized Signatory

By: _____
Authorized Signatory

Countersigned and Registered by:

COMPUTERSHARE TRUST COMPANY OF CANADA

By: _____
Authorized Signatory

FORM OF TRANSFER

To: Computershare Trust Company of Canada

FOR VALUE RECEIVED the undersigned hereby sells, assigns and transfers to

_____

_____

(print name and address) the Warrants represented by this Warrants Certificate and hereby irrevocable constitutes and appoints _____as its attorney with full power of substitution to transfer the said securities on the appropriate register of the Warrant Agent.

In the case of a warrant certificate that contains a U.S. restrictive legend, the undersigned hereby represents, warrants and certifies that (one (only) of the following must be checked):

☐ (A) the transfer is being made only to the Corporation;

☐ (B) the transfer is being made outside the United States in accordance with Rule 904 of Regulation S under the U.S. Securities Act of 1933, as amended (the "**U.S. Securities Act**"), and in compliance with any applicable local securities laws and regulations, and the holder has provided herewith the Declaration for Removal of Legend attached as Schedule "C" to the Warrant Indenture and any other information required by the Warrant Agent; or

☐ (C) the transfer is being made in a transaction that does not require registration under the U.S. Securities Act or any applicable state securities laws and the undersigned has furnished to the Corporation and the Warrant Agent an opinion of counsel of recognized standing, or other evidence, in form and substance reasonably satisfactory to the Corporation and the Warrant Agent to such effect, to the extent required pursuant to the terms of the U.S. restrictive legend.

In the case of a warrant certificate that does not contain a U.S. restrictive legend, if the proposed transfer is to, or for the account or benefit of, a U.S. Person or a person in the United States, the undersigned hereby represents, warrants and certifies that the transfer of the Warrants is being completed pursuant to an exemption from the registration requirements of the U.S. Securities Act and any applicable state securities laws, in which case the undersigned has furnished to the Corporation and the Warrant Agent an opinion of counsel of recognized standing or other evidence in form and substance reasonably satisfactory to the Corporation and the Warrant Agent to such effect.

☐ If a transfer is to a U.S. Person, check this box.

If required pursuant to the U.S. Securities Act, certificates representing transferred Warrants will be endorsed with the legend set forth in Section 2.8(a) of the Indenture.

DATED this _____day of _____, 20__.

SPACE FOR GUARANTEES OF SIGNATURES (BELOW)

)
)
)
)
)
)
)
)
)
)

Signature of Transferor

Guarantor's Signature/Stamp

Name of Transferor

REASON FOR TRANSFER – For US Residents only (where the individual(s) or corporation receiving the securities is US resident). Please select only one (see instructions below).

☐ Gift ☐ Estate ☐ Private Sale ☐ Other (or no change in ownership)

Date of Event (Date of gift, death or sale):

Value per Warrant on the date of event:

☐CAD OR ☐ USD

CERTAIN REQUIREMENTS RELATING TO TRANSFERS – READ CAREFULLY

The signature(s) of the transferor(s) must correspond with the name(s) as written upon the face of this certificate(s), in every particular, without alteration or enlargement, or any change whatsoever. All securityholders or a legally authorized representative must sign this form. The signature(s) on this form must be guaranteed in accordance with the transfer agent's then current guidelines and requirements at the time of transfer. Notarized or witnessed signatures are not acceptable as guaranteed signatures. As at the time of closing, you may choose one of the following methods (although subject to change in accordance with industry practice and standards):

- **Canada and the USA**: A Medallion Signature Guarantee obtained from a member of an acceptable Medallion Signature Guarantee Program (STAMP, SEMP, NYSE, MSP). Many commercial banks, savings banks, credit unions, and all broker dealers participate in a Medallion Signature Guarantee Program. The Guarantor must affix a stamp bearing the actual words "Medallion Guaranteed", with the correct prefix covering the face value of the certificate.

- **Canada**: A Signature Guarantee obtained from an authorized officer of the Royal Bank of Canada, Scotia Bank or TD Canada Trust. The Guarantor must affix a stamp bearing the actual words "Signature Guaranteed", sign and print their full name and alpha numeric signing number. Signature Guarantees are not accepted from Treasury Branches, Credit Unions or Caisse Populaires unless they are members of a Medallion Signature Guarantee Program. For corporate holders, corporate signing resolutions, including certificate of incumbency, are also required to accompany the transfer, unless there is a "Signature & Authority to Sign Guarantee" Stamp affixed to the transfer (as opposed to a "Signature Guaranteed" Stamp) obtained from an authorized officer of the Royal Bank of Canada, Scotia Bank or TD Canada Trust or a Medallion Signature Guarantee with the correct prefix covering the face value of the certificate.

- **Outside North America**: For holders located outside North America, present the certificates(s) and/or document(s) that require a guarantee to a local financial institution that has a corresponding Canadian or American affiliate which is a member of an acceptable Medallion Signature Guarantee Program. The corresponding affiliate will arrange for the signature to be over-guaranteed.

OR

The signature(s) of the transferor(s) must correspond with the name(s) as written upon the face of this certificate(s), in every particular, without alteration or enlargement, or any change whatsoever. The signature(s) on this form must be guaranteed by an authorized officer of Royal Bank of Canada, Scotia Bank or TD Canada Trust whose sample signature(s) are on file with the transfer agent, or by a member of an acceptable Medallion Signature Guarantee Program (STAMP, SEMP, NYSE, MSP). Notarized or witnessed signatures are not acceptable as guaranteed signatures. The Guarantor must affix a stamp bearing the actual words: "SIGNATURE GUARANTEED", "MEDALLION GUARANTEED" OR "SIGNATURE & AUTHORITY TO SIGN GUARANTEE", all in accordance with the transfer agent's then current guidelines and requirements at the time of transfer. For corporate holders, corporate signing resolutions, including certificate of incumbency, will also be required to accompany the transfer unless there is a "SIGNATURE & AUTHORITY TO SIGN GUARANTEE" Stamp affixed to the Form of Transfer obtained from an authorized officer of the Royal Bank of Canada, Scotia Bank or TD Canada Trust or a "MEDALLION GUARANTEED" Stamp affixed to the Form of Transfer, with the correct prefix covering the face value of the certificate.

REASON FOR TRANSFER – FOR US RESIDENTS ONLY

Consistent with US IRS regulations, Computershare is required to request cost basis information from US securityholders. Please indicate the reason for requesting the transfer as well as the date of event relating to the reason. The event date is not the day in which the transfer is finalized, but rather the date of the event which led to the transfer request (i.e., date of gift, date of death of the securityholder, or the date the private sale took place).

SCHEDULE "B"

EXERCISE FORM

TO: CARDIOL THERAPEUTICS INC.

AND TO: Computershare Trust Company of Canada

The undersigned holder of the Warrants evidenced by this Warrant Certificate hereby exercises the right to acquire _____(A) Common Shares of Cardiol Therapeutics Inc.

Exercise Price Payable: _____

((A) multiplied by $4.60, subject to adjustment)

The undersigned hereby exercises the right of such holder to be issued, and hereby subscribes for, Common Shares that are issuable pursuant to the exercise of such Warrants on the terms specified in such Warrant Certificate and in the Warrant Indenture.

The undersigned hereby acknowledges that the undersigned is aware that the Common Shares received on exercise may be subject to restrictions on resale under applicable securities legislation.

Any capitalized term in this Exercise Form that is not otherwise defined herein, shall have the meaning ascribed thereto in the Warrant Indenture.

The undersigned represents, warrants and certifies as follows (one (only) of the following must be checked):

☐ (A) the undersigned holder (i) did not acquire the Warrants within the United States and was not a U.S. Person at the time the Warrants were acquired, (ii) is not in the United States, (iii) is not a U.S. Person, (iv) is not exercising the Warrants on behalf of, or for the account or benefit of, a U.S. Person or a person in the United States, (v) did not execute or deliver this exercise form in the United States and (vi) delivery of the underlying Common Shares will not be to an address in the United States; OR

☐ (B) the undersigned holder is the original purchaser from the Corporation, pursuant to an exemption from registration under the U.S. Securities Act of 1933, as amended (the "**U.S. Securities Act**"), of the units of which the Warrants comprised a part, and at the time of such acquisition was a U.S. Person or was in the United States (or was acting on behalf of, or for the account or benefit of, a U.S. Person or a person in the United States), and confirms, as of the date of hereof, each of the representations, warranties, certifications and agreements made by it in connection with its acquisition of such Warrants, and confirms its status as an "accredited investor" within the meaning of Rule 501(a) of Regulation D under the U.S. Securities Act, as though such representations, warranties, certifications and agreements were made on the date hereof and in respect of the acquisition of the Common Shares issuable upon exercise of the Warrants being exercised; OR

☐ (C) an exemption from the registration requirements of the U.S. Securities Act and all applicable state securities laws is available for the exercise of the Warrants, and attached hereto is a written opinion of U.S. counsel or other evidence in form and substance reasonably satisfactory to the Corporation and the Warrant Agent to such effect.

It is understood that the Corporation and Computershare Trust Company of Canada may require evidence to verify the foregoing representations.

Notes:

(1) Certificates will not be registered or delivered to an address in the United States unless Box B or C above is checked and the applicable requirements are complied with.

(2) If the Warrants have the legend set forth in Section 2.8(1) affixed to them, the resulting Common Shares will have the same U.S. legend affixed to them as well, for so long as required by applicable requirements of the U.S. Securities Act.

(3) If Box C above is checked, holders are encouraged to consult with the Corporation and the Warrant Agent in advance to determine that the legal opinion or other evidence tendered in connection with the exercise or legending matters will be satisfactory in form and substance to the Corporation and the Warrant Agent.

"**United States**" and "**U.S. Person**" are as defined in Rule 902 of Regulation S under the U.S. Securities Act.

The undersigned hereby irrevocably directs that the said Common Shares be issued, registered and delivered as follows:

Name(s) in Full and Social Insurance Number(s) (if applicable)	**Address(es)**	**Number of Common Shares**

Please print full name in which certificates representing the Common Shares are to be issued. If any Common Shares are to be issued to a person or persons other than the registered holder, the registered holder must pay to the Warrant Agent all eligible transfer taxes or other government charges, if any, and the Form of Transfer must be duly executed.

Once completed and executed, this Exercise Form must be mailed or delivered to **Computershare Trust Company of Canada, c/o General Manager, Corporate Trust**.

DATED this ___day of _____, 20___.

)

	)	
	)	
	)	
Witness	)	(Signature of Warrantholder, to be the same as appears on
	)	the face of this Warrant Certificate)
	)	
	)	
	)	
	)	
	)	Name of Registered Warrantholder

☐ Please check if the certificates or DRS representing the Common Shares are to be delivered at the office where this Warrant Certificate is surrendered, failing which such certificates or DRS will be mailed to the address set out above. Certificates or DRS will be delivered or mailed as soon as practicable after the surrender of this Warrant Certificate to the Warrant Agent.

SCHEDULE "C"

FORM OF DECLARATION FOR REMOVAL OF LEGEND

TO: Computershare Trust Company of Canada and Computershare Investor Services Inc., as warrant agent and transfer agent for Cardiol Therapeutics Inc.

AND TO: Cardiol Therapeutics Inc.

The undersigned (a) acknowledges that the sale of _____ [common shares/warrants] of Cardiol Therapeutics Inc. (the "**Corporation**") to which this declaration relates, represented by certificate number _____, is being made in reliance on Rule 904 of Regulation S under the United States Securities Act of 1933, as amended (the "**U.S. Securities Act**"), and (b) certifies that (1) the undersigned is not an "affiliate" (as that term is defined in Rule 405 under the U.S. Securities Act) of the Corporation, (2) the offer of such securities was not made to a person in the United States and either (A) at the time the buy order was originated, the buyer was outside the United States, or the seller and any person acting on its behalf reasonably believed that the buyer was outside the United States, or (B) the transaction was executed in, on or through the facilities of the Toronto Stock Exchange or other designated offshore securities market and neither the seller nor any person acting on its behalf knows that the transaction has been prearranged with a buyer in the United States, (3) neither the seller nor any affiliate of the seller nor any person acting on any of their behalf has engaged or will engage in any directed selling efforts in the United States in connection with the offer and sale of such securities, (4) the sale is bona fide and not for the purpose of "washing off" the resale restrictions imposed because the securities are "restricted securities" (as such term is defined in Rule 144(a)(3) under the U.S. Securities Act), (5) the seller does not intend to replace such securities with fungible unrestricted securities and (6) the contemplated sale is not a transaction, or part of a series of transactions which, although in technical compliance with Regulation S under the U.S. Securities Act, is part of a plan or scheme to evade the registration provisions of the U.S. Securities Act. Unless otherwise defined herein, terms used herein have the meanings given to them by Regulation S under the U.S. Securities Act.

Date: _____ _____

Name of Seller

By: _____

Name:

Title:

Exhibit 4.3

Certain identified information has been excluded from the exhibit pursuant to Item 601(a)(6) of Regulation S-K due to personal privacy concerns. Redacted information is indicated by: [***]

LICENSE AGREEMENT

This License Agreement ("License Agreement") is made this 20th day of January, 2017 (the "Effective Date") by and between Meros Polymers Inc., a company incorporated under the laws of Alberta, with a principal place of business at 1700 Enbridge Centre, 10175 — 101 Street NW, Edmonton, Alberta T5J 0H3, Canada ("Meros"), and **Cardiol Therapeutics Inc.** ("Cardiol") a company incorporated under the laws of Ontario, with a principal place of business at 2275 Upper Middle Road East, Suite 101, Oakville, Ontario, L6H 0C3 (together with any Affiliate to which this Agreement may be assigned pursuant to Section 18.8 hereof). For purposes hereof, Meros and Cardiol. are each referred to hereinafter individually as a "Party" and together as the "Parties". For purposes hereof, capitalized terms not otherwise defined herein shall have the meanings assigned such terms in Article 1 hereof, or as otherwise indicated.

WHEREAS Meros is the owner of or otherwise Controls the Meros Technology and is prepared to grant an exclusive sub-license of the Meros Technology, within the Field of Use;

WHEREAS Cardiol desires to sub-license the Meros Technology, as identified herein, on the terms and conditions stipulated in this Agreement;

WHEREAS Meros has agreed to assist Cardiol in the Development of the Project Product, as identified herein, on the terms and conditions described in this Agreement;

NOW THEREFORE in consideration of the mutual covenants contained herein, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. DEFINITIONS

Whenever used in this Agreement with an initial capital letter, the terms defined in this Article 1 shall have the meanings specified.

"Affiliate" shall mean, with respect to a Party or a Third Party, any individual, corporation, firm, limited liability company, partnership, trust or other entity which directly controls or is controlled by or is under common control with such Party or Third Party. "Control" for purposes of this definition only means ownership, directly or indirectly through one or more Affiliates, of more than fifty percent (>50%) of the shares of stock entitled to vote for the election of directors, in the case of a corporation, or more than fifty percent (>50%) of the equity interests in the case of any other type of legal entity, status as a general partner in any partnership, or any other arrangement whereby such Party or Third Party controls or has the right to control the Board of Directors or equivalent governing body of a corporation or other entity.

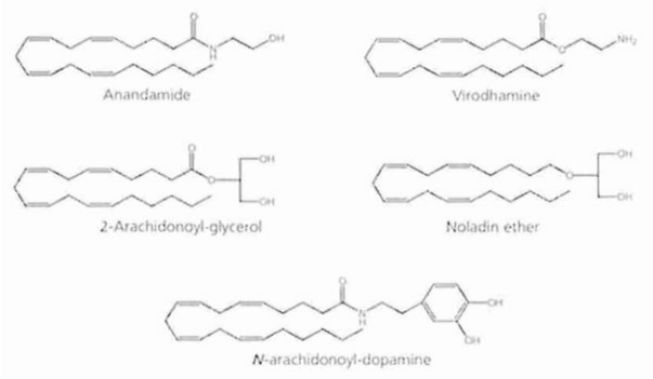
"Agreement" shall mean this Sub-License Agreement.

"Cannabinoids" shall mean a broad range of chemical compounds including the following:

1. Phytocannabinoids: a group of C21 terpenophenolic compounds found in the *Cannabis sativa* plant, and either extracted from the plant tissue or chemically synthesized. This comprises 10 sub-classes of such compounds and includes the 57 structures as specified in Brenneisen

(Brenneisen R. Chemistry and analysis of phytocannabinoids and other *Cannabis* constituents. In `Marijuana and the Cannabinoids', ElSohley M.A. Humana Press, Totowa, New Jersey, pp17-49, 2007).

2. Endocannabinoids: endogenous molecules that show prime pharmacological activity and that bind to the cannabinoid receptors CB1 and/or CB2, and synthetic forms thereof, including:



3. Other natural and/or synthetic molecules that show prime pharmacological activity and that bind to the CB1 and/or CB2 receptors.

"Cardiol Improvements" shall mean any enhancement, invention or discovery created, conceived, identified, or reduced to practice by or on behalf of Cardiol, without the collaboration or assistance of Meros or its Affiliates, that constitutes an improvement to the subject matter of the Meros Technology, whether or not patentable.

"Cardiol Intellectual Property" or "Cardiol IP" shall mean Cardiol Improvements, Cardiol Know-How and any patents that Cardiol files for an invention arising out of the Development.

"Cardiol Know-How" shall mean and include any and all unpatented proprietary ideas, inventions, discoveries, Confidential Information, data, results, formulae, designs, specifications, scientific methods, business plans and methods, processes, formulations, techniques, ideas, know-how, technical information (including, without limitation, structural and functional information), process information, pre-clinical information, clinical information, and any and all proprietary biological, chemical, pharmacological, toxicological, pre-clinical, clinical, assay, control and manufacturing data Controlled by Cardiol or one of its Affiliates.

"Cardiol Indemnitees" shall have the meaning for such term set forth in Section 14.3.

"Confidential Information" shall mean, with respect to a Party receiving the information (the "Receiving Party") all information, which is disclosed by the other Party or any of the other Party's employees, consultants, Affiliates, licensees or Sub-Licensees (collectively, the "Disclosing Party") to the Receiving Party hereunder or to any of its employees, consultants, Affiliates, licensees or Sub-Licensees ("Representatives") except to the extent that such information, (i) as of the date of disclosure is demonstrably known to the Receiving Party or its Representatives, as

shown by written documentation, other than by virtue of a prior confidential disclosure to such Party or its Representatives; (ii) as of the date of disclosure is in, or subsequently enters, the public domain, through no fault or omission of the Receiving Party or its Representatives; (iii) is obtained by the Receiving Party or its Representatives from a Third Party having a lawful right to make such disclosure free from any obligation of confidentiality; or (iv) is independently developed by or for the Receiving Party or its Representatives without reference to or reliance upon any Confidential Information of the Disclosing Party as demonstrated by competent written records.

"Control" or "Controlled" shall mean, with respect to the Meros Technology, the possession by a Party of the ability to sell or grant a license or sub-license of such Meros Technology as provided for herein without violating the terms of any arrangement or agreements between such Party and any Third Party, unless otherwise provided for in this Agreement.

"Date of Commencement" or "Commencement Date" shall mean the date on which this Agreement is executed and delivered by the Parties and shall be read and construed accordingly.

"Development", "Develop", "Developed" and "Developing" shall mean, with respect to completing the work described in Schedule B and with respect to any further work regarding the Project Product, all activities relating to research and development in connection with seeking, obtaining and/or maintaining any Regulatory Approval for Project Products in the Territory, including without limitation, all pre-clinical research and development activities, all human clinical studies, all activities relating to developing the ability to manufacture any Project Product or any component thereof (including, without limitation, process development work), and all other activities relating to seeking, obtaining and/or maintaining any Regulatory Approvals from any Regulatory Authority, including the publishing of certain data and other results as may be necessary in connection with the foregoing.

"Dispute" shall have the meaning for such term set forth in Article 17.

"Drug Approval Application" shall mean any application for Regulatory Approval (other than pricing and reimbursement approvals) required prior to any commercial sale or use of a Project Product in any country or jurisdiction, including, without limitation, any application filed with any Regulatory Authority for Regulatory Approval (other than pricing and reimbursement approvals) required prior to any commercial sale or use of a Project Product in any country or jurisdiction.

"FDA" shall mean the United States of America Food and Drug Administration or any successor Regulatory Authority for the regulation of bio-pharmaceutical products in the United States of America.

"Field of Use" shall mean:

(a) the delivery of any Cannabinoids for any and all human or animal disease indications and any derivatives thereof that incorporates the Meros Technology; and

(b) the delivery of any drugs or classes of drugs currently used or developed in the future to diagnose or treat cardiovascular and/or cardiopulmonary disease, heart failure and/or cardiac arrhythmias in humans and animals, including but not limited to, Sildenafil, Pirfenidone, Rapamycin, Methotrexate, Amiodarone, Cyclosporine, statins, angiotensin

receptor blockers, angiotensin converting enzyme inhibitors, nitrates, beta blockers, TLR4 antagonists, any blockers of HSP60 activity or inhibitors of production and/or transport of HSP 60 and any derivatives of any of them that incorporate or utilize the Meros Technology.

"Financial Report" shall have the meaning for such term set forth in Section 9.1.

"Founding Directors" shall mean David Elsley, Eldon Smith, Anthony Bolton and Terrence Lynch.

"Improvements" shall mean Meros Improvements, Cardiol Improvements, and Joint Improvements, separately or collectively as the context may dictate.

"Indemnitees" shall have the meaning for such term set forth in Section 14.3.

"Indemnitor" shall have the meaning for such term set forth in Section 14.3.

"Intellectual Property" or "IP" shall mean intellectual property, including but not limited to inventions (both patentable and non-patentable), discoveries, improvements, copyrightable works, integrated circuit topographies, trademarks, trade secrets, and the works, technologies, products and services covered and protected by such intellectual property rights, including but not limited to prototypes, compounds, biological materials, research findings, data, computer programs, software, databases and circuitry;

"Joint Improvements" shall mean any enhancement, invention or discovery created, conceived, identified, or reduced to practice by either Party or its Affiliates with the collaboration or assistance of the other Party or the other Party's Affiliates, which constitutes an improvement to the subject matter of the Meros Technology, whether or not patentable.

"Laws" shall mean all provisions of all (i) constitutions, treaties, laws, statutes, codes, ordinances, orders, decrees, rules, regulations and municipal by-laws, whether domestic, foreign or international; (ii) judgments, orders, writs, injunctions, decisions, rulings, decrees and words of any governmental or regulatory body or authority; and (iii) all policies, voluntary restraints, practices and guidelines of any Regulatory Authority, in each case binding on or affecting the Party referred to in the context in which such word is used.

"Meros Improvements" shall mean any enhancement, invention or discovery created, conceived, identified, or reduced to practice by or on behalf of Meros, without the collaboration or assistance of Cardiol or its Affiliates, which constitutes an improvement to the subject matter of the Meros Technology, whether or not patentable.

"Meros Indemnitees" shall have the meaning for such term set forth in section 14.1.

"Meros Intellectual Property" or "Meros IP" shall mean the patents and patent applications listed in Schedule A, attached hereto and made a part hereof and any intellectual property arising from the implementation and execution of any Project Plans are as applicable.

"Meros Know-How" shall mean and include, any and all unpatented proprietary ideas, inventions, discoveries, Confidential Information, data, results, formulae, designs, specifications, scientific

methods, business plans and methods, processes, formulations, techniques, ideas, know-how, technical information (including, without limitation, structural and functional information), process information, pre-clinical information, clinical information, and any and all proprietary biological, chemical, pharmacological, toxicological, pre-clinical, clinical, assay, control and manufacturing data Controlled by Meros or one of its Affiliates relating to the Meros Technology.

"Meros Patent Rights" shall mean, the rights and interests in and to issued patents and pending patent applications (including inventor's certificates and utility models) in any country or jurisdiction relating to the Meros Technology, including all provisionals, substitutions, continuations, continuations-in-part, divisionals, supplementary protection certificates, renewals, all letters patent granted thereon, and all reissues, reexaminations, extensions, confirmations, revalidations, registrations, patents of addition thereof, PCT applications and foreign counterparts, owned or Controlled by a Party relating to the Meros Technology.

"Meros Product" shall mean, any product, process, device, formula or service the manufacture, use, offer for sale, sale or performance of which (i) relies on or incorporates, in whole or in part, the Meros Technology; (ii) would, absent the ownership of the Meros IP or the licenses granted to Cardiol hereunder, infringe any Valid Claim included in the Meros IP; (iii) is covered by any Pending Claim included in the Meros IP; or (iv) would otherwise, absent the ownership of the Meros IP license granted to Cardiol hereunder, infringe or misappropriate any of the Meros Technology.

"Meros Technology" shall mean, collectively the Meros Patent Rights, the Meros Know-How, the Meros IP, the Meros Product, and the Meros Improvements, if any.

"Net Sales" shall mean the amount received from the manufacture, distribution, sales, licensing, sublicensing and/or leasing of Project Products and/or the Meros Technology within the Field of Use, or any part thereof by Cardiol, its agents, distributors and/or its Sub-Licensees to Third Parties net of any of the following (a) discounts actually allowed; (b) credits for claims, allowances, retroactive price reductions or returned goods; (c) sales, tariffs, duties, taxes or other governmental charges paid in connection with the sales of such Project Products; (d) prepaid or allowed freight, insurance and other transportation expenses; and (e) brokerage commissions paid to others in connection with the sales of Project Products or leasing, licensing or sublicensing Meros Technology or any part thereof.

"Non-Royalty Sub-license Income" shall mean any payments or other rights granted to Cardiol or other consideration received by Cardiol to the extent that it is paid in consideration for the grant of a sublicense of the rights to any of Project Products or other rights or Meros Technology in whole or in part, granted to Cardiol hereunder (including, without limitation, upfront payments, marketing, distribution, franchise, option license or documentation fees, bonus and milestone payments, regardless of the form of the payment), but excluding amounts received as running royalties, a profit share, or other revenue sharing based on Net Sales for which Cardiol and/or Meros is entitled to receive a royalty payment. For the avoidance of doubt, Non-Royalty Sub-license Income does not include *bona fide:* (a) purchase price for debt financing of Cardiol's or any of its Affiliates' stock or other securities; (b) consideration allocated to or in reimbursement for patent, research and other development costs; (c) consideration in respect of development services provided by a third party; (d) consideration paid to the extent used for research and

development of any product using Meros Technology; (e) Joint Improvements; and (f) Cardiol Improvements. If Cardiol or its Affiliates receive Non-Royalty Sub-license Income in a form other than cash or cash equivalents, the amount of such Non-Royalty Sub-license Income will be calculated based on the fair market value of such Non-Royalty Sub-license Income, at the time of the transaction, assuming an arm's length transaction made in the ordinary course of business.

"Payment Report" shall have the same meaning for such terms set forth in Section 9.1.

"Pending Claim" shall mean a bona fide pending claim for a patent within the Meros Patent Rights that (i) has not been disclaimed, revoked, withdrawn or abandoned; (ii) has not been unappealably cancelled or rejected by any administrative agency or other body of competent jurisdiction; (iii) has not been declared unpatentable by any administrative agency, under a decision of a court or other body of competent jurisdiction that is unappealable or unappealed within the time allowed for appeal; or (iv) has not lost through an interference proceeding.

"Project Plan" shall mean the basic research program to be developed by Cardiol working in collaboration with Meros within 150 days following the Date of Commencement, the outline of which is attached hereto as Schedule B and includes any additions, replacements or substitutions.

"Project Product" shall mean any therapeutic and/or prophylactic treatment incorporating or using Meros Technology within the Field of Use.

"Regulatory Approval" shall mean any and all approvals (other than pricing and reimbursement approvals), product and establishment licenses, registrations or authorizations of any kind of any Regulatory Authority necessary for the Development, pre-clinical and/or human clinical testing, manufacture, quality testing, supply, use, storage, importation, export, transport, marketing and sale of a Project Product (or any component thereof) in any country or other jurisdiction.

"Regulatory Authorities" shall mean any applicable supranational, national, federal, state, provincial or local regulatory agency, department, bureau or other governmental entity of any country or jurisdiction, having responsibility in such country or jurisdiction for any Regulatory Approvals of any kind in such country or jurisdiction, and any successor agency or authority thereto.

"Related Person" has the meaning assigned to it in Section 251 of the Income Tax Act, Stats. Can. 1970-71-72, c. 63, as amended.

"Royalty Due Dates" have the meaning given to it in Section 9.1 hereof and they shall remain in effect for each and every year during which this Agreement remains in full force and effect.

"Rules" shall have the meaning for such term set forth in Section 17.3.2.

"Services" means services provided using some or all of the Meros Technology.

"Sub-Licensee" shall mean any non-Affiliate third party that has entered into a sub-license agreement with Cardiol.

"Sub-license Agreement" means any agreement under which rights to the Meros Technology and/or Project Products are granted by Cardiol to a Sub-Licensee for use, development, research, co-development, partnered development manufacture, distribution, or marketing.

"Term" shall mean the period commencing on the Commencement Date and continuing until the expiration or termination of this Agreement in accordance with the terms hereof.

"Territory" shall mean all the world.

"Third Party" shall mean any person or entity other than Cardiol, Meros and their respective Affiliates.

"UofA" or "University" shall mean the University of Alberta located in Edmonton, Alberta.

"UofA Agreement" shall have the meaning for such term set forth in Section 7.1.

"University Improvements" shall mean improvement(s) to the Meros Technology that are discovered, created or invented by an inventor who is employed by the University ("University Inventor") and whose ownership rights have been assigned in whole or in part to the University, and which rights are not encumbered by a third party prior to the creation of such improvement(s). For further clarification, improvements made by one or more University Inventors in conjunction with other persons who are not inventors named in the patents described in Schedule A hereto are not University Improvements.

"Valid Claim" shall mean a claim in an issued, unexpired patent within the Meros Patent Rights that (i) has not been finally cancelled, withdrawn, abandoned or rejected by any administrative agency or other body of competent jurisdiction; (ii) has not been revoked, held invalid, or declared unpatentable or unenforceable in a decision of a court or other body of competent jurisdiction that is unappealable or unappealed within the time allowed for appeal; (iii) has not been rendered unenforceable through disclaimer or otherwise; or (iv) is not lost through an interference proceeding.

2. PROPERTY RIGHTS IN AND TO THE TECHNOLOGY

2.1 For the avoidance of doubt, nothing in this Agreement shall be interpreted as giving any right or license to Cardiol in relation to any Intellectual Property rights owned or controlled by or licensed to Meros, including Meros Technology, other than the rights specifically granted under this Agreement and no such right or license shall be implied as being given by Meros to Cardiol other than the rights specifically granted under this Agreement, and nothing in this Agreement shall be interpreted as giving any right or license to Meros in relation to any Intellectual Property rights owned or controlled by or licensed to Cardiol, including the Cardiol IP, other than the rights specifically granted under this Agreement and no such right or license shall be implied as being given by Cardiol to Meros other than the rights specifically granted under this Agreement.

2.2 As between the parties, Meros shall solely own all Meros Improvements and shall have the right to file, prosecute, maintain and extend patent applications and patents covering any Meros Improvement.

2.3 As between the parties, Cardiol shall solely own all Cardiol Improvements and shall have the right to file, prosecute, maintain and extend patent applications and patents covering any Cardiol Improvement.

2.4 Cardiol and Meros shall jointly own all Joint Improvements and shall, subject to Section 12.1 mutually agree on the filing, prosecuting, maintaining and extending patent applications and patents covering any Joint Improvements. Cardiol and Meros shall jointly on a 50/50 basis share in any remuneration, royalty or other revenue or payments from licensing or in any way commercializing and using the Joint Improvements outside of the Field of Use. Neither Party shall be required to seek the consent of the other Party for any use of the Joint Improvements on a non-exclusive basis.

2.5 Each Party shall, at the request of the other, enter into such further reasonable agreements and execute any and all reasonable documents as may be required to ensure that ownership of Improvements as set forth in this Section 2 and to otherwise effect the intent of this Section 2.

2.6 Cardiol shall not assign, transfer, mortgage, pledge, financially encumber, grant a security interest in or permit a lien to be created, charged or otherwise dispose of any or all of the rights granted to it under this Agreement without the prior written consent of Meros, which consent shall not be unreasonably withheld or delayed.

3. GRANT OF RIGHTS

3.1 Subject to the conditions contained in Section 3.2 hereof and subject to the terms and conditions of this Agreement and in consideration of the payments by Cardiol to Meros as described in Section 3.2 and the royalty payments stipulated in Article 4, Meros hereby grants to Cardiol a sole and exclusive, world-wide, irrevocable royalty-bearing license within the Field of Use, including the qualified right to grant sub-licenses within the Field of Use, to the Project Product and to use the Meros Technology and the University Improvements under the Meros Patent Rights and other Intellectual Property Rights owned or Controlled by Meros and relating to the Meros Technology to use, have used, make, have made, import and have imported, Develop, have Developed, modify, have modified, enhance, have enhanced, improve, have improved, commercialize, sell, manufacture, have manufactured and export the Project Products.

3.2 Subject to Article 11, Meros and the University of Alberta shall maintain a perpetual right to use the Meros Patent Rights and Meros IP at no cost for academic and educational purposes.

3.3 As partial consideration for Meros granting the Sub-license described in Section 3.1, Cardiol agrees to raise through debt and/or equity a minimum of $400,000.00 CAD by June 30, 2017 to support the execution of the Project Plan and for Cardiol's general working capital purposes.

3.4 Cardiol agrees to make the following milestone payments and use reasonable commercial efforts to achieve the following milestones:

3.4.1 Submit an application to conduct a Phase **I** clinical trial to any Regulatory Authority in a country covered by Patent Rights as soon as is feasible subject to available safety data, research results and financial resources;

3.4.2 Enroll the first patient in a Phase I clinical trial in a country covered by Patent Rights as soon as is feasible following receipt of all necessary regulatory approvals pertaining to the Phase I clinical trial;

3.4.3 Pay Meros $100,000 upon enrolling the first patient in a Phase IIB clinical trial designed to investigate the safety and indications of efficacy of one of the Project Products;

3.4.4 Pay Meros $500,000 upon enrolling the first patient in a Pivotal Phase III clinical trial designed to investigate the safety and efficacy of one of the Project Products;

3.4.5 Pay Meros $1,000,000 upon receiving Regulatory Approval from the US FDA for any one of the Project Products;

3.4.6 Cardiol shall use reasonable commercial efforts to obtain a New Drug Application number following the successful conclusion of its Phase III clinical trials program for at least one of the Project Products.

4. ROYALTIES

4.1 Other License Financial Terms

4.1.1 Cardiol shall pay to Meros royalties of 5% of worldwide proceeds of Net Sales of Project Product and Meros Technology that it receives in relation to the human and animal disease indications and derivatives thereof described in part (a) of the Field of Use pursuant to this Agreement;

4.1.2 Cardiol shall pay to Meros 7% of any Non-Royalty Sub-License Income that Cardiol receives in relation to the human and animal disease indications and derivatives thereof described in part (a) of the Field of Use;

4.1.3 Cardiol shall pay to Meros royalties of 3.70% of worldwide proceeds of Net Sales of Project Products and Meros Technology that it receives in relation to human and animal cardiovascular and/or cardiopulmonary disease, heart failure and /or cardiac arrhythmias diagnosis and/or treatments using the drugs mentioned in part (b) of the Field of Use pursuant to this Agreement; and

4.1.4 Cardiol shall pay to Meros 5% of any Non-Royalty Sub-License Income that Cardiol receives in relation to any human and animal heart disease, heart failure and/or arrythmias indications as described in part (b) of the Field of Use and 4.1.3 above.

5. EQUITY CONSIDERATION AND BOARD OF DIRECTORS

5.1 Within 60 days following the execution of this Agreement by both parties Cardiol shall issue to Meros the number of shares from its treasury equal to 10% of its issued and outstanding voting share capital. The issued shares shall be free and clear of any and all encumbrances and Meros shall be able to vote the purchased shares on an unrestricted basis. These shares shall be issued on a non-dilutable basis until Cardiol receives $1,000,000.00 in debt and/or equity financing after which the shares shall be dilutable to the extent all the other issued shares owned by the Founding Directors of Cardiol are diluted when further financing takes place.

5.2 Within 60 days following the execution of this Agreement by both parties Cardiol shall also issue to Meros the number of shares from its treasury equal to 10% of its then issued and outstanding voting share capital to be held in "escrow". When the financing threshold mentioned in Section 5.1 is achieved the escrowed shares shall then be dilutable to the extent all the other issued shares owned by the Founding Directors of Cardiol are diluted when further financing takes place. Upon the occurrence of the milestone described in Section 3.4.2 hereof the said shares will be released from escrow and shall be free and clear of any and all encumbrances and Meros shall be free to vote the shares on an unrestricted basis.

5.3 The Parties agree that a nominee of Meros shall be appointed to the Board of Directors of Cardiol upon the completion of Cardiol's financing of not less than $1,000,000.00 CAD and that concurrent with that appointment Dr. Afsaneh Lavasanifar will be appointed to Cardiol's Scientific Advisory Board. Any nominee of Meros to be appointed from time to time shall be at the mutual agreement of Meros and the Founding Directors. Cardiol's agreement shall not be unreasonably withheld or delayed.

6. SUBLICENSING

6.1 Right to Sub-license. In the event Cardiol wishes to sub-license any or all of its rights under this Agreement to a third party it will not enter into any Sub-License Agreement with that third party that does not conform with the following provisions of this sub-license agreement:

6.1.1 Section 1 Definitions insofar as they are applicable to a sub-license agreement and Section 2.6 - Grant of Security Interest;

6.1.2 Sections 3.1 and 3.2 - Grant of Rights;

6.1.3 Sections 6.1 and 6.2 - Sub-Licensing;

6.1.4 Section 8 - Records Retention and Review;

6.1.5 Section 10.5 - Compliance with Law;

6.1.6 Section 10.6 - No Debarment;

6.1.7 Section 11 - Confidential Information;

6.1.8 Section 14 regarding Cardiol Indemnity; and

6.1.9 Section 15 - Insurance for Cardiol.

Cardiol shall provide Meros with a copy of any Sub-License Agreement within 14 days of it being fully executed.

6.2 Meros shall be entitled to provide the University of Alberta with a copy of this Agreement or any Sub-License Agreement entered into pursuant to 3.1 and 6.1 above.

7. THIRD PARTY AGREEMENTS

7.1 University of Alberta Agreement. Meros represents and warrants that, to the best of Meros's knowledge, the license agreement dated March 15, 2010 between The Governors of the University of Alberta and Meros, (as such agreement may have been or may be amended, supplemented, or restated from time to time, the "**UofA Agreement**"), remains in full force and effect as of the Effective Date.

8. RECORDS RETENTION; REVIEW

8.1 Cardiol shall maintain at its principal place of business, or such other place as may be most convenient, separate accounts and complete and accurate records of business done pursuant to this Agreement, such accounts and records to be in sufficient detail to enable the Parties to ensure that all proper returns including royalty payments are being made under this Agreement, and Cardiol shall require Meros to keep similar accounts and records.

8.2 Cardiol. shall retain the accounts and records referred to in Section 8.1 above for at least four (4) years after the date upon which they were made and shall permit a duly authorized representative of Meros to inspect such accounts and records during normal business hours of Cardiol, and upon reasonable written notice to Cardiol, at Meros's expense. Meros may exercise its right of inspection only within the four (4) year period that Cardiol is required to maintain such accounts and records, may only exercise such right twice in any four consecutive calendar quarters, and only twice with respect to accounts and records covering any specific period of time. Cardiol shall furnish such reasonable evidence as such representative will deem necessary to verify royalty amounts payable to Meros and will permit such representative to make copies of or extracts from such accounts, records and agreements at Meros's expense. Should such inspection of Cardiol's records lead to the discovery that Cardiol has paid less than 95% of the royalty amounts that should have been paid for such time period, Cardiol agrees to promptly reimburse Meros in full for its documented, out-of-pocket cost of such inspection and to promptly pay any outstanding sums with interest calculated in accordance with Section 9.2. Should such inspection lead to a discovery that Cardiol paid 105% or greater of the royalty amounts that should have been paid for such time period, such overpayment shall be credited against future payments due by Cardiol.

8.3 During the term of this Agreement and thereafter, all information provided to Meros or its representatives pursuant to this Article 8 shall remain confidential and be treated a Confidential Information by Meros, and Meros will not make same available to any other person except as may be required by law.

8.4 Notwithstanding the termination of this Agreement, this Article 8 shall remain in full force and effect until:

8.4.1 all payments required to be made by Cardiol to Meros under this Agreement have been made by Cardiol to Meros, and

8.4.2 any other claim or claims of any nature or kind whatsoever of either Party against the other have been settled.

8.5 Other Parties. Each Party shall include in any agreement with its Affiliates or Third Parties with respect to the Development or commercialization of Project Products and/or Meros Technology terms requiring such party to retain records as required in this Article 8 in order to permit the other Party to inspect such records as required by this Article 8.

9. ROYALTY PAYMENT TERMS

9.1 Payment of Royalties. Cardiol shall make any royalty payments owed to Meros hereunder in arrears, within sixty (60) days after each Royalty Due Date. For greater certainty, the Parties agree that royalties shall accrue on the date payment is due as reflected in the written invoice to the purchaser of the Project Product or the sub-sublicense of the Meros Technology, as applicable. Each royalty payment shall be accompanied by a report (the "**Financial Report**") for each country in the Territory in which sales of Project Products occurred in the calendar quarter covered by such statement, specifying: the Net Sales, if any, in each country's currency; the royalties shall be converted from each country's currency, using the applicable exchange rate to convert from each country's currency to United States dollars and the royalties shall be payable in United States dollars.

9.2 Interest. In the event that any payment due hereunder is not made within 10 days after the due date thereof, interest shall accrue from such due date at a rate equal to one percent (1%) per month, calculated based on the number of days such payments remain unpaid after the date such payments are due.

9.3 Taxes. All royalty payments paid by Cardiol to Meros under this Agreement are exclusive of taxes, and Cardiol shall deduct and remit any applicable withholding taxes (and provide Meros with documentary proof thereof sufficient to allow Meros to claim credit therefor) and shall pay any sales, use, rental, custom, value added, consumption or other taxes, duties, levies, fees or charges that may be assessed in any jurisdiction resulting from or arising under this Agreement. Meros shall collect and remit such taxes, duties, levies, fees or charges as required under applicable Law.

10. COMMERCIALIZATION OF PROJECT PRODUCTS

10.1 Research and Development

10.1.1 The Parties shall, within 150 days from the Commencement Date finalize the Project Plan.

10.1.2 Regulatory Approvals. Cardiol shall use good faith efforts to seek, obtain and maintain, at its sole cost and expense or the expense of an Affiliate or sub-licensee, Regulatory Approvals in relation to the Project Products within the United States, Canada, European Union and such other jurisdictions within the Territory as Cardiol may determine.

10.2 Commercialization. Without limiting any rights of Meros herein or under the Project Plan on and after the Commencement Date, Cardiol shall have control, authority over and responsibility for the Project Plan and Development (with an obligation to consult with the Chief Scientific Officer of Meros) and commercialization activities concerning any and all of the Project Products in the Territory, including without limitation (i) all basic research initiatives, preclinical and clinical development programs; (ii) all activities relating to Development, manufacture and supply of any and all Project Products; (iii) all marketing, promotion, sales, distribution, import and export activities relating to any and all Project Products; and (iv) all activities relating to any regulatory filings, registrations, applications and Regulatory Approvals relating to any of the foregoing, including the holding of such Regulatory Approvals in Cardiol's name. Meros shall use its reasonable commercial efforts to support Cardiol's efforts to carry out the aforesaid commercialization activities.

10.3 Commitment and Right of First Refusal. During the Term, Cardiol will exercise reasonable commercial efforts to jointly work with Meros to Develop and to commercialize any or all of the Project Products in the Territory. Cardiol hereby grants to Meros the right of first refusal to carry out Cardiol's future research and development programs following and in addition to the Project Plan provided that Meros meets Cardiol's requirements and is qualified and competitive as determined by Cardiol in its sole discretion. Cardiol agrees that it will not adjust or change any formulation covered under the Meros Technology unless and until Cardiol has previously consulted with Dr. Afsaneh Lavasanifar and she has provided her direction and opinion.

10.4 Progress Reports. Following completion of the pre-clinical phase of the research being conducted under the Project Plan in addition to the Financial Report, within 60 days after the end of each calendar quarter, Cardiol shall provide Meros with a progress report ("Progress Report") which shall constitute a summary of Cardiol's regulatory and commercialization efforts with respect to the Project Products in the Territory in sufficient detail for Meros to understand what has been done by Cardiol. Cardiol will provide to Meros prompt written notice of the obtaining of any Regulatory Approval in relation to any of the Project Products in the Territory.

10.5 Compliance with Standards and Laws. Each of the Parties agrees to comply with Good Clinical Practice, Good Laboratory Practice, Good Manufacturing Practices, all applicable Law and the industry practices set forth in guidelines issued by the Pharmaceutical Research and Manufacturers of America (PhRMA) in the conduct of all activities pursuant to this Agreement.

10.6 No Debarment. As of the Effective Date, and from thenceforth, neither Party, nor any of its respective Affiliates, has been or will be debarred or is subject or will be subject to debarment and no such party will use in any capacity, in connection with the Development, manufacture or commercialization of a Project Product, any person who has been debarred pursuant to Section 306 of the *Federal Food, Drug, and Cosmetic Act* of the United States of America, or who is the subject of a conviction described in such section. Each Party agrees to inform the other as soon as reasonably practicable following such Party's receipt of knowledge of same, in writing, if it or any person who is performing services hereunder is debarred or is the subject of a conviction described in Section 306, or if any action, suit, claim, investigation or legal or administrative proceeding is pending or, to the best of its knowledge, is threatened, relating to the debarment or conviction of such Party or any person used in any capacity by such Party or any of its respective Affiliates in connection with the Development, manufacture or commercialization of the Project Product.

11. TREATMENT OF CONFIDENTIAL INFORMATION

11.1 Confidential Obligations. Meros and Cardiol each recognize that the other Party's Confidential Information constitutes highly valuable and proprietary confidential information. Meros and Cardiol each agree that it will keep confidential, and will cause its officers, employees, consultants, agents, Affiliates and Sub-Licensees to keep confidential, all Confidential Information of the other Party. Neither Meros, Cardiol nor any of their respective officers, employees, consultants, agents, Affiliates or Sub-Licensees shall use Confidential Information of the other Party for any purpose whatsoever other than exercising any rights granted to it or reserved by the receiving party hereunder. Without limiting the foregoing, each Party may disclose information to the extent such disclosure is reasonably necessary in (i) filing and prosecuting patent applications and maintaining patents which are filed in accordance with the provisions of this Agreement; or (ii) filing, prosecuting or defending litigation in accordance with the provisions of this Agreement; or (iii) complying with applicable Laws or by the requirements of any nationally recognized security exchange, quotation system or over-the-counter market on which such Party has its securities listed or traded; provided, however, that if a Party is required to make any such disclosure of the other Party's Confidential Information, it will give reasonable advance notice to the other Party of such disclosure requirement and will use reasonable efforts to assist such other Party in efforts to secure confidential treatment of such information required to be disclosed.

11.2 Limited Disclosure and Use. Meros and Cardiol each agree that any disclosure by it of the other Party's Confidential Information to any of its Affiliates or Sub-Licensees or any of its or their officers, employees, consultants or agents shall be made only if and to the extent reasonably necessary to carry out its rights and responsibilities under this Agreement, shall be limited to the maximum extent possible consistent with such rights and responsibilities and shall only be made to Third Parties who are bound by written confidentiality obligations to maintain the confidentiality thereof and not to use such Confidential Information except as expressly permitted by this Agreement. Meros and Cardiol each further agree not to disclose or transfer the other Party's Confidential Information to any Third Parties under any circumstance without the prior written approval of the other Party (such approval not to be unreasonably withheld), except as otherwise required by Law or

to any prospective or actual investors, lenders or other financing sources, strategic partners, acquirers or licensees (including Sub-Licensees) who are obligated to keep such information confidential and except as otherwise expressly permitted by this Agreement. Each Party shall take such action, and shall cause its Affiliates or Sub-Licensees to take such action, to preserve the confidentiality of each other's Confidential Information as it would customarily take to preserve the confidentiality of its own Confidential Information, and in no event, shall treat Confidential Information with less than reasonable care. Each Party, upon the request of the other Party, will return or destroy, with such destruction to be certified by an authorized officer of the receiving Party, all the Confidential Information disclosed or transferred to it by the other Party pursuant to this Agreement, including all copies and extracts of documents and all manifestations in whatever form, within forty-five (45) days of the termination or expiration of this Agreement; provided however, that a Party may retain Confidential Information of the other Party relating to any license or right to the Project Product and/or the right to use Meros Technology which survives such termination, and one copy of all other Confidential Information may be retained in inactive archives solely for the purpose of establishing the contents thereof.

11.3 Bankruptcy Procedures. All Confidential Information disclosed by one Party to the other, including all intellectual property rights therein, shall remain the property of the Disclosing Party. In the event that a court or other legal or administrative tribunal, directly or through an appointed master, trustee or receiver, assumes partial or complete control over the assets of a party to this Agreement based on the insolvency or bankruptcy of or any other similar insolvency event with respect to such Party, the bankrupt or insolvent Party shall promptly notify the court or other tribunal (i) that Confidential Information received from the other Party under this Agreement remains the property of the other Party; and (ii) of the confidentiality obligations under this Agreement. In addition, the bankrupt or insolvent party shall, to the extent permitted by Law, take all steps they are able to which are necessary or desirable to maintain the confidentiality of the other Party's Confidential Information and to insure that the court, other tribunal or appointee maintains such information in confidence in accordance with the terms of this Agreement.

11.4 Publicity.

11.4.1 Subject to the terms hereof including, without limitation, Section 11.1, neither Party may publicly disclose the terms or any other matter of fact regarding this Agreement without the prior written consent of the other Party; provided, however, that either Party may make such a disclosure, without the other Party's consent, (i) to the extent required by Law or by the requirements of any nationally recognized securities exchange, quotation system or over-the-counter market on which such Party has its securities listed or traded; (ii) to any prospective or actual investors, lenders or other financing sources, strategic partners, acquirers or licensees (including Sub-Licensees); or (iii) to persons or entities permitted disclosure of Confidential Information pursuant to Section 11.2 hereof but only to the extent and on the same terms and conditions as set forth in Section 11.2. Provided however that the Parties recognize that under the University Agreement the University will have the right, solely for academic purposes, to present at Symposia, professional meetings and to publish in academic journals or other academic publications

accounts of its research relating to Meros Technology and University Improvements, provided that Meros shall have been furnished with and Meros will ensure that Cardiol shall be given copies of the proposed disclosure at least 120 days in advance of the presentation or submission for publication date and Meros and Cardiol shall use this 120 day period to evaluate the proposed disclosures for patentable or confidential content and, if Meros and/or Cardiol determines it is desirable to obtain patent protection with respect to any information contained in the proposed disclosure then Cardiol will co-operate in all reasonable respects in ensuring a patent application is filed in a timely manner. Meros may request an additional 60-day extension for obtaining patent protection. Meros shall identify confidential information in any such disclosures and, where requested by Meros and Cardiol, the University has agreed to promptly remove such Confidential Information from such disclosures prior to submission for publication or presentation. Provided that Meros has ensured that the covenants the University has made to remove any Confidential Information have been enforced, the University shall be free to present and/or publish said disclosures within 120 days after initial disclosure to Meros and Cardiol. Provided nothing herein shall prevent Cardiol from discussing rights granted to it hereunder in order to more effectively carry out the Development referred to herein as a responsibility of Cardiol.

11.4.2 The Parties acknowledge and accept that one or more master's theses or one or more doctoral theses may be generated by students of the University relating to the Meros Technology and University Improvements. Notwithstanding any provision of this Agreement said students shall retain copyright in respect of their master's theses or doctoral theses and publications of theses can only be delayed in accordance with the then applicable policies of University and pursuant to Section 11.4.1 above.

11.5 Use of Name. Except as otherwise expressly provided pursuant to any rights granted under any Agreement, neither Party shall employ or use the name of the other Party in any promotional materials or advertising without the prior express written permission of the other Party as to each such use, except as otherwise previously set forth in a permitted disclosure pursuant to Section 11.4, provided, however, that any packaging for Project Products may reference that such product is manufactured under certain patent rights licensed by Meros exclusively to Cardiol.

12. PROVISIONS CONCERNING THE FILING, PROSECUTION AND MAINTENANCE OF PATENT RIGHTS

12.1 Patent Filing, Prosecution and Maintenance. Following the Commencement Date, the Parties agree that Cardiol, at Cardiol's cost and expense, shall pay for the preparation filing, prosecuting, obtaining and maintain patents for all Meros IP and all Meros Improvements, acting through patent attorneys or agents of mutual choice, and Cardiol, at Cardiol's cost and expense, shall prepare, file, prosecute, obtain and maintain patents for all Cardiol IP, acting through patent attorneys or agents of Cardiol's choice. The Parties further agree that they shall mutually, at Cardiol's cost and expense, cause to be prepared, filed,

prosecuted, obtained and maintained patents for all Joint Improvements, acting through patent attorneys or agents chosen mutually by the Parties.

12.2 Cooperation. The parties agree to cooperate in good faith regarding the preparation, filing, prosecution and maintenance of all patent applications related to the Project Products filed in accordance with the terms hereof, including obtaining and executing necessary powers of attorney and assignments by the named inventors, providing relevant technical reports to each party, as applicable, concerning the invention disclosed in such patent application, and obtaining execution of such other documents which shall be needed in the filing and prosecution of such patent applications. Meros shall update Cardiol regarding the status of patent applications for Joint Improvements on which Meros provided assistance in the patent application. Without limiting the generality of the foregoing, Meros shall keep Cardiol reasonably informed of the status of the filing, prosecution and maintenance of patent applications for Meros IP, Meros Improvements and Joint Improvements, including, without limitation, (i) by providing Cardiol with copies of all material communications received from or filed in patent office(s) with respect to such filing, and (ii) by providing to Cardiol, within a reasonable time prior to taking or failing to take any action that would materially affect the scope or validity of any such filing (including the substantial narrowing, cancellation or abandonment of any claim(s) without retaining the right to pursue such subject matter in a separate application, or the failure to file or perfect the filing of any claim(s) in any country), with prior written notice of such proposed action or inaction so that Cardiol has a reasonable opportunity to review and comment.

12.3 Divisional and Continuation. The Parties agree that Meros and Cardiol will consult and reach agreement on whether or not to pursue additional patent claims regarding the Project Products under the Meros Patent Rights through the filing of one or more divisionals or continuations under Meros Patent Rights. Meros shall direct the drafting of the filings and review such filings in advance with Cardiol and Cardiol shall pay the cost and expense therefor. However, if the Parties do not agree on whether or not to pursue additional claim or claims as described above and Meros wishes to proceed it may proceed but it shall pay the cost and expense therefor.

12.4 Notice of Infringement. If, during the Term, either Party learns after the date hereof of any actual, alleged or threatened infringement by a Third Party of any Meros Patent Rights under this Agreement, such Party shall promptly notify the other Party and shall provide such other Party with available evidence of such infringement.

12.5 Infringement of Meros Patent Rights.

12.5.1 Meros shall have the first right (but not the obligation), at Meros's expense and with legal counsel of its own choice, to bring suit (or take other appropriate legal action) against any actual, alleged or threatened infringement of the Meros Patent Rights owned by Meros. Cardiol shall have the right, at its own expense, to participate in the defense of any such action by Meros using counsel of Cardiol's own choice; provided, however, that under no circumstances shall the foregoing affect the right of Meros described in the first sentence of this Section 12.5.1. If Meros does not file any action or proceeding against such infringement within six

(6) months (or such earlier period in the event that the deadline for action or proceeding is earlier) after the later of (i) Meros's notice to Cardiol under Section 12.4 above, (ii) Cardiol's notice to Meros under Section 12.4 above, or (iii) a written request from Meros to take action with respect to such infringement, then Cardiol shall have the right (but not the obligation), at its expense, to bring suit (or take other appropriate legal action) against such actual, alleged or threatened infringement, with legal counsel of its own choice, but shall not be permitted to settle any such suit without the prior consent of Meros, which consent shall not be unreasonably withheld, conditioned or delayed. Under no circumstances shall Cardiol be entitled to settle any suit in the Territory in respect of Meros Patent Rights owned by Meros without the prior written consent of Meros, which consent shall not be unreasonably withheld, conditioned or delayed. Any damages, monetary awards or other amounts recovered, whether by judgment or settlement, pursuant to any suit, proceeding or other legal action taken under this Section 12.5.1, in respect of the Territory, shall be applied as follows:

(a) First, to reimburse the Parties for their reasonable respective costs and expenses (including reasonable attorneys' fees and costs) incurred in prosecuting such enforcement action; and

(b) Second, any other amounts to Meros as to sixty percent (60%) and Cardiol as to forty percent (40%), on *a pari passe* basis.

12.5.2 As between the Parties, Cardiol shall have the first right (but not the obligation), at Cardiol's expense and with legal counsel of its own choice, to bring suit (or take other appropriate legal action) against any actual, alleged or threatened infringement of the Joint Improvements. Meros shall have the right, at its own expense, to participate in the defense of any such action by Cardiol using counsel of Meros's own choice; provided, however, that under no circumstances shall the foregoing affect the right of Cardiol described in the first sentence of this Section 12.5.2. If Cardiol does not file any action or proceeding against such infringement within six (6) months (or such earlier period in the event that the deadline for action or proceeding is earlier) after the later of (i) Cardiol's notice to Meros under Section 12.4 above, (ii) Meros's notice to Cardiol under Section 12.4 above, or (iii) a written request from Cardiol to take action with respect to such infringement, then Meros shall have the right (but not the obligation), at its own expense, to bring suit (or take other appropriate legal action) against such actual, alleged or threatened infringement, with legal counsel of its own choice, but shall not be permitted to settle any such suit without the prior consent of Cardiol, which consent shall not be unreasonably withheld, conditioned or delayed. Under no circumstances shall either Party be entitled to settle any suit in respect of the Joint Improvements without the prior written consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed. Any damages, monetary awards or other amounts recovered, whether by judgment or settlement, pursuant to any suit, proceeding or other legal action taken under this Section 12.5.2, in respect of the Territory, shall be applied as follows:

(a) First, to reimburse the Parties for their reasonable respective costs and expenses (including reasonable attorneys' fees and costs) incurred in prosecuting such enforcement action; and

(b) Second, any other amounts to Cardiol as to fifty percent (50%) and Meros as to fifty percent (50%), on a *pari passu* basis.

12.5.3 If a Party brings any such action or proceeding hereunder, the other Party agrees to be joined as party plaintiff if necessary to prosecute such action or proceeding, and to give the Party bringing such action or proceeding reasonable assistance and authority to file and prosecute the suit; provided, however, that neither Party shall be required to transfer any right, title or interest in or to any property to the other Party or any Third Party to confer standing on a Party hereunder.

12.6 Covenant Not to Take Adverse Action. Meros hereby covenants and agrees (and, with respect to its Affiliates and Sub-Licensees, represents and warrants) that neither it nor any of its Affiliates or Sub-Licensees shall institute or participate in, or assist any third party to institute or participate in formal proceedings against, or otherwise take any action adverse to Cardiol or any of its Affiliates' or licensees' rights or asserted rights in respect of the Cardiol IP, including without limitation through any interference or similar proceeding, or in connection with any challenge to the ownership, validity or enforceability of the Cardiol IP. Cardiol hereby covenants and agrees (and, with respect to its Affiliates and Sub-Licensees, represents and warrants) that neither it nor any of its Affiliates or Sub-Licensees shall institute or participate in, or assist any third party to institute or participate in formal proceedings against, or otherwise take any action adverse to, Meros. or any of its Affiliates' or licensees' rights or asserted rights in respect of the Meros Technology, including without limitation through any interference or similar proceeding, or in connection with any challenge to the ownership, validity or enforceability of the Meros Technology.

13. REPRESENTATIONS AND WARRANTIES

13.1 Meros Representations. Meros represents and warrants to Cardiol that:

13.1.1 the execution and delivery of this Agreement and the performance of the transactions contemplated hereby have been duly authorized by all appropriate Meros corporate action; and

13.1.2 this Agreement is a legal and valid obligation binding upon Meros and enforceable in accordance with its terms, and the execution, delivery and performance of this Agreement by the Parties does not conflict with any agreement, instrument or understanding to which Meros is a party of or by which it is bound;

13.1.3 Meros either owns or has full right, title and license to use and Develop the Meros Technology as contemplated in the Agreement and to sub-license the right to use and Develop the Meros Technology and to enter into this Agreement;

13.1.4 the Project Products licensed hereunder, including, but not limited to, the Meros **IP** related to Project Products, is sufficient to permit Cardiol to enjoy the rights granted to it and fulfill its obligations hereunder; and

13.1.5 to the best of Meros's knowledge, as of the Effective Date no claim has been filed by a Third Party alleging that any aspect of the Meros Technology or the manner in which it has been Developed by Meros through the Effective Date infringes or misappropriates the patents, trademarks, copyrights or other rights of Third Parties, and Meros has no reason to believe that the filing of any such claim is imminent or, if made, would be valid.

13.2 Cardiol Representations. Cardiol represents and warrants to Meros that:

13.2.1 the execution and delivery of this Agreement and the performance of the transactions contemplated hereby have been duly authorized by all appropriate corporate actions of Cardiol;

13.2.2 this Agreement is a legal and valid obligation binding upon Cardiol and enforceable in accordance with its terms, and the execution, delivery and performance of this Agreement by the Parties does not conflict with any agreement, instrument or understanding to which Cardiol is a party of or by which it is bound; and

13.2.3 All regulatory submissions under Section 10.1.2 shall comply with all standards, requirements and Laws in the jurisdictions in which they are submitted and be performed in a commercially reasonable manner and time.

13.3 No Other Warranties.

13.3.1 Except as expressly set forth in this Article 13 and in Article 7, NEITHER PARTY MAKES ANY REPRESENTATION OR EXTENDS ANY WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED. MEROS EXPRESSLY DISCLAIMS, TO THE FULLEST EXTENT PERMITTED BY LAW, ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY AND NON-INFRINGEMENT. IN PARTICULAR, EXCEPT AS EXPRESSLY SET FORTH IN THIS ARTICLE 13 AND IN ARTICLE 7, CARDIOL ACKNOWLEDGES THAT THE RIGHTS GRANTED HEREIN ARE PROVIDED "AS IS, WHERE IS".

13.3.2 IN NO EVENT SHALL ANY PARTY BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES, INCLUDING DAMAGES FOR LOST PROFITS OR LOST REVENUES REGARDLESS OF WHETHER IT HAS BEEN INFORMED OF THE POSSIBILITY OR LIKELIHOOD OF SUCH DAMAGES OR THE TYPE OF CLAIM, CONTRACT OR TORT (INCLUDING NEGLIGENCE).

14. INDEMNIFICATION

14.1 Cardiol Indemnity. Except for a claim for which Cardiol is entitled to indemnification from Meros under Section 14.2, Cardiol shall indemnify, defend and hold harmless Meros, and their respective directors, officers, employees, stockholders and agents and their respective successors, heirs and assigns (the "Meros Indemnitees") from and against any liability, damage, loss or expense (including reasonable attorneys' legal fees and expenses of litigation) incurred by or imposed upon such Meros Indemnitees, or any of them, in connection with any Third Party claims, suits, actions, demands or judgments, including, without limitation, personal injury and product liability matters in the Field of Use, to the extent arising out of (i) any actions or omissions, after the Commencement Date, caused by Cardiol and its Affiliates in connection with the use, Development, modification, enhancement, improvement of the Meros Technology or the Project Products, or the manufacture, sale, offer for sale or distribution of the Project Products that were caused by gross negligence or willful misconduct on the part of Cardiol or any of its Affiliates in accordance with the rights and license granted by Meros hereunder; (ii) any breach or alleged breach of a representation or warranty of Cardiol hereunder; (iii) any breach or alleged breach of this Agreement by Cardiol or, with respect to any Affiliate, any act or omission that would constitute a breach of this Agreement were such act or omission Cardiol's own; (iv) except for a claim for which Cardiol is entitled to indemnification from Meros under Section 14.2, a claim arising on or following the Commencement Date, that (A) the use in accordance with a Project Product's labeling, (B) the Development, modification, enhancement, improvement of the Meros Technology or the Project Products, in each case, following the Commencement Date, (C) the manufacture of the Project Products by Cardiol themselves or on behalf of Meros, or (D) the sale, offer for sale or distribution of the Project Products by Cardiol in the Territory or any of its Affiliates other than expressly in accordance with this Agreement, constitutes an infringement or a misappropriation of any Third Party rights, or (v) gross negligence or willful misconduct on the part of Cardiol or any of its Affiliates, in each case, as finally adjudicated in a court of competent law, in any such case under this Section 14.1.

14.2 Meros Indemnity. Except for a claim for which Meros is entitled to indemnification from Cardiol under Section 14.1, Meros shall indemnify, defend and hold harmless Cardiol and their respective directors, officers, employees, stockholders and agents and their respective successors, heirs and assigns (the "Cardiol Indemnitees") from and against any liability, damage, loss or expense (including reasonable attorneys' fees and expenses of litigation) incurred by or imposed upon such Cardiol Indemnitees, or any of them, in connection with any Third Party claims, suits, actions, demands or judgments, including, without limitation, personal injury and product liability matters in the Field of Use, to the extent arising out of (i) any actions or omissions of Meros and its Affiliates in connection with the use, Development, modification, enhancement, improvement of the Meros Technology that were caused by gross negligence or willful misconduct on the part of Meros or any of its Affiliates, in each case, as filially adjudicated in a court of competent law, in any such case under this Section 14.2.; (ii) any breach or alleged breach of a representation or warranty of Meros hereunder; (iii) any breach or alleged breach of this Agreement by Meros or, with respect to any Affiliate of Meros, any act or omission that would constitute a breach of this Agreement were such act or omission Meros's own.

14.3 Indemnification Procedures. in the event that a Meros Indemnitee or Cardiol Indemnitee (the "Indemnitees") is seeking indemnification under Section 14.1 or 14.2 above from a Party (the "Indemnitor"), the Indemnitees shall notify the Indemnitor of such claim with respect to such Indemnitee as soon as reasonably practicable after the Indemnitee receives notice of the claim. The Indemnitor (on behalf of itself and such Indemnitee) shall, at its sole cost and expense, have full control of and authority over the defense of the claim (including the right to settle the claim) and the other Party and the Indemnitee shall, at their own expense, cooperate as requested by the Indemnitor in the defense of the claim.

14.4 Indemnification Limitations. In no event shall the Parties be required to pay any amount under Section 14.1 or Section 14.2 above or until the aggregate amount of all losses incurred exceeds $25,000.00, and only up to a maximum amount of $100,000.00 in aggregate.

15. INSURANCE

15.1 Cardiol agrees that no later than the commencement of a clinical trial it will insure itself against product liability with such coverage limits as are reasonable for a development stage biotechnology company. The coverage under such policy of insurance will be broad enough to cover Meros to the same extent it covers Cardiol.

16. TERM AND TERMINATION

16.1 Term; Expiration. The Term shall be the longer of 20 years or for the life of the Meros Patent Rights and any new or related patent rights sub-licensed under this Agreement which support the Project Products, subject to termination of this Agreement in accordance with this Article 16. Without limiting the foregoing, Cardiol's royalty payment obligations under this Agreement will expire on a product-by-product and country-by-country basis upon the expiration of the last to expire of a Valid Claim of the Meros Patent Rights that, but for the rights licensed under this Agreement, would be infringed by the manufacture, Development, use or sale of such product in such country.

16.2 Termination for Breach of Payment. This Agreement and the rights granted herein may be terminated by Meros upon any payment breach by Cardiol except for reasons beyond their reasonable control, effective ninety (90) days after giving written notice to Cardiol of such termination. If such default or breach is cured within the foregoing ninety (90) day period, the notice shall be deemed automatically withdrawn and of no effect.

16.3 Further Termination by Cardiol. Cardiol may terminate this Agreement if Cardiol determines in its sole discretion that the Project Products and Meros Technology are not worthy of Development based on research outcomes or commercial viability.

16.4 Further Termination by Meros. Cardiol shall use reasonable commercial efforts to continue the development of the Meros Technology. Meros may terminate this Agreement if Cardiol ceases all activities relating to the Development and/or commercialization of one or all of Project Products and ceases any and all attempts to raise capital to support the Development and/or commercialization of Project Products.

16.5 Effects of Termination.

16.5.1 Termination by Meros. Upon any termination of this Agreement by Meros hereunder, as of the effective date of such termination, all licenses and sub-licenses granted by Meros to Cardiol under Section 3.1 shall terminate immediately and automatically and Cardiol shall re-sell, transfer and assign the rights to Project Products acquired under Section 3.1 to Meros for one dollar ($1.00). Cardiol shall immediately assign and transfer to Meros, all of Cardiol's right, title and interest in and to all Regulatory Approvals and other submissions to Regulatory Authorities with respect to the Project Products in the Territory.

Termination by Cardiol. Upon any termination of this Agreement by Cardiol hereunder, all licenses granted by Meros to Cardiol, and all sub-licenses granted by Cardiol and its Affiliates hereunder shall terminate immediately and automatically and Cardiol shall transfer the rights to the Meros Technology and Project Products acquired under Section 3.1 to Meros for one dollar ($1.00). Cardiol shall immediately assign and transfer to Meros, all of Cardiol's right, title and interest in and to all Regulatory Approvals and other submissions to Regulatory Authorities with respect to the Project Products in the Territory. Notwithstanding the foregoing, Cardiol and its Affiliates shall have the right, for six (6) months or such longer time period on which the Parties may mutually agree in writing, to sell or otherwise dispose of all inventories of Product Projects on hand as of the effective date of such termination in accordance with the terms of this Agreement, with royalties to be paid to Meros on all Net Sales of such Project Products as provided for in this Agreement.

16.5.2 Termination by Either Party. Upon any termination of this Agreement, each Party shall immediately transfer to the other, or destroy and certify such destruction, all the Confidential Information disclosed, transferred to it, or generated by or on behalf of the Disclosing Party in the context of this Agreement, including all copies and extracts of documents and all manifestations in whatever form, and all other data, if any, regarding clinical data, materials and information (including, without limitation, all sales and marketing materials) in the possession of the Receiving Party or one of its Affiliates relating to the Project Products or the Meros Technology, provided however, that a Party may retain one copy of all Confidential Information in inactive archives solely for the purpose of establishing the contents thereof.

16.6 Remedies. Except as otherwise expressly set forth in this Agreement, the termination provisions of this Article 16 are in addition to any other relief and remedies available to either Party at law.

16.7 Surviving Provisions. Notwithstanding any provision herein to the contrary, (i) the provisions of Article 1 - Definition, (ii) the rights and obligations of the Parties set forth in Articles 2 —Property Rights In and To the Technology, 4 — Royalties, 8 — Records Retention and Review, 11 -

Treatment of Confidential Information, 13 — Representations and Warranties, 14 — Indemnification, 16 — Term and Termination, 17 — Disputes, 18 — Miscellaneous and this Section, and (iii) any rights or obligations otherwise accrued hereunder (including any accrued payment obligations), shall survive the expiration or termination of this Agreement for any reason. In addition, the rights and obligations of the parties under Section 12.6 shall survive the termination of this Agreement.

17. DISPUTES

17.1 Dispute Resolution Procedures. Any dispute, controversy or claim between the parties relating to the construction and/or interpretation of this Agreement (a "**Dispute**") shall be resolved in accordance with the provisions, of this Article 17. Notwithstanding anything in this Agreement to the contrary, nothing contained in this Agreement shall limit a Party's ability to seek and obtain equitable relief from a court of competent jurisdiction.

17.2 First Level. All Disputes shall be referred to a senior representative of each Party for review, consideration and resolution. If such individuals are unable to resolve the Dispute within thirty (30) days after referral of the matter to them, the Parties shall submit the Dispute for resolution pursuant to Section 17.3.

17.3 Arbitration.

17.3.1 If any Dispute is not resolved pursuant to Section 17.2, any Party may, within thirty (30) days after the initiation of the procedures set forth in Section 17.2, refer such Dispute to arbitration by serving written notice of its intention to arbitrate the Dispute to the other Party.

17.3.2 Arbitration of any Dispute shall be conducted pursuant to the Rules and regulations under the *Arbitration Act* of Alberta with one Arbitrator appointed.

17.3.3 All arbitrations shall take place in Edmonton, Alberta in the English language.

17.3.4 Any decision of the Arbitrator shall be final and binding on the Parties. The costs and expenses of the arbitration shall be paid as the Arbitrator determines. The Party to whom any amount is owed as a result of an award of the arbitrator shall be entitled to payment within thirty (30) days of the date of award.

17.3.5 Each of the Parties agrees to cooperate promptly and fully with the other Party with respect to all aspects of arbitration, including the appointment of the arbitrator and compliance with any requests or orders of the Arbitrator.

17.3.6 During the arbitration proceeding, the Parties shall continue the performance of their respective obligations hereunder in the ordinary course.

18. MISCELLANEOUS

18.1 Notification. All notices, requests and other communications hereunder shall be in writing, shall be addressed to the receiving party's address set forth below or to such other address

as a party may designate by notice hereunder, and shall be either (i) delivered by hand, (ii) made by facsimile transmission (to be followed with written fax confirmation), (iii) sent by private courier service providing evidence of receipt, (iv) sent by registered or certified mail, return receipt requested, postage prepaid, or (v) sent by email. The addresses and other contact information for the parties are as follows:

If to Meros:	Meros Polymers Inc. c/o 2 - 142F Katz Group Centre University of Alberta Edmonton, Alberta T6G 2N8 Attention: Dr. Afsaneh Lavasanifar Fax: ******* Email: *******
With a copy to:	Parlee McLaws LLP Barristers and Solicitors 1700 Enbridge Centre, 10175 — 101 Street NW. Edmonton, Alberta T5J OH3 Attention: Bruce D. Hirsche Fax: ******* Email: *******
If to Cardiol:	Cardiol Therapeutics Inc. 2275 Upper Middle Road East Suite 101 Oakville, Ontario, L6H 0C3 Attention: David Elsley Email: *******

All notices, requests and other communications hereunder shall be deemed to have been given either (i) if by hand, at the time of the delivery thereof to the receiving party at the address of such party set forth above, (ii) if made by email or facsimile transmission, at the time that receipt thereof has been acknowledged by electronic confirmation or otherwise, (iii) if sent by private courier, on the third (3") business day following the day such notice is delivered to the courier service, or (iv) if sent by registered or certified mail, on the fifth (5th) business day following the day such mailing is made.

18.2 Language. This Agreement has been prepared in the English language and the English language shall control its interpretation. The Parties hereto confirm that they have agreed that this Agreement and all documents relating hereto be drafted in the English language only.

18.3 Governing Law. This Agreement will be construed, interpreted and applied in accordance with the federal laws of Canada or the laws of the Province of Alberta, as applicable, without regard to its conflict of law principles or rules. Subject to Article 17, any Dispute arising out of or related to this Agreement or the transactions contemplated hereby shall be heard exclusively in a Court of competent jurisdiction located in Edmonton, Alberta.

18.4 Limitations. Except as expressly set forth elsewhere in this Agreement, neither Party grants to the other Party any right or license to any of its intellectual property. All rights not expressly granted are reserved to their owners.

18.5 Entire Agreement. This Agreement constitutes the entire agreement between the Parties and their Affiliates with respect to the subject matter hereof and supersedes all prior representations, understandings and agreements between the Parties and/or their Affiliates with respect to the subject matter hereof including, without limitation, the Interim Agreement. No modification to this Agreement shall be effective unless in writing with specific reference to this Agreement and signed by the Parties.

18.6 Waiver. The terms or conditions of this Agreement may be waived only by a written instrument executed by the Party waiving compliance. The failure of either Party at any time or times to require performance of any provision hereof shall in no manner affect its rights at a later time to enforce the same. No waiver by either Party of any condition or term shall be deemed as a continuing waiver of such condition or term or of another condition or term.

18.7 Headings. Section and subsection headings are inserted for convenience of reference only and do not form part of this Agreement.

18.8 Assignment. Except as otherwise provided herein, neither this Agreement nor any right or obligation hereunder may be assigned, delegated or otherwise transferred, in whole or part, by either Party without the prior, express written consent of the other Party (not to be unreasonably withheld or delayed). Each of Meros and Cardiol may, with the written consent of the other Party, assign, delegate or transfer this Agreement or any right or obligation hereunder, in whole or in part to any of its Affiliates or to an acquirer of all or substantially all of its business and assets. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment in violation of this Section 18.8 shall be void. The terms and conditions of this Agreement shall be binding upon and inure to the benefit of the permitted successors and assigns of the parties.

18.9 Force Majeure. Neither Party shall be liable for failure of or delay in performing obligations set forth in this Agreement, including, without limitation, Section 18.13, and neither shall be deemed in breach of its obligations hereunder, if such failure or delay is due to natural disasters or any causes beyond the reasonable control of such Party. In event of such force majeure, the Party affected thereby shall use reasonable efforts to cure or overcome the same and resume performance of its obligations hereunder.

18.10 Construction. The Parties hereto acknowledge and agree that: (i) each Party and its respective counsel have reviewed and negotiated the terms and provisions of this Agreement and have contributed to its revision in connection with the agreement by the Parties of the execution version hereof; (ii) the rule of construction to the effect that any ambiguities are resolved against the drafting Party shall be employed in the interpretation of this Agreement; and (iii) the terms and provisions of this Agreement shall be construed fairly as to each Party hereto and not in favor of or against either Party, regardless of which Party was generally responsible for the preparation of this Agreement.

18.11 Severability. If any provision(s) of this Agreement are or become invalid, are ruled illegal by any court of competent jurisdiction or are deemed unenforceable under the current applicable Law from time to time in effect during the Term hereof, it is the intention of the Parties that the remainder of this Agreement shall not be affected thereby provided that a Party's rights under this Agreement are not materially affected. The Parties hereto covenant and agree to renegotiate any such term, covenant or application thereof in good faith in order to provide a reasonably acceptable alternative to the term, covenant or condition of this Agreement or the application thereof that is invalid, illegal or unenforceable, it being the intent of the Parties that the basic purposes of this Agreement are to be effectuated.

18.12 Status. Nothing in this Agreement is intended or shall be deemed to constitute a partnership, agency, or employer-employee relationship between the Parties.

18.13 Further Assurances. Each Party agrees to execute, acknowledge and deliver such further instructions, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

18.14 Counterparts. This Agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

18.15 Currency. Unless otherwise specified, all dollar amounts in this Agreement refer to Canadian currency.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representative in originals this 20th day of January, 2017, effective as of the Effective Date.

CARDIOL THERAPEUTICS INC.	**MEROS POLYMERS INC.**
Per: /s/David Elsley	Per: /s/Afsaneh Lavasanifar
Name: David Elsley	Name: Dr. Afsaneh Lavasanifar
Title: President	Title: Chief Scientific Officer

Exhibit 4.4

Certain identified information has been excluded from the exhibit pursuant to Item 601(a)(6) of Regulation S-K due to personal privacy concerns. Redacted information is indicated by: [***]

EXCLUSIVE MASTER SERVICES AGREEMENT

This MASTER SERVICES AGREEMENT (the "Agreement") is entered into on April 17, 2018 and is effective as of June 12th, 2017 (the **"Effective Date")**

By and between,

Dalton Chemical Laboratories, Inc. o/a Dalton Pharma Services, a corporation incorporated under the laws of the Province of Ontario, Canada whose principal operations are located at: 349 Wildcat Road, Toronto, ON, M3J 253, Canada together with its subsidiaries and affiliates (as defined below), (hereinafter referred to as **"CONTRACTOR")**

and

Cardiol Therapeutics Inc., a corporation incorporated under the laws of Ontario whose principal operations are located at: 2275 Upper Middle Road East, Suite 101, Oakville, ON, L6H 0C3, Canada, together with its subsidiaries and affiliates, (hereinafter referred to as **"COMPANY")**

COMPANY and CONTRACTOR are hereinafter referred to individually as **"Party"** and collectively as **"Parties"**

WHEREAS COMPANY is a healthcare company involved in the research, development, sales, and marketing of therapies for the treatment of human diseases; and

WHEREAS CONTRACTOR is a leading contract services company with expertise in pharmaceutical discovery, development, formulation, synthesis, manufacturing, filling, analysis and related services (the **"Services");** and

WHEREAS, the CONTRACTOR has agreed to provide certain Services to COMPANY on the terms and conditions set out in this Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1.0 Definitions

a) **"Agreement"** shall mean this Master Services Agreement (MSA) with its Appendices and Work Orders, including all documents (as amended from time to time between the Parties).

b) **"API"** means a molecule as defined in **Appendix A.**

c) **"Appendix"** means an appendix to this Agreement and each appendix will be subject to the terms and conditions of this Agreement unless scope specific terms and conditions are outlined therein.

d) **"Affiliate"** shall mean with respect to a Party or a Third Party, any individual, corporation, company, firm, limited liability company, partnership, trust, joint venture or other entity which Controls, is Controlled by, or is under common Control with such Party or Third Party or entity. **"Control"** means the ownership, directly or indirectly, of more than fifty percent (50%) of the

issued share capital or the legal power to direct or cause the direction of the general management and policies of the Party In question.

e) **"cGMP Product"** shall mean all Product which is defined in individual Purchase Orders, Work Order(s) and/or this Agreement to be manufactured in accordance with cGMP.

f) **"Company's Property" is** defined in Section 4.1.

g) **"Day(s)"** shall mean calendar days, unless otherwise expressly stated in this Agreement.

h) **"Development Work"** means R&D work (typically research and exploratory in nature) as defined in COMPANY-approved Work Orders and includes unvalidated processes or test methods.

i) **"Effective Date"** means the effective date of this Agreement.

j) **"Field" means the API,** intermediates or derivatives thereof, compositions comprising any of the foregoing (alone or in combination(s)), manufacturing, developing processes for manufacturing and arty and all uses of any of the forgoing.

k) **"Manufacturing Costs"** shall mean all costs required to reproduce and release cGMP Product.

I) **"Product"** shall be any entity or composition of matter in the Field as defined in Section 2.2.

m) **"Project'** means a project with the characteristics specified in Section 2.2.

n) **"Purchase Order"** shall mean any document governed by this Agreement specifying the Project, Product and/or Work Product to be conducted and delivered.

o) **"Quality Agreement"** shall mean a separate document that defines both specific quality parameters for a Project or Product and which party is responsible for the execution of those parameters and is signed by both Parties.

p) **"Services"** means any services provided by the CONTRACTOR relating to API and as may be further described in a Work Order, and shall include manufacturing API, intermediates or derivatives thereof, Products comprising API, intermediates or derivatives thereof and developing processes for manufacturing any of the foregoing.

q) **"Specification(s)"** shall mean the mutually agreed upon specifications, instructions, and processes with respect to the Project and defined in the relevant Work Order.

r) **"Territory"** shall mean the world.

s) **"Third Party"** shall mean any person or entity other than the CONTRACTOR, COMPANY and their respective Affiliates.

t) **"Validated Manufacturing Process"** shall mean steps or processes with established scientific evidence that a process is capable of delivering consistent product quality and is designated as "validated" in a Work Order.

u) **"Work Order"** shall mean any document governed by this Agreement specifying the work and Services to be fulfilled under this Agreement. Work Order(s) shall be approved in writing and signed by both Parties.

v) **"Work Order Changes"** shall mean mutually agreed upon amendments to the Work Order.

w) **"Work Product"** means a thing, document, product or service as defined in a Work Order for a Project and may relate to or include Services performed, such as Development Work or batch manufacture and includes all deliverables, Product and the output or results of Development Work.

2. PERFORMANCE OF SERVICES

2.1. CONTRACTOR shall provide Services within and pertaining to the Field exclusively to COMPANY. CONTRACTOR shall not provide Services or Product or Work Product or rights to any Intellectual Property in or pertaining to the Field to any third party nor commercialize same directly or indirectly itself. In consideration of this covenant of exclusivity, COMPANY shall allot and issue shares in the COMPANY to CONTRACTOR, as indicated in **Appendix B,** hereto.

2.2. The Services shall be undertaken on a project basis for development projects and commercial activities shall be undertaken on a Product basis. In respect of each project (a **"Project")** or product (a **"Product")**, CONTRACTOR and COMPANY shall agree in writing upon objective(s), scope, price, specifications, deliverables Work Product, milestones and timelines for the Services. Each Project shall be described in Work Order attached to this Agreement. For greater certainty it is agreed that CONTRACTOR shall undertake the work described in one or more Work Orders added to this Agreement and agrees that the defined deliverables will meet the agreed level of quality, as set forth in this Agreement and the most current executed Quality Agreement, including the Work Orders. CONTRACTOR will perform the Services in a professional, competent and timely manner, in accordance with the terms and conditions of this Agreement and applicable laws, rules and regulations. In the event of a conflict between the provisions of a Work Order and the provisions of this Agreement, the provisions of this Agreement will prevail unless expressly stated otherwise in the Work Order, signed by the Parties.

2.3. This Agreement shall remain in force from the Effective Date unless terminated by COMPANY pursuant to Section 7. To the extent that COMPANY requires Services (including the manufacture of a Product, as defined in Work Order with respect to a Project, approved for sale to the public), CONTRACTOR shall be the exclusive provider of same on the condition that CONTRACTOR has the capabilities to so provide at no more than fair market value and any negotiated discounts under requisite terms and conditions in compliance with applicable laws. The Parties acknowledge that industry practice or certain jurisdictions or government authorities may require that COMPANY obtain the Services from another entity or from more than one entity (for example for regulatory approval, to ensure commercial supply of a Product to the public, legal procurement requirements, or to otherwise comply with applicable laws), in which case COMPANY is free to obtain the Services from another entity but to the extent possible CONTRACTOR shall be the preferred provider of said Services.

2.4. In consideration of the performance of the Services with respect to this MSA and any individual Project, COMPANY will pay CONTRACTOR the amount specified in the Work Order with respect to such Project within the time period specified or pursuant to the principles set out in **Appendix B** for "Consideration for Services". Any expenses, individually or collectively, exceeding this amount by more than $1,000 must be mutually agreed upon in writing by the Parties prior to such expenses being incurred, and documented In a written Work Order. All prices to be indicated in one or more Work Orders will be in **Canadian Dollars (CDN),** unless otherwise specified, and be exclusive of all applicable taxes. Changes in scope for initiated projects will be captured in a Work Order revisions or additional Work Orders and will reflect the agreed upon scope of services and pricing.

2.5. CONTRACTOR shall not subcontract any of the Services hereunder without the prior express written permission of COMPANY. For any Services hereunder that are subcontracted,

CONTRACTOR will be responsible for the Services in the same manner as if CONTRACTOR were providing the Services directly (i.e., not subcontracting the Services), except in cases where COMPANY selects the subcontracted service provider itself or the services must be subcontracted based on capability different from originally quoted. In such cases any additional vendor qualification costs shall be billed to the COMPANY, or COMPANY shall take the financial responsibility for any errors or deficiencies of the COMPANY-selected subcontractor.

2.6. CONTRACTOR will arrange for shipment of Product to a destination specified by COMPANY at COMPANY's request using a mutually agreed designated carrier and shipment guidelines/protocol provided by COMPANY. Delivery of Products shall be on terms equivalent to EXW (Incoterms (2010)) and all carrier expenses or shipping related expenses (such as duty, taxes or customs fees) shall be the responsibility of COMPANY.

2.7. Upon expiration of any raw materials, API or other COMPANY materials or Product, CONTRACTOR shall notify COMPANY of such expiration and COMPANY shall determine if the expired matter shall be disposed of by CONTRACTOR, retested by CONTRACTOR or returned to COMPANY at COMPANY's cost as detailed in a Work Order. Any raw materials, API, components or other materials purchased by CONTRACTOR exclusively for use in COMPANY Project that are not paid for by COMPANY shall be invoiced at cost plus 15% to COMPANY upon expiration, in addition to any applicable disposal fees.

2.8. Storage fees shall apply to all Product, raw materials, API, Components, equipment or other COMPANY material that is stored at CONTRACTOR after 30 days with no further work-scope signed for their future scheduled use. Such fees will be as detailed in a written Work Order and will be at COMPANY's cost.

2.9. Dispensing fees shall apply to requests by COMPANY for CONTRACTOR to dispense any COMPANY Product or materials. Such fees will be as detailed in a written Work Order and will be at COMPANY's cost.

3. PROJECT LIAISON

3.1. The CONTRACTOR and COMPANY will each designate a liaison to facilitate communication. Each Party may change its liaison at any time by written notice to the other Party. The CONTRACTOR agrees to meet periodically at the reasonable request of COMPANY to hold informal meetings on the progress of the Services with respect to Projects. If the frequency or duration of meetings exceeds a reasonable amount upon discussion with COMPANY, upon prior written notice to COMPANY, CONTRACTOR may charge COMPANY for additional time requirements to meet these requirements. COMPANY may visit the CONTRACTOR and its facilities with reasonable notice and agreement with CONTRACTOR during business hours to: (a) observe the progress of the Services, (b) inspect the work being done and materials being used, and (c) consult with CONTRACTOR's personnel concerning the Services. COMPANY right to request audit to be per the terms of the most current executed Quality Agreement. Any visits to CONTRACTOR facilities by additional third parties at COMPANY request, must be subject to confidentiality terms and may be subject to additional fees. The CONTRACTOR will provide safe and proper facilities for said representatives of COMPANY to accomplish any and all of the foregoing.

4. CONTRACTOR'S RESPONSIBILITIES WITH RESPECT TO COMPANY'S PROPERTY

4.1. The CONTRACTOR agrees that property, including but not limited to Products, formulated Products, related equipment and/or materials, and any other materials or information (including Confidential Information as hereinafter defined): (i) provided by COMPANY or (ii) prepared for COMPANY during the course of the provision of Services, including any and all Work Product and the Intellectual property rights therein, or (iii) developed by either party in or pertaining to the Field (collectively "COMPANY's Property") are owned by COMPANY.

4.2. The CONTRACTOR will:

i. provide secure locations for storage of COMPANY's Property;

ii. abide by instructions provided by COMPANY for use of the COMPANY'S Property; and

iii. provide COMPANY with prompt notification of adverse events, if any, associated with COMPANY's Property.

4.3. The CONTRACTOR shall use COMPANY's Property only to perform the Services and shall use any Product solely in accordance with the provision of the Services outlined in the Work Order with respect to the relevant Project, or as otherwise Instructed in writing by COMPANY.

4.4. The CONTRACTOR shall receive written approval from COMPANY prior to the disposal or relocation of any COMPANY Property. Any fees associated with the disposal or removal of COMPANY Property shall be paid by the COMPANY and documented in a Work Order.

5. PRODUCT WARRANTY OBLIGATIONS

5.1. CONTRACTOR hereby warrants to COMPANY as follows with respect to each Product (as defined in Work Orders with respect to a Project) supplied hereunder and each Work Product:

(i) Validated Process or Validated Tests — Product shall conform to the mutually agreed upon Specification(s) with respect to the Project as defined in the relevant Work Order and its amendments and subject to the terms in Sections 5.2, 5.3 and 5.4. For clarity, it is a material breach of warranty if a Validated Process is demonstrated to cause a Product to be out of Specification. Any deficiencies in the Product resulting from CONTRACTOR's compliance with the COMPANY's instructions, specifications and processes shall be the responsibility of COMPANY. The COMPANY acknowledges and agrees that should the Product meet Specifications and so long as CONTRACTOR performs the Services substantially in accordance with the Work Order ("substantially" means that there may be minor deviations that cannot be demonstrated to have caused the Product to be out of the Specifications for the Product), this Agreement, the applicable Quality Agreement and all applicable laws, regulatory and governmental requirements mutually agreed by the Parties, that COMPANY is obligated to pay for the Services performed;

(ii) Conformity with Laws — Each Product and Work Product conforms to applicable laws, regulatory and governmental requirements;

(iii) Free from Defects — Each Product and Work Product is free from any defects in workmanship or materials. In the case of materials, CONTRACTOR shall verify that all materials comply with the applicable Specifications prior to use; and

(iv) Industry Standards — Each Product and Work Product conforms to generally accepted industry standards.

5.2. Unvalidated Processes or Test Methods — CONTRACTOR does not warrant that Product shall be within specification for unvalidated processes or tests. COMPANY acknowledges and agrees that should the (unvalidated) Product fail to meet Specifications, but so long as CONTRACTOR performs the Services substantially in accordance with the Work Order ("substantially" means that there are minor deviations that cannot be demonstrated to have caused the Product to be out of the Specifications for the Product), this Agreement, the applicable Quality Agreement and all applicable laws, regulatory and governmental requirements mutually agreed by the Parties, that COMPANY is obligated to pay for the Services performed.

For processes or Projects not developed at CONTRACTOR's premises, COMPANY must provide all available development and validation reports prior to transfer for CONTRACTOR's review. If upon CONTRACTOR's review or upon execution of the provided process, the provided information is not deemed to be sufficient to reliably support the process as provided, CONTRACTOR reserves the right to require further development be performed at COMPANY's expense as mutually agreed by both parties or that all activities be conducted at COMPANY's risk, requiring full payment for Services irrespective of outcome. CONTRACTOR does not assume responsibility for yields or meeting provided Specifications for newly transferred Projects.

Performance of non-cGMP activities shall be defined in detail in the Work Order, but are not subject to the terms of a Quality Agreement. Non-GMP materials cannot be defined as suitable for human use nor can they be documented by CONTRACTOR as such. Non-cGMP materials are produced by methods agreed to by both parties but may not necessarily follow cGMP procedures. CONTRACTOR cannot assure sterility of materials produced in non-cGMP environment/methods and therefore cannot define the materials as sterile in any documentation.

5.3. COMPANY may accept or reject any and all Products that are In material breach of the warranties set out in Sections 5.1 and 5.2 and hold CONTRACTOR liable for all replacement cost of defective Product (excluding API cost) plus reasonable incidental transportation (unless COMPANY has requested shipment under quarantine prior to release testing results being available. In such cases CONTRACTOR shall not be responsible for reasonable incidental transportation costs). In any event, there should be no claims against CONTRACTOR for any amount greater than the contract value for the specific scope of work.

5.3.1 In the event that COMPANY shall reject any or all of the Products delivered by CONTRACTOR under this Agreement, COMPANY shall specify in writing the reason or reasons for such rejection **("Rejection Notice")** within 30 days after the COMPANY receives release test results for the Product (Including but not limited to initial Products) **("Notice Period").** If the CONTRACTOR does not receive the Rejection Notice during the Notice Period, the Products shall be deemed accepted by COMPANY.

5.3.2 Within fifteen (15) business days of receiving a Rejection Notice, CONTRACTOR shall respond stating whether (i) it accepts the rejection or (ii) it disputes the rejection, in which case the Parties shall, after good faith negotiation as to whether the rejection is justified, refer such dispute to a mutually acceptable independent third party with the appropriate expertise to assess the conformity or non-conformity of the rejected Product(s) to Specifications and the applicable Quality Agreement. Such independent third party shall be qualified and shall also have the methods validated/verified prior to use. The independent third party shall test the applicable Product(s) and shall determine whether such Product(s) met or did not meet the applicable Specifications and/or shall review the relevant batch records and other relevant documentation to determine whether such Product was processed In accordance with the applicable Quality Agreement and shall also make a determination as to whether any failure was caused by defective, adulterated or misbranded API or other Material (including, but not limited to failure of API or other Materials to meet applicable Specifications or to have been manufactured in accordance with cGMP) or was caused during shipment to COMPANY or COMPANY's designee. The Parties agree that such third party's determination shall be final and binding upon the Parties. The Party against whom the independent third party rules shall bear the costs of testing and review by such independent third party. If such third party determines that COMPANY's rejection of Product was incorrect, COMPANY shall pay for both the initially rejected Product and any replacement produced at COMPANY's request.

In the event that COMPANY rightfully rejects a Product after a Validated Manufacturing Process has been demonstrated to cause the material breach of warranty, COMPANY shall have, in its sole discretion, the right to elect either replacement of the rejected portion of the Product batch as soon as possible at no further cost to COMPANY (excluding API cost), or to receive a refund of a pro rata portion of the amount paid for Manufacturing Costs by COMPANY with respect to such Product based on the percentage of such Product that is unusable. The remedy under the foregoing sentence shall be COMPANY's sole remedy for failure of Product(s) to meet Specifications or to have been processed in accordance with the Quality Agreement and the other terms of this Agreement.

In the event that CONTRACTOR fails to remedy, or acknowledges an inability to remedy the breach of the warranties identified by COMPANY, COMPANY shall be entitled to terminate this Agreement in accordance with Section 7.

5.4. Development Work carried out by CONTRACTOR shall be paid in full for the scope of work defined in a Work Order upon completion irrespective of outcome unless a negative outcome is the result of CONTRACTOR'S gross negligence or willful misconduct or failure to substantially comply with the Work Order and Its amendments (if applicable). In such case, CONTRACTOR shall forfeit any portion of fees relating to the Project affected by such grossly negligent acts or willful misconduct or failure to substantially comply with a Work Order and its amendments. Development work is not guaranteed to be successful. If the defined scope of development work is conducted by CONTRACTOR and it is determined that additional work is required to achieve the defined objective, CONTRACTOR shall provide COMPANY with a proposal outlining the intended additional activities and pricing for COMPANY agreement in a Work Order prior to proceeding with additional work.

5.5. In the event that CONTRACTOR is in material breach of the warranties set out in Sections 5.1 and 5.2, and such breach has not been remedied in accordance with Sections 5.3 or 5.4 or

CONTRACTOR acknowledges an inability to meet such warranties, CONTRACTOR shall, at the discretion of COMPANY, release to COMPANY, any requested raw materials (at CONTRACTOR cost if not already paid for by COMPANY) or work-in-progress so that COMPANY may complete the manufacture of the Product at an alternate site of its choice. COMPANY shall not be charged (or will be reimbursed if already paid) for any Services CONTRACTOR provided resulting in such breach subject to the terms outlined in Sections 5.1, 5.2, 5.3 and 5.4.

5.6. In the event that COMPANY exercises its rights under Section 5.3 or 5.5, CONTRACTOR shall provide all reasonable assistance to COMPANY.

5.7. The CONTRACTOR further warrants to the COMPANY that CONTRACTOR has not, nor has any of its employees, agents, or contractors who may provide Services under this Agreement, been (i) debarred or proposed to be debarred under, or convicted of a crime for which a person or entity can be debarred under, Section 306(a) or 306(b) of the United States *Generic Drug Enforcement Act of 1992* or under 42 U.S.C. Section 1320a-7 or (ii) sanctioned by, suspended, excluded, or otherwise deemed ineligible to participate in any federal health care program including Medicare and Medicaid, or any other federal procurement or non-procurement programs. CONTRACTOR further warrants that should CONTRACTOR or any of its employees, agents or contractors be debarred, investigated for debarment, convicted or sanctioned under Section 306(a) or 306(b) as described above, CONTRACTOR shall immediately notify COMPANY.

6. QUALITY

6.1. If a Project will be subject to cGMP regulations or U.S. FDA, Health Canada, ICH, SCC, EMEA or other such regulations or guidelines, these requirements will be outlined in a separate Quality Agreement to outline the roles and responsibilities for such regulatory compliance, prior to the initiation of cGMP work. Quality Agreement shall apply to cGMP activities only.

6.2. COMPANY may elect to qualify CONTRACTOR, which from time to time could require on-site review activities. COMPANY will schedule, with reasonable prior notice, such activities in consultation with CONTRACTOR so that the necessary resources are made available. Such qualification assumes a two person, two day audit per year. Additional audits or qualifications may be subject to additional fees based on duration or frequency and will be mutually agreed by the Parties. COMPANY may also require additional audits or inspections from regulatory bodies which will be subject to additional fees if they exceed one regulatory body audit annually. The
standards to which the audit is performed will reflect the current stage of development and the quality systems applicable therein. For non-cGMP projects, it is assumed that no regulatory audits shall apply.

6.3. COMPANY shall provide CONTRACTOR with reasonable prior notice to any regulatory filing or product related activity that may result in on-site review activities, or CONTRACTOR may refuse such review. The Parties shall discuss Product status relative to pending review activities including scheduling of review activities.

6.4. CONTRACTOR shall be responsible for maintaining, at its expense, facility or other licenses or permits, and regulatory (EMA, U.S. FDA and TGA) and government approvals necessary for the performance of Services. Should COMPANY define new regulations, requirements or markets, not originally defined above CONTRACTOR shall perform a gap analysis of its current practices,

facilities etc. against any new requirements chosen by COMPANY or applicable regulator with respect to COMPANY's Product(s). COMPANY and CONTRACTOR shall discuss and mutually agree to any capital or process/system costs that arise as a result of implementing such changes and which Party shall bear such costs. Should the cost of maintaining licenses or permits and regulatory and government approvals applicable to COMPANY projects or scopes of work increase, the Parties shall negotiate responsibility for these costs in good faith. These changes shall not be reasonably withheld if requested changes are commercially reasonable for both Parties.

7. TERMINATION

7.1. COMPANY may, upon thirty (30) days' written notice to CONTRACTOR, terminate this Agreement at its sole discretion. Unless otherwise agreed to, upon termination of this Agreement by COMPANY, CONTRACTOR will be reimbursed for the total estimated price with respect to any Project activities that are completed or partially completed as well as any non-cancellable orders as of the date of notice of the termination. Notwithstanding the foregoing, CONTRACTOR shall not be reimbursed for any completed or partially completed Projects that are in material breach of Sections 5.1 and 5.2. In addition, allocation of any additional costs to CONTRACTOR related to capacity reservation shall be mutually agreed upon by both parties. COMPANY shall also be entitled to terminate one or more Projects without terminating the Agreement (a **"Partial Termination"**) in which case CONTRACTOR will be reimbursed for the total estimated price with respect to any Project activities completed or partially completed provided that such Project is not in breach of Sections 5.1. and 5.2 as of the date of notice of the Partial Termination. Upon completion of this Agreement or its termination, the CONTRACTOR will return, or arrange for return, to COMPANY, within 30 days, all COMPANY Property, all documentation (other than one copy of the documentation for regulatory or archival purposes provided that such documentation shall remain subject to CONTRACTOR's confidentiality obligations to Company), samples (defined as including any material derived from a test system for examination or analysis including, but not limited to, preparations, specimens, etc.), and/or supplies generated by the CONTRACTOR or furnished by COMPANY and given to the CONTRACTOR. However, at COMPANY's option, COMPANY may, with written instruction, direct the CONTRACTOR to dispose of any Property instead of return Property to COMPANY, such destruction to be certified in writing by the CONTRACTOR. Any order to destroy any Company Property must be made in writing by COMPANY and CONTRACTOR shall not proceed with disposal of any COMPANY Property until such written notice is received. In the event of a Partial Termination the obligation to return or to arrange for return of COMPANY Property or Samples, shall be interpreted in relation to the relevant Project or Projects only. COMPANY shall pay CONTRACTOR all disposal or shipping charges, as selected by COMPANY, as related to the termination. This may Include, but is not limited to, items such as equipment, materials, consumables, samples or product.

7.2. Upon termination by COMPANY, CONTRACTOR shall return, or arrange for return, to COMPANY, within thirty (30) days of termination, all property of COMPANY provided to the CONTRACTOR, any reports relating to the provision of the Services, all documentation, and/or any materials furnished by COMPANY and given to the CONTRACTOR in connection with the Services (CONTRACTOR may retain one copy for regulatory or archival purposes provided that such copy shall remain subject to CONTRACTOR's confidentiality obligations to Company). However, at COMPANY's option, COMPANY may, with written instruction, direct the CONTRACTOR to dispose of any Property instead of return Property to COMPANY, such disposal to be certified in writing

by the CONTRACTOR. Any order to destroy any Company Property must be made in writing by COMPANY and CONTRACTOR shall *not* proceed with destruction of any COMPANY Property until such written notice is received. If COMPANY shall require CONTRACTOR to undertake any past termination activities the Parties shall negotiate the terms of a settlement proposal which shall include reasonable fees relating to such post termination activities that shall be undertaken by CONTRACTOR at the reasonable request of COMPANY.

8. LIABILITY AND INSURANCE

8.1. CONTRACTOR will exercise commercially reasonable professional efforts, to ensure the accuracy of the advice, information, and documentation provided in connection with the performance of the Services.

8.2. During the term of this Agreement, CONTRACTOR will maintain product liability insurance in an amount of not less than CAN$1 million and errors & omissions liability insurance in an amount of not less than CAN$4 million, such insurance to be on terms acceptable to COMPANY acting reasonably, and COMPANY shall be an additional insured thereunder.

8.3. The CONTRACTOR warrants and represents that any advice given by its servants or agents or the use of any documentation provided in connection with the Services will not Infringe third party rights.

8.4. The Services will be performed by CONTRACTOR's employees at its facilities, unless the Parties agree in writing and in advance that Services will be performed at a sub-CONTRACTOR's facility. CONTRACTOR shall be solely responsible for any loss, damage, injury, or death arising from its performance of the Services and shall indemnify and hold COMPANY and its agents (collectively, **"COMPANY Indemnitees")** harmless from any liability or expense, including reasonable attorney fees, for any loss or damage to property and/or death or Injury to person(s), including COMPANY's employees and agents, and animals, or from claims, actions, suits or proceedings therefrom, arising from CONTRACTOR's performance of the Services. The aforementioned obligations shall apply regardless of whether liability without fault is imposed or sought to be imposed, except to the extent that the foregoing is void or otherwise unenforceable under applicable law, and except to the extent that such loss, damage, injury, liability, death, or claim is the result of a COMPANY Indemnitee's negligence or willful misconduct.

8.5. COMPANY shall be solely responsible for any loss, damage, injury, or death arising from its performance of its obligations under the Agreement and shall indemnify and hold CONTRACTOR and its agents **("CONTRACTOR Indemnitees")** harmless from any liability or expense, including reasonable attorney fees, for any loss or damage to property and/or death or injury to person(s), including CONTRACTOR's employees and agents, and animals, or from claims, actions, suits or proceedings therefrom, arising from COMPANY's performance of its obligations under the Agreement. The aforementioned obligations shall apply regardless of whether liability without fault is imposed or sought to be imposed, except to the extent that the foregoing is void or otherwise unenforceable under applicable law, and except to the extent that such loss, damage, Injury, liability, death, or claim is the result of a CONTRACTOR Indemnitee's negligence or willful misconduct.

9. REPRESENTATIONS AND WARRANTIES

9.1. Each party represents and warrants that:

a) it is a duly incorporated, organized and subsisting corporation and has all requisite powers, capacities, licenses and permissions under its governing legislation and the other laws applicable to it, and under its articles of incorporation, bylaws and governing resolutions to develop and/or manufacture the Product; and to enter into, exercise its rights and perform and comply with all other obligations under this Agreement;

b) all actions, conditions and tangible items, have been taken, fulfilled or produced with respect thereto, that are required by law, contract or otherwise;

c) this Agreement has been duly authorized, executed and delivered by it and constitutes a legal, valid and binding obligation of it enforceable against it in accordance with its terms;

d) it is not a party to any agreement under the terms of which it Is prohibited or restricted from entering into any of the obligations assumed, liabilities imposed, or restrictions accepted by it under this Agreement; and

e) the execution and delivery of this Agreement and the performance by it of its responsibilities, obligations and covenants hereunder will not result in the violation of any statute, order, decree, judgment, ordinance, regulation or law applicable to it or by which any of its assets may be bound.

9.2. CONTRACTOR represents and warrants that its performance of the Services, which utilizes information other than COMPANY's Confidential Information, will not infringe any subsisting claim of a third party domestic or foreign patent right or any copyright or violate any third-party trade secret right, or other intellectual property right or contractual right. CONTRACTOR shall defend, at its expense, all suits, actions or proceedings in which COMPANY and/or CONTRACTOR Indemnitee(s) is / are made a defendant for such infringement or violation resulting from the possession, sale or offer for sale of the Product and shall pay and discharge all judgment or decrees rendered against an Indemnitee in such suits, actions or proceedings with respect to such infringement or violation. COMPANY shall provide CONTRACTOR with prompt written notice of any such suits, actions or proceedings or written threats thereof and shall provide CONTRACTOR all information available to COMPANY, for such defense and shall accord CONTRACTOR the full opportunity and authority to assume sole defense thereof, including settlements and appeals provided that any settlement which effects the interests of COMPANY or its agents or customers, in selling, offering for sale, importing and using the Product shall not be entered into without COMPANY's prior written consent. CONTRACTOR shall also have the right to obviate any such suit, action or proceeding or threat thereof by procuring the right for COMPANY and its agents and customers to sell, offer for sale, and import the Product. COMPANY extends a like warranty to CONTRACTOR with respect to infringement or trade secret violation by CONTRACTOR in complying with COMPANY's written instructions, specifications or processes for the Product.

10. CONFIDENTIALITY

10.1. All information and materials (including all information related to or arising from the Services) shall be considered confidential information of the COMPANY for the purpose of this Agreement, irrespective of whether communicated orally or in writing by COMPANY or obtained through observations by or on behalf of CONTRACTOR, at the offices or other premises of COMPANY, or otherwise (the “Confidential Information”). CONTRACTOR shall be entitled to disclose or allow access to Confidential Information to its officers, employees, and its representatives, or agents who have been approved by COMPANY in writing and who have a need to know or have access to Confidential Information, only if such persons are subject to restrictions on the disclosure of Confidential Information comparable to those contained in this Agreement. The Confidential Information will be kept confidential and will not be disclosed or made available to any person, without COMPANY's prior consent, except to the extent that the Confidential Information:

a) is or becomes public knowledge otherwise than through default on the part of CONTRACTOR or any of its representatives; or

b) is already lawfully in the possession of CONTRACTOR prior to its disclosure to CONTRACTOR by COMPANY (as evidenced by CONTRACTOR's written record); or

c) hereafter becomes lawfully available to CONTRACTOR and is not subject to any confidentiality obligation to COMPANY (or a person owing a duty of confidence to COMPANY in respect of such information); or

d) Confidential Information, which can be demonstrated as independently developed or acquired by CONTRACTOR without reference to or reliance upon confidential information defined in this agreement, and as evidenced by CONTRACTOR's written records.

10.2. Information shall not be exempted under clause 10.1 from the restriction under this Agreement by reason only that some or all of its features (but not the combination and principle thereof) are or become public knowledge or are in the possession of or become available to CONTRACTOR as mentioned in such clause.

10.3. CONTRACTOR will use the Confidential Information only in relation to the provision of the Services, and in particular, will not make commercial use of any part of the Confidential Information for any purpose whatsoever. CONTRACTOR agrees that the Confidential Information is owned by COMPANY.

10.4. Notwithstanding the restrictions of this Section, CONTRACTOR may disclose the Confidential Information as is required pursuant to competent judicial or governmental administrative orders provided that CONTRACTOR shall provide COMPANY with prompt written notice of such order before such disclosure so that COMPANY may seek a protective order or other appropriate remedy. CONTRACTOR shall consent to COMPANY obtaining any protective order or other appropriate remedy that COMPANY, or any of its Affiliates may seek for the purpose of preventing disclosure of any of the Confidential Information. In the event that COMPANY does not obtain such protective order or other remedy, CONTRACTOR shall furnish only that portion of the Confidential Information which CONTRACTOR is advised by written opinion of its legal counsel is legally required and CONTRACTOR shall use reasonable efforts to obtain reliable

assurance that the Confidential Information shall be accorded confidential treatment by such court or government agency.

10.5 CONTRACTOR agrees to take all reasonable steps to maintain the Confidential Information confidential and secure (including all steps that CONTRACTOR takes to protect its own confidential information).

10.6. Upon request, CONTRACTOR agrees to promptly deliver to COMPANY any documentation in its possession, in any form or medium, which contains any of the Confidential Information, whether such documentation was received from COMPANY or produced by or on behalf of CONTRACTOR, provided, however, that CONTRACTOR shall be entitled to retain a copy of the documentation in order to verify compliance with this Agreement.

10.7. The parties hereby acknowledge and agree that money damages would not be a sufficient remedy for any breach of confidentiality and the Company shall be entitled to seek injunctive or other equitable relief to remedy any such breach or threatened breach. Such remedy shall not be deemed to be the exclusive remedy of any breach but shall be in addition to any other rights and remedies available at law or equity or this Agreement.

11. INTELLECTUAL PROPERTY RIGHTS

11.1. All intellectual property, including but not limited to data, discoveries, know how, inventions, improvements, formulae, ideas, devices, compounds, materials, writings, or other intellectual property together with the notes, records, data, reports, sketches, plans, memoranda, protocols, domain names, trademarks, copyright and other tangible information relating thereto including all Work Product, whether or not subject to protection under patent or copyright laws (collectively “Intellectual Property”), which are conceived, developed and/or made by or for CONTRACTOR during the course of the Services or in or pertaining to the Field shall be the exclusive property of COMPANY, except for cases outlined below, and herein assigns or confirms assignment of same to the COMPANY. Further CONTRACTOR shall or shall cause authors of any copyright to waive any moral rights in favour of the COMPANY, its Affiliates, successors and heirs. COMPANY shall have the sole right to file patent applications (including filings in foreign countries), and to prosecute and maintain patents on any Intellectual Property resulting from CONTRACTOR's work under this Agreement, and CONTRACTOR agrees that exclusive rights to the Intellectual Property in the Territory shall reside with COMPANY. CONTRACTOR shall promptly notify COMPANY of any developed Intellectual Property and shall cause all those working under the CONTRACTOR to do the same. The term **“CONTRACTOR Know-How”** shall mean information and data, in any form, that CONTRACTOR has determined to be necessary to DEVELOP and MANUFACTURE Product, which has been disclosed to and approved by COMPANY, as the same may be modified from time to time by agreement of the parties hereto. For the avoidance of doubt, CONTRACTOR shall own all rights, titles, and interests of any independent Improvement to CONTRACTOR Know-How that was made, discovered or conceived solely by or on behalf of CONTRACTOR (or its Affiliates) during the Term and that is: (i) not based on or derived from COMPANY Know-How (or arty other Intellectual Property rights of COMPANY or any of its Affiliates) or any Confidential Information of COMPANY; and (ii) severable from the Product, COMPANY KNOW-HOW (and any other Intellectual Property Rights of COMPANY or any of its Affiliates) and Confidential Information of COMPANY (i.e., an improvement that can be exploited independent of the Product and without otherwise infringing upon or misappropriating or using

any COMPANY Know-How (or any other Intellectual Property rights of COMPANY or any of its Affiliates) or any Confidential Information of COMPANY or any of its Affiliates); and (iii) was not paid for the COMPANY; and (iv) is outside and unrelated to the Field, For clarity, any discovery or discoveries made, discovered or conceived by or on behalf of COMPANY (or its Affiliates) or jointly by the Parties (or their respective Affiliates) shall not be considered for any purpose to be an independent improvement but shall instead be Intellectual Property of COMPANY.

11.2. CONTRACTOR shall, at COMPANY's request and expense, execute all documents necessary to perfect the obligations in Section 11.1 and/or to enable COMPANY to make applications for domestic or foreign patents relating to the Intellectual Property, including documents of title, assist in prosecution of any foreign or domestic patent applications, and assist in securing, defending or enforcing any such title and right thereto, and shall cooperate with COMPANY, its designees, its attorneys or agents, in any claims or litigation concerning COMPANY or related companies with respect to the Intellectual Property. CONTRACTOR herein does appoint and shall cause its personnel or other persons involved in creating Intellectual Property to do so, appoint the COMPANY (or its counsel or agents) with the power to execute any such documents on its behalf, if it is not possible to locate or timely have the documents executed by the CONTRACTOR or its personnel or said other persons. Company shall promptly notify Contractor upon exercising said power.

11.3. CONTRACTOR shall ensure that any CONTRACTOR personnel or any other persons involved in creating Intellectual Property, shall have no claims relating to such Intellectual Property and shall cooperate with COMPANY, at COMPANY's request and expense, in securing, defending or enforcing any such title and right relating to the Intellectual Property, to cooperate with COMPANY, its designees, its attorneys or agents in any claims or litigation concerning COMPANY or its Affiliates with respect to the Intellectual Property, to assist in prosecution of any foreign or domestic patent applications relating to the Intellectual Property, and to review and execute domestic and foreign patent applications, and other proper documents and papers (including but not limited to documents of title) to facilitate the securing and maintaining of domestic and foreign patent protection relating to the Intellectual Property.

11.4. CONTRACTOR shall grant, and hereby does grant to COMPANY, to the extent that it is free so to do, an irrevocable, non-exclusive, worldwide, royalty-free perpetual license to use all patents, registered designs, copyrights, trademarks, and other intellectual property rights which CONTRACTOR has the right to license where such patents, registered designs, copyright, know-how, or other intellectual property are either (a) incorporated into the Product; or (b) need to be licensed to COMPANY in order to enable COMPANY to use and practice lawfully any Intellectual Property in the Territory.

11.5. The CONTRACTOR will not take any steps to oppose or contest the validity of any patents or patent applications or any other intellectual property rights of COMPANY, relating to the Confidential Information or the Intellectual Property.

12. NOTICES

12.1. Notice required or provided for by the terms of this Agreement shall be in writing and shall be delivered by prepaid registered mail, return receipt requested; personally by hand; courier; by email; or by facsimile transmission, in each case addressed to the Party or Parties to whom it is to

be given at the address or facsimile number shown below or at such other address or facsimile number as the Party to whom such notice is to be given shall have last notified the other Party in accordance with the provisions of this Section:

In the case of CONTRACTOR at:

Dalton Chemical Laboratories Inc. o/a Dalton Pharma Services
349 Wildcat Road
Toronto, Ontario, M3J 253
Attention: Peter Pekos
Fax No.: *******
****

And in the case of COMPANY at:

Cardiol Therapeutics Inc.
2275 Upper Middle Rd. E. Suite 101
Oakville, Ontario L6H 0C3
Attention: David Elsley
****

Any such notice or other document shall:

(I) if delivered by hand, courier, or email be deemed to have been given and received at the place of receipt on the date of delivery, provided that if delivery is other than during business hours (9:00 a.m. to 5:00 p.m., local time) in the place of receipt, such notice shall be deemed to have been given and received at the place of receipt on the first business day thereafter;

(ii) if mailed, be deemed to have been given and received at the place of receipt on the earlier of the date of actual receipt and ten (10) business days after the date of mailing. In the event of postal disruption, such notices or documents must be delivered by means other than by mail; and

(Hi) if transmitted by facsimile, and provided that the sender has received confirmation of receipt, be deemed to have been received on the same day if transferred during business hours (9:00 a.m. to 5:00 p.m., local time) in the place of receipt, and be deemed to have been given and received at the place of receipt on the next business day in the place of receipt following the day of sending, if transferred after business hours in the place of receipt.

13. ASSIGNMENT

13.1. This Agreement may not be assigned by CONTRACTOR without the prior written consent of the other party which will not be unreasonably withheld. COMPANY may assign with notice to the Contractor. Any assignment or transfer by a Party other than in accordance with the terms hereof shall be void and shall entitle the other Party to terminate this Agreement. Any permitted assignee shall assume all obligations of its assignor under this Agreement. No assignment shall

relieve either Party of responsibility for the performance of any obligation which accrued prior to the effective date of such assignment.

14. WAIVER

14.1. The failure on the part of either Party hereto to exercise or enforce any right conferred upon it under this Agreement shall not be deemed to be a waiver of any such right to bar the exercise or enforcement thereof at any time or times thereafter.

15. LAW

15.1. This Agreement shall be interpreted and enforced under the laws of the Province of Ontario and the federal laws of Canada applicable therein. Subject to Section 16, the Parties shall attorn to the exclusive jurisdiction of the Courts of Ontario.

16. ARBITRATION

16.1. The parties recognize that disputes, controversies or claims arising out of or in connection with, or relating to, this Agreement, or the performance, breach, termination or validity thereof (a "Dispute") may arise from time to time during the course of this Agreement. In the event of such a dispute, controversy or claim either party may, by notice to the other party, have such issue referred to their respective designees according to the following escalation path:

	Escalated to the following level at the Parties	
Days from original notice	CONTRACTOR	COMPANY
Ten (10) business days	Natalie Lazarowych, Ph.D. – Director of Project Management	David Elsley, MBA President & CEO
Twenty-five (25) business days	Peter Pekos M.Sc. – President & CEO	David Elsley, MBA—— President & CEO

16.2. If this discussion does not result in a resolution of the Dispute within thirty-five (35) business days, or any extension thereof agreed by the Parties in writing, either Party may invoke the formal arbitration provisions of this Section of the Agreement.

16.3. Any dispute, controversy or claim arising out of or in connection with, or relating to, this Agreement, or the performance, breach, termination or validity thereof shall be finally settled by arbitration. The arbitration shall be conducted in accordance with the *Ontario Arbitration* Act, *1991* by one or more arbitrators appointed in accordance with the applicable rules. The arbitration shall be conducted in Toronto, Ontario in English. Except for breach of confidentiality, misappropriation of intellectual property or other circumstances where injunctive relief may be granted by a court of law, arbitration is the exclusive remedy for any party with respect to any dispute arising under or relating to this Agreement or the subject matter hereof, except that a party may resort to a court of competent jurisdiction to enforce the provisions of this Section or to enforce any decision rendered in arbitration under this Section of the Agreement. Provided that the parties have exercised all of their rights and obligations under Section 16.1 and 16.2 of

the Agreement, the process of arbitration hereunder shall be initiated by one Party giving the other Party written notice, in accordance with the provisions of this Agreement, of initiation of arbitration. The arbitration shall be conducted by arbitrator(s) having no financial or personal interest in the business affairs of either Party. Absent agreement or an award In the arbitration to the contrary, the arbitration fees and expenses shall be paid in equal shares by the parties. The arbitrator shall have the authority to award any remedy or relief that a court or a judge of the Ontario Courts could order or grant in accordance with this Agreement. The decision of the arbitration panel shall be final and binding on the Parties, is non-appealable, and may be enforced in any court of competent jurisdiction. The arbitration shall be kept confidential and the existence of the proceedings and the elements of it shall not be disclosed beyond the arbitrator, the Parties, their counsel and any person necessary to the conduct of the proceedings, except as may be lawfully required in judicial proceedings relating to the arbitration or otherwise.

16.4. At all times, except as set forth below, notwithstanding the existence of a dispute with respect to a particular Project, the Parties shall continue to perform their respective obligations in accordance with the provisions of this Agreement. Where there is a dispute as to the amount of the monies owing by COMPANY to CONTRACTOR pursuant to a Project, the portion of the amount owing that is not contested, disputed or challenged shall be paid when due but without prejudice to the rights of the Parties to contest, dispute or challenge the disposition of the remaining portion of the monies claimed thereunder. Until the resolution of the dispute with respect to which the amount of monies owing to CONTRACTOR is being contested, disputed or challenged, CONTRACTOR shall be relieved from any further obligation to deliver Services with respect to the disputed portion of such Project, and other than a Project that involves the delivery to COMPANY of Products for clinical trials.

17. SEVERABIIITY

17.1. Whenever possible, each provision of this Agreement shall be interpreted in the manner to be effective and valid under applicable law, but if any provision of this Agreement should be prohibited under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity without invalidating the remainder of such provision or the remaining provisions of the Agreement. The Parties agree to renegotiate such invalid or unenforceable provision in good faith in order to provide a reasonably acceptable alternative consistent with the basic purpose of this Agreement.

18. FORCE MAJEURE

18.1 Except as to payments required under this Agreement, neither Party shall be liable in damages for, nor shall this Agreement be terminable or cancelable by reason of, any delay or default in such party's performance hereunder if such default or delay is caused by events beyond such party's reasonable control including, but not limited to, acts of God, regulation or law or other action or failure to act of any government or agency thereof, war or insurrection, civil commotion, destruction of production facilities or materials by earthquake, fire, flood or storm, labor disturbances, epidemic, or failure of suppliers, public utilities or common carriers; provided, however, that the Party seeking relief hereunder shall immediately notify the other party of such cause(s) beyond such party's reasonable control. The Party that may invoke this Section shall use all reasonable endeavors to reinstate its ongoing obligations to the other. If the cause(s) shall continue unabated for one hundred twenty (120) days, then the Parties shall

meet to discuss and negotiate in good faith what modifications to this Agreement should result from this force majeure.

19. ENTIRE AGREEMENT

19.1. This Agreement, and the related Appendices, and the most recently executed Quality Agreement constitute the entire agreement and understanding between the Parties with respect to the subject matter hereof and supersedes any prior agreement, understanding, or arrangement between the Parties, whether oral or in writing. No representation, undertaking, or promise shall be taken to have been given or be implied from anything said or written in negotiations between the Parties prior to this Agreement except as expressly stated in this Agreement. Neither Party shall have any remedy in respect of any untrue statement made to it upon which it has relied in entering into this Agreement (unless such untrue statement was made fraudulently). This Agreement can only be amended upon written consent of the parties.

20. FURTHER ASSURANCES

20.1. The Parties shall do and execute all such further acts and things as are reasonably required to give full effect to the rights given and the transactions contemplated by this Agreement.

21. INDEPENDENT CONTRACTOR; NO THIRD-PARTY BENEFICIARIES

21.1. For the purpose of this Agreement and all Services to be provided hereunder, each Party shall be, and shall be deemed to be, an independent CONTRACTOR and not an agent or employee of the other party. Neither Party shall have authority to make any statements, or representations or commitments of any kind, or to take any action, which shall be binding on the other Party, except as may be explicitly provided for herein or authorized by the other Party in writing. Nothing in this Agreement, either express or implied, shall confer on any person other than a Party to this Agreement or a Party's permitted successors and assigns, any rights or remedies of any nature or kind whatsoever under or by reason of this Agreement.

22. SURVIVAL

22.1. The following provisions shall survive the termination of this Agreement regardless of the cause of termination, as well as other items which by their intent or meaning are intended to so survive: 2.1, 4.1, 4.3, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 19, 20, 21 and 22.

THE NEXT PAGE IS THE SIGNING PAGE.

Agreed to for and on behalf of Dalton Chemical Laboratories Inc. o/a Dalton Pharma Services

Name: Peter Pekos
Position: President & CEO

Signature: /s/Peter Pekos

Date: April 17, 2018

Agreed to for and on behalf of Cardiol Therapeutics Inc.

Name: David Elsley
Position: President & CEO

Signature: /s/David Elsley

Date: April 17, 2018

APPENDIX A

There is no diagram here

APPENDIX B

Consideration for Exclusivity of Section 2.1

1. In consideration of the CONTRACTOR's covenant of exclusivity to the COMPANY, the COMPANY agrees to allot and issue to the CONTRACTOR 200,000 Class A common shares of the COMPANY (the **"Exclusivity Share?)** within 45 business days of the Effective Date.

2. The CONTRACTOR shall also earn and be entitled to receive, and the COMPANY shall issue to the CONTRACTOR, a total of an additional 200,000 Class A common shares of the Company (the **"Invention Bonus Shares"**) if and when the CONTRACTOR discovers and/or develops a proprietary methodology for formulating cannabinoids (the **"Proprietary Methodology")** for which the COMPANY, in its sole discretion, elects to file a patent application resulting in the issuance of **a** patent or otherwise pursue as a means of manufacturing cannabinoids in support of its research and commercial development programs. The CONTRACTOR acknowledges and agrees that the COMPANY is obliged to issue the Invention Bonus Shares ONLY if a U.S. patent for the Proprietary Methodology is granted to the COMPANY (the date of grant of such patent being the **"Patent Grant Date")**, unless the COMPANY, in its sole discretion, elects, and notifies the CONTRACTOR in writing of its election (the date of providing such notice being the **"Notice Date"),** to keep the Proprietary Methodology as a trade secret and not proceed with filing a patent application for the Proprietary Methodology. The Invention Bonus Shares shall be issued within 45 business days of either the Patent Grant Date or the Notice Date, as the case may be.

3. The CONTRACTOR represents and warrants that it is, and that on the date of receipt of any of the Exclusivity Shares or the Invention Bonus Shares it will be, an "accredited investor" (as such term is defined in National Instrument 45-106 Prospectus Exemptions of the Canadian Securities Administrators) by virtue of being a person that has net assets of at least Cdn$5,000,000 as shown on its most recently prepared financial statements. The CONTRACTOR represents and warrants that it is acquiring the Exclusivity Shares or the Invention Bonus Shares, as the case may be**,** as principal for the CONTRACTOR'S own account and not for the benefit of any other person. The CONTRACTOR is aware that: (a) the COMPANY is not a "reporting issuer" or the equivalent in any jurisdiction and, accordingly, the Exclusivity Shares and the Invention Bonus Shares will be subject to an indefinite hold period under applicable securities laws; (b) the Exclusivity Shares and the Invention Bonus Shares are not listed on any stock exchange and no public market exists for the Class A common shares of the COMPANY; and (c) the Exclusivity Shares and the Invention Bonus Shares are subject to transfer restrictions contained in the COMPANY'S constating documents.

4. The CONTRACTOR agrees that in the event the COMPANY should at any time propose to qualify its Class A common shares for sale to the public, the CONTRACTOR will execute in respect of all Exclusivity Shares and Investment Bonus Shares, if any, held by it such standard escrow agreement as may be required by the applicable securities regulators as a condition precedent to accepting a prospectus of the COMPANY qualifying the distribution of its Class A common shares for sale to the public, and the CONTRACTOR shall deposit such aforementioned Class A common shares into escrow in accordance with the escrow agreement.

Consideration for Services

Fees and payments for Services shall be set out in each Work Order. For clarity, none of the Class A common shares constitutes consideration for Services.

Exhibit 4.5

Certain identified information has been excluded from the exhibit pursuant to Item 601(a)(6) of Regulation S-K due to personal privacy concerns. Redacted information is indicated by: [***]

EXCLUSIVE SUPPLY AGREEMENT

THIS EXCLUSIVE SUPPLY AGREEMENT (this "**Agreement**") is made as of September 28, 2018 (the "**Effective Date**"), by and between Noramco, Inc., a Georgia corporation, with offices at 500 Swedes Landing Road, Wilmington, Delaware 19801, USA ("**Noramco**"), and Cardiol Therapeutics Inc., an Ontario corporation located at 2275 Upper Middle Road East, Suite 101, Oakville, ON, Canada, L6H 0C3 ("**Buyer**"). Noramco and Buyer may be referred to herein each as a "**Party**" or together as the "**Parties**", as the context may require.

WHEREAS, Noramco is engaged in the business of manufacturing and selling active pharmaceutical ingredients;

WHEREAS, Buyer is engaged in the business of developing, manufacturing and/or selling finished pharmaceutical products; and

WHEREAS, Buyer wishes, for itself and its Affiliates, to purchase cannabidiol (CBD) for its use in the manufacture of Products (as defined below), and Noramco is willing to supply such active pharmaceutical ingredient exclusively to Buyer for distribution of Products in the Territory on the terms and subject to the conditions of this Agreement.

NOW THEREFORE, in consideration of the mutual representations, warranties and covenants set forth in this Agreement, the Parties agree as follows:

DEFINITIONS

For purposes of this Agreement, the following words or expressions have the meanings provided below:

"**Action**" has the meaning set forth in Section 10.1.

"**Affiliate**" means with respect to either Party, any individual, partnership, association, corporation, limited liability company, trust or other legal person or entity that is controlled by, controls or is under common control with that Party. As used herein, "**control**" of a corporation or other business entity means direct or indirect beneficial or legal ownership of fifty percent (50%) or more of the voting interest in, or more than fifty percent (50%) of the equity of, or the right to appoint fifty percent (50%) or more of the directors or managers of, that corporation or other business entity.

"**Agreement**" has the meaning set forth in the introductory paragraph.

"**API**" means cannabidiol (CBD).

"**Breaching Party**" has the meaning set forth in Section 13.2.

"**Buyer**" has the meaning set forth in the introductory paragraph. The term "Buyer" as used in this Agreement shall also refer to any Affiliate of Buyer that has executed and delivered to Noramco a Participation Agreement.

"**Buyer Indemnitee**" has the meaning set forth in Section 10.1.

"**cGMP**" means current good manufacturing practices within the meaning of the rules and regulations of the FDA, including 21 C.F.R. Parts 210 and 211, as applicable to the manufacturing,

packaging, handling, storage (including during transit) and control of API, as amended from time to time during the Term.

"**Confidential Information**" means all information, data and know-how disclosed by or for a Party to the other Party concerning the business, marketing strategies, pricing, technology, methods, formulations or processes of the disclosing Party or any of its Affiliates, customers or vendors, whether written, verbal, electronic, visual (e.g., obtained by observation of facilities) or in any other medium, whether tangible or intangible, and whether disclosed prior to or subsequent to the Effective Date. Confidential Information includes any summaries, analyses, compilations, technical information and other materials prepared by either Party, their respective Affiliates, or any of its or their respective officers, directors, employees or agents that contain or are based in whole or in part on any other Confidential Information. Confidential Information also includes the existence and terms of this Agreement. However, Confidential Information does not include information, data or know-how that:

(a) was in the public domain at the time of the disclosure to the receiving Party, or thereafter became part of the public domain without any fault of the receiving Party (it being understood that Confidential Information shall not be deemed to be in the public domain where it is merely embraced by or contained in more general information that is in the public domain);

(b) rightfully was in the receiving Party's possession prior to the disclosure by or for the disclosing Party (it being understood that Confidential Information shall not be deemed to be in the receiving Party's prior possession where it is merely embraced by or contained in more general information that was in the receiving Party's prior possession);

(c) was lawfully obtained by the receiving Party from a third party who had the right to make such disclosures; or

(d) was developed by or for the receiving Party independently of that disclosure.

"**DEA**" means the Drug Enforcement Administration of the United States Department of Justice or any successor organization.

"**DMF**" means the Drug Master File with respect to an API, as filed with the FDA by Noramco or any of its Affiliates.

"**Effective Date**" has the meaning set forth in the introductory paragraph.

"**Exclusivity Payment**" has the meaning set forth in Section 1.1.2.

"**FDA**" means the United States Food and Drug Administration or any successor organization.

"**Forecast**" has the meaning set forth in Section 3.1.1.

"**Importer of Record**" means an agent of Noramco that acts as importer of record for receipt of shipments of API into Canada.

"**Invention**" means any innovation, improvement, development, discovery, method, know-how, process, technique or the like, whether or not written or otherwise fixed in any form or medium and whether or not patentable or copyrightable, that is generated, conceived, or reduced to practice by either

Party (or any of its Affiliates or its or their respective employees, independent contractors, subcontractors or agents), or jointly by the Parties, in connection with this Agreement; and all intellectual property rights therein.

"**Losses**" has the meaning set forth in Section 10.1.

"**Manufacturing Interruptions**" has the meaning set forth in Section 8.1.

"**Manufacturing Quota**" means the amount of an API allotted to Noramco by the DEA pursuant to applicable DEA regulations so that Noramco may manufacture API.

"**Manufacturing Quota Restrictions**" has the meaning set forth in Section 8.2.

"**Minimum Quantity**" has the meaning set forth in Section 1.1.5.

"**Nonconforming API**" has the meaning set forth in Section 6.1.

"**Noramco**" has the meaning set forth in the introductory paragraph.

"**Noramco Indemnitee**" has the meaning set forth in Section 10.1.

"**Participating Affiliate**" has the meaning set forth in Section 22,2,

"**Participation Agreement**" has the meaning set forth in Section 22.2.

"**Party**" and "**Parties**" **have** the meaning set forth in the introductory paragraph.

"**Price**" has the meaning set forth in Section 4.1.

"**Procurement/Import Quota**" means the applicable Canadian import permit for import of API.

"**Procurement/Import Quota Restrictions**" has the meaning set forth in Section 8.3.

"**Products**" means any drug product for human therapeutic use, in any dosage form or strength, manufactured by or for Buyer, that contains API.

"**Proprietary IP**" has the meaning set forth in Section 12.1.

"**Purchase Order**" means a written order from Buyer given in accordance with this Agreement requesting API to be manufactured by Noramco and supplied to Buyer hereunder.

"**Quality Agreement**" means the agreement related to quality assurance and control to be entered into between the Parties in the form attached hereto as Appendix B.

"**Recall**" has the meaning set forth in Section 7.3.

"**Regulatory Authority**" means any and all governmental bodies and organizations regulating the manufacture, importation, distribution, use and/or sale of any Product.

"**Representatives**" has the meaning set forth in Section 11.1.

"**Specification**" means Noramco's API specification contained in Appendix A, subject to Section 4.2.1.

"**Term**" has the meaning set forth in Section 13.1.

"**Territory**" means ******* – Exclusive territory. Redacted for confidentiality and as disclosure would be seriously prejudicial to interest of Cardiol.

"**Year**" means, (i) with respect to the first year of the Term, the period from the Effective Date up to and including December 31 of the same calendar year, (ii) with respect to the last year of the Term, the period from January 1 of such last calendar year up to and including the date of termination or expiration of this Agreement, and (iii) for all periods of the Term in between, a calendar year.

1. SUPPLY

1.1 Purchase and Sale.

1.1.1 Volume. Subject to the terms and conditions of this Agreement, each Year Noramco shall supply to Buyer and Buyer shall purchase from Noramco ****** of Buyer's requirements for API for use in Products, provided that Noramco meets agreed upon API Specifications and Buyer's volume requirements. In the event that Noramco is unable to meet the Buyer's API Specifications and/or supply requirements for any reason whatsoever including failure to obtain sufficient Manufacturing Quota, the Buyer will be free to purchase API from alternate suppliers without losing Exclusivity in the Territory. For the avoidance of doubt, the Parties intend for Buyer's "commercial requirements" of API to mean all of Buyer's and all of its Affiliates' aggregate commercial demand for API in any form, including whether before or after such API has been incorporated into Product, and whether Product is manufactured by or on behalf of Buyer. Buyer will keep accurate records of its annual commercial requirements of API and, upon the request of Noramco during the Term and for one (1) Year thereafter, will permit Noramco or its duly authorized agents to examine such records during normal business hours for the purpose of verifying the correctness of such calculations and the volume of API purchased by Buyer hereunder.

1.1.2 Exclusive in the Territory. Buyer shall pay Noramco the non-recoupable sum of Three Million ($3,000,000) Dollars by December 1, 2018 (the "**Exclusivity Payment**")**.** The Exclusivity Payment will be credited towards payments of Minimum Quantities purchased during 2018 and 2019. Provided that the Exclusivity Payment is timely made and provided that Buyer complies with Section 1.1.5, Noramco and its Affiliates shall not sell API to any third party for use in the production of products of any kind in the Territory, or to any third party for delivery of products of any kind into the Territory. Further, if Noramco or Buyer learns that any third party is purchasing API from Noramco or its Affiliates and exporting such API into the Territory, Noramco shall stop the sale of API to such third party. If Buyer shall fail to pay the Exclusivity Payment or to comply with Section 1.1.5, Noramco may terminate Buyer's exclusivity under this Section 1.1.2 by sending written notice of noncompliance to Buyer. The termination of exclusivity becomes effective thirty (30) calendar days after the date of such written notice if Buyer has not cured such noncompliance within such period. Noramco shall not license any third party (other than a Noramco Affiliate that is bound by the requirements of this Agreement) to use any Noramco processes for the manufacture of API or the sale of API in the Territory.

1.1.3 Exception for Prescription Medicines. Noramco and its Affiliates shall have the right to sell the API to third parties outside Canada for use in products that are approved as prescription medicines by the Therapeutic Products Directorate of Health Canada, notwithstanding the prohibition in Section 1.1.2.

1.1.4 Initial Raw Materials Order. Cardiol shall pay Noramco ******* for the purchase of raw materials for the production of **KG of API as per Section 1.1.5.2. Amounts paid for raw materials will be credited towards Buyer's future purchases of API.

1.1.5 Minimum Quantity. Each Year Noramco shall supply to Buyer and Buyer shall purchase from Noramco the following minimum volumes of API (each Year's volume being that Year's "**Minimum Quantity**"). On or before November 30th prior to each Year (the "**Order Date**"), Buyer will order at least the following Minimum Quantities from Noramco for delivery during the Year immediately following the Order Date:

1.1.5.1 during Year 2018, **KG at ****/KG;

1.1.5.2 during Year 2019, **KG at ****/KG;

1.1.5.3 during Year 2020, **KG at ****/KG; and

1.1.5.4 during Year 2021, at Buyer's sole discretion, either **KG at ****/KG or **KG at ****/KG. – Maximum pricing for 2021 and minimum quantity required to be purchased by Buyer from 2022 onwards to ensure maintenance of exclusivity, respectively. Redacted for confidentiality and as disclosure would be seriously prejudicial to interest of Cardiol.

1.1.6 The Parties agree that the per KG pricing beyond Year 2021 will not exceed ****/KG and such pricing will be reviewed in the context of the purchase volumes at that time. Provided Buyer purchases a Minimum Quantity of **KG in 2022 and in each subsequent Year, Buyer's sole and exclusive rights referenced in Section 1.1.2 will remain in full force and effect. Provided Buyer purchases at least Minimum Quantities in accordance with this Agreement, Noramco will not provide any customer buying API, save and except for ******* with better pricing or terms than those offered to Buyer. Noramco will notify Buyer in writing if it intends to enter into an agreement with such a customer to supply API for better pricing or terms than those offered to Buyer and Noramco will ratchet Prices to Buyer downward to match better pricing or terms offered to such a customer.

1.1.7 All Prices are expressed in US dollars. Pricing includes all costs, tariffs, duties and shipping to Canada as specified in Buyer's Purchase Order.

1.2 Product Discontinuation. Buyer shall use commercially reasonable efforts to provide at least six (6) months' advance notice to Noramco if it intends to no longer order API due to its election to discontinue or otherwise withdraw from the market any Product.

2. PERMITS, DMFs AND COAs

2.1 Permits. Noramco, at its sole cost and expense, will be responsible for obtaining all licenses, permits and other governmental approvals necessary for the manufacture of the API; *provided,* that Manufacturing Quota is addressed in Article 8. Noramco will supply the API through the Importer of Record. Noramco, at its sole cost and expense, will be responsible for obtaining all licenses, permits and other governmental approvals necessary in connection with such Importer of Record's possessing, handling, storing and using API following delivery to it by; *provided,* that Procurement/Import Quota is

addressed in Article 8. Noramco shall address Procurement/Import Quotas through such Importer of Record.

2.2 DMFs. Noramco, at its sole cost and expense, has filed or will file and shall maintain during the Term valid DMFs, in accordance with all applicable laws, rules and regulations of the FDA or any other Regulatory Authority expressly identified in the Specification. Noramco shall provide Buyer with an access or right of reference letter entitling Buyer to make continuing reference to the Noramco DMFs during the Term in connection with any regulatory filings made with the FDA by Buyer with respect to Products. During the Term, Noramco may change the Specification, manufacturing process, including for avoidance of doubt change of major manufacturing process equipment, or manufacturing location for the API. Noramco shall advise Buyer in writing not less than six (6) months prior to implementation of such change. No such change shall affect Noramco's obligation or ability to provide API to Buyer in the quantities and within the times contemplated herein.

2.3 CoAs. Noramco shall provide a certificate of analysis with each shipment of API. Buyer shall be solely responsible for releasing API in connection with the manufacture of Products.

3. FORECASTS AND PURCHASE ORDERS

3.1 Forecasts.

3.1.1 Rolling Quarterly Forecasts. Commencing in 2019, on the first day of each calendar quarter throughout the Term, Minimum Quantities notwithstanding, Buyer shall provide to Noramco ******* (**) month rolling forecast (each, a "**Forecast**") of its anticipated purchases of API under this Agreement. The first ******* (Forecast period and binding forecast period, respectively. Redacted for confidentiality and as disclosure would be seriously prejudicial to interest of Cardiol) calendar months of each Forecast shall be binding on Buyer and shall constitute a firm commitment to issue a Purchase Order for the API indicated for such months. The balance of each Forecast shall be a non-binding, good faith estimate of Buyer's anticipated purchases of API during such period. Each Forecast will include information regarding quantities suitable for planned regulatory filings, including Manufacturing Quota and Procurement/Import Quota filings. Buyer acknowledges that any failure by Buyer to provide Forecasts in accordance with this Section 3.1.1 that are reasonable in light of Buyer's historic sales data may prevent Noramco from obtaining Manufacturing Quota and Procurement/Import Quota, respectively.

3.1.2 Variations. With respect to any Forecast submitted hereunder, the quantity of API Forecast with respect to each of the first two calendar quarters in such Forecast may not deviate by more than ** percent (**%) from the quantity of API Forecast in the immediately prior Forecast (for example, the quantity of an API forecasted for the first quarter of a given Forecast shall not vary by more than **% (Percentage of deviation permitted. Redacted for confidentiality and as disclosure would be seriously prejudicial to interest) from the quantity of such API forecasted for the second quarter in the immediately prior Forecast. For the avoidance of doubt, in the event any Forecast overlaps with any prior Forecast with respect to the binding period described in Section 3.1.1, Buyer acknowledges that, notwithstanding such overlap, the quantity of API in each binding period is fixed upon the submission of the first applicable Forecast and may not be changed (by any subsequent Forecast or otherwise) without Noramco's prior written consent.

3.1.3 Planning. With respect to each Forecast, Noramco may, within ******* calendar days (Notification period. Redacted for confidentiality and as disclosure would be seriously prejudicial to interest of Cardiol) of receipt thereof, notify Buyer that it will not be able to meet Buyer's anticipated demand for any API as reflected for any of the third and fourth quarters. In such event, the

Parties shall promptly meet to discuss in good faith to revise such Forecast, which shall be resubmitted by Buyer to Noramco with quantities mutually acceptable to both Parties. If, notwithstanding bona fide negotiations concerning Forecast and demand, if the Parties are unable to arrive at a mutually acceptable solution, Buyer may either terminate this Agreement for convenience or obtain additional supply from a third party without losing the exclusivity provided in Section 1.1.

3.2 Purchase Orders. Buyer shall place Purchase Orders for the API with Noramco from time to time in accordance with this Section 3.2. Each Purchase Order shall (i) specify in kilograms the quantity of API requested; and (ii) request only quantities of API consistent with the applicable binding portion of the applicable Forecast delivered in accordance with Section 3.1.1; and (iii) specify a delivery date. Noramco shall accept all Purchase Orders that comply with the foregoing requirements. Noramco may, in its sole discretion and without liability to Buyer, reject any Purchase Order that does not comply with any one or more of the foregoing requirements. Noramco shall notify Buyer in writing of any such Purchase Order rejection within ****** business days (Rejection notification period. Redacted for confidentiality and as disclosure would be seriously prejudicial to interest of Cardiol) of receiving such Purchase Order. Purchase Orders shall be binding upon Buyer when submitted to Noramco, and binding on Noramco when accepted (or not timely rejected). Notwithstanding anything to the contrary in this Section 3.2, all Purchase Orders remain subject to Article 8.

4. PRICE AND PAYMENT

4.1 Pricing. The price of API to be sold to Buyer under this Agreement ("**Price**") is as set forth in Section 1.1.5 and is expressed in U.S. dollars.

4.2 Price Adjustments.

4.2.1 Due to Technical Changes. Changes to the Specification or the applicable Quality Agreement requested by Buyer will be implemented only following a technical and cost review by the Parties and a written, signed amendment detailing the change, and are subject to the Parties reaching agreement on appropriate revisions to the Price and allocation of any other resulting costs. If the Parties agree to proceed with such amendment and Buyer accepts a proposed Price adjustment, Noramco shall implement the proposed change on the agreed timeframe, and the adjusted Price shall apply only to API that is manufactured under the amended Specification or Quality Agreement, as applicable.

4.3 Invoicing. Noramco shall invoice Buyer for API purchased hereunder upon tender of delivery in accordance with Section 5.1. Invoices shall be submitted by email as Buyer may specify in writing from time to time, and a copy of the invoice shall also be enclosed in the applicable shipment. Each invoice shall, to the extent applicable, identify Buyer's Purchase Order number, API batch numbers, names and quantities, Price, freight charges (if any) and the total amount to be remitted by Buyer.

4.4 Payment Terms. Subject to Sections 1.1.2 and 4.5, Buyer shall pay Noramco all amounts due hereunder within ******* calendar days from the date of invoice; *provided* that Buyer is not obligated to pay any invoice for API with respect to which Buyer has delivered a written objection pursuant to Article 6 until such Dispute has been resolved. Buyer shall make payments by electronic transfer of United States dollars to the account designated by Noramco in the applicable invoice (or otherwise in writing).

4.5 Payment Issues.

4.5.1 Non-Payment. Noramco shall be entitled to interest on any overdue sum at a rate equal to the lesser of ******* (Percentage of interest. Redacted for

confidentiality) per month or the highest rate permissible under applicable law. In addition, Noramco will not be obligated to accept or honor Buyer's Purchase Orders or to make any shipments of API hereunder unless Buyer's account with Noramco is in good standing. Buyer agrees to pay all costs and expenses, including reasonable attorneys' fees, incurred by Noramco in the collection of any sum payable by Buyer to Noramco.

4.5.2 Recurring Non-Payment. If Buyer's payment is overdue (i) for ******* (Period of time. Redacted for confidentiality) or more consecutive invoices or (ii) more than ******* times (Number of times. Redacted for confidentiality) (whether or not consecutive) in any Year, then Noramco shall have the right, in its sole discretion, to change Buyer's payment terms under Section 4.4 effective immediately upon written notice to Buyer.

4.5.3 Credit Risk. If at any time the financial status of Buyer, or the credit risk involved, shall become unsatisfactory to Noramco acting reasonably, Noramco may require cash or satisfactory security prior to accepting such Purchase Order or making shipments of API hereunder. The election by Noramco to require such cash or security shall not affect the obligation of Buyer to take and pay for the contracted API.

4.5.4 Remedies Cumulative. For the avoidance of doubt, Noramco's rights under this Section 4.5 are cumulative and in addition to any other rights or remedies to which it may be entitled at law or in equity.

4.6 Taxes. In addition to the Price for API, Buyer shall pay Noramco any and all governmental taxes, charges or duties of every kind (excluding any tax based upon Noramco's net income) that Noramco may be required to collect or pay upon sale, transfer or shipment of API under this Agreement.

5. SHIPMENT OF API

5.1 Delivery. Noramco shall make deliveries of API to Buyer or its legal designate CIP Destination - Freight Prepaid and Allowed. Risk of loss of API shall pass to Buyer in accordance with such Incoterm. Title to API shall transfer to Buyer concurrently with risk of loss. Noramco shall deliver within ******* (Period of time. Redacted for confidentiality) days of the delivery date set forth in the applicable Purchase Order. Noramco shall use only carriers that are experienced in the transport of high value pharmaceuticals and that have a recognized record of dependable delivery.

5.2 Packing. Noramco shall pack and label shipping containers in accordance with applicable law and transport guidelines, and the Specification.

6. PRODUCT CLAIMS

6.1 Inspection and Rejection. All API may be inspected by Buyer and rejected if the API does not meet the warranty set forth in Section 9.1(iii) (any such API, "Nonconforming API"). API will be deemed accepted if Noramco does not receive written notice from Buyer to the contrary, setting forth in reasonable detail the claimed nonconformity and making a sample of the alleged Nonconforming API available for inspection by Noramco at Buyer's premises or, upon request, shipped to Noramco, within thirty ******* (Period of time. Redacted for confidentiality) after tender of delivery to Buyer of such API.

6.2 Assessment. Upon receipt of a timely-delivered rejection notice and sample pursuant to Section 6.1, Noramco will have thirty (30) calendar days to inspect the alleged Nonconforming API and

make a reasonable assessment of the alleged nonconformance. If Noramco agrees, or there is a determination under Section 6.3, that any API is Nonconforming API, then Noramco, at its sole cost (including shipping), and as Buyer's sole remedy, shall promptly replace the Nonconforming API. Buyer shall, at Noramco's election and expense, either return the Nonconforming API to Noramco or destroy the Nonconforming API and have an authorized officer of Buyer certify such destruction in writing.

6.3 Dispute Resolution. Any Dispute between the Parties concerning whether rejected API is in fact Nonconforming API that the Parties are unable to resolve within a ******* day period (Number of days. Redacted for confidentiality) from Buyer's rejection notice will be investigated in accordance with the Quality Agreement. If the Parties still cannot agree after such investigation whether rejected API is in fact Nonconforming API, the Parties will arrange to have samples submitted to a qualified independent laboratory mutually agreed to by Noramco and Buyer for testing; or, in the event of a Dispute related to cGMP, then to a mutually agreed upon third party expert for resolution. Such laboratory will use the test methods contained in the applicable Specification. The determination as to whether all or part of such API is Nonconforming API by such laboratory or expert, as the case may be, will be final and binding on the Parties absent manifest error. The fees and expenses of the laboratory or expert, as the case may be, incurred in making such determination will be paid by Noramco if the API is determined to be Nonconforming API, and by Buyer in all other cases.

7. PRODUCT COMPLAINTS AND RECALLS

7.1 Customer Complaints. During the Term, Noramco shall reasonably cooperate with Buyer in connection with any necessary investigation arising from customer complaints relating to Product in accordance with the Quality Agreement. Without in any manner limiting the foregoing, each of Buyer and Noramco shall comply with FDA requirements for complaint handling. Buyer shall maintain a system for monitoring, investigating, and following up on adverse event reports received by it involving Products, and shall provide prompt notice to Noramco of any Product complaints, including, but not limited to, information concerning adverse drug events that are required to be reported to FDA or Health Canada, side effects, injury, toxicity, or sensitivity reaction.

7.2 Regulatory Action. Each Party shall notify the other Party of any regulatory action or other action concerning the safety of any API or Product in accordance with the Quality Agreement, including but not limited to FDA or Health Canada inspection reports, warning letters or import alerts.

7.3 Product Recall. In the event of a Product recall, field alert, withdrawal or field correction ("Recall") that does not result from Nonconforming API, then, as between Noramco and Buyer, Buyer shall (i) be responsible for the expenses of the recall and (ii) reimburse Noramco for any costs reasonably expended by Noramco to assist Buyer to investigate and/or effect the Recall. Noramco shall, subject to Sections 10.4 and 10.5, bear the direct expenses of a Recall if the Recall would not have resulted but for Noramco's breach of its warranty set forth in Section 9.1(iii). For the purposes of this Section 7.3, the direct expenses of Recall shall mean the expenses of notification and destruction or return of the Recalled Product and the cost of the API used in the Recalled Product.

8. SUPPLY ISSUES

8.1 Manufacturing Interruptions. Buyer acknowledges that the day-to-day manufacturing operation of the facilities used by Noramco to produce API may be subject to interruptions, fluctuations, slow-downs, suspensions and reductions in the ordinary course of business due to a variety of reasons ("**Manufacturing Interruptions**"). If Noramco believes that a Manufacturing Interruption is reasonably likely to result in a material reduction of any API available to be delivered to Buyer, Noramco shall notify Buyer and consult with Buyer about such Manufacturing Interruption prior to or as soon as reasonably

possible after the commencement of such Manufacturing Interruption. After any Manufacturing Interruption resulting in a material reduction of any API terminates, Noramco shall promptly communicate to Buyer regarding such Manufacturing Interruption, the reason therefor, the actions taken, and any corrective actions possible to prevent a repeat event.

8.2 Manufacturing Quota Restrictions. Buyer acknowledges that the production and supply of API is contingent upon DEA rules, orders, or directives related to Manufacturing Quotas for API, which may limit or restrict the manufacture or supply of API by Noramco to Noramco's customers ("**Manufacturing Quota Restrictions**"). If Noramco believes that a Manufacturing Quota Restriction is reasonably likely to result in a material reduction or suspension of the delivery of an API to Buyer, Noramco shall promptly consult with Buyer to coordinate with respect to their respective obligations, in accordance with Sections 8.4 and 8.5.

8.3 Procurement/Import Quota Restrictions. It is the sole responsibility of Noramco, and Noramco shall use commercially reasonable efforts, to obtain for its Importer of Record (as set out in Section 2.1) Procurement/Import Quota for API. Noramco acknowledges API manufactured by Noramco is contingent upon DEA (and/or Canadian) rules, orders, or directives related to Procurement/Import Quotas for API that may limit or restrict Noramco's customers from receiving API manufactured by Noramco ("**Procurement/Import Quota Restrictions**"). If Noramco believes that a Procurement/Import Quota Restriction is reasonably likely to result in Buyer's inability to take delivery of any API from Noramco on the delivery date set forth in the applicable Purchase Order, Noramco shall promptly consult with Buyer to coordinate with respect to their respective obligations, in accordance with Section 8.4.

8.4 Failure to Obtain Quota. Each Party shall use commercially reasonable efforts to prepare and plan for the supply and purchase of API against Purchase Orders given in accordance with this Agreement, in anticipation of Noramco and its Importer of Record receiving applicable quota. However, in the event that Noramco or its Importer of Record has not obtained the necessary Manufacturing Quota or Procurement/Import Quota, as the case may be, to allow it to perform its obligations under this Agreement, Noramco shall promptly inform Buyer in writing. In the event that there is not sufficient Manufacturing Quota or Procurement/Import Quota with respect to an outstanding Purchase Order for API, such Purchase Order ******* (Dealing with purchase orders and any remedies for the parties in the event of failure to obtain quote. Redacted for confidentiality and as disclosure would be seriously prejudicial to interest of Cardiol)

8.5 Allocation and Cooperation. Buyer recognizes that, due to Manufacturing Interruptions or Manufacturing Quota Restrictions, Noramco may produce less API in any given time period than anticipated, and that Noramco may, at its discretion, allocate its available supply of API among its customers on such basis as Noramco deems fair and reasonable. Notwithstanding the above, Noramco shall (i) use commercially reasonable efforts to minimize interruptions in the supply of API to Buyer, (ii)

use commercially reasonable efforts to coordinate with Buyer to mitigate against the consequences of any shortages related to Manufacturing Interruptions or Manufacturing Quota Restrictions and (iii) honor its obligations under Sections 1.1.5 and 3.1.1 prior to allocating API to any other customer.

8.6 No Liability for Interruptions and Restrictions. Noramco shall not be liable to Buyer for any damage, inconvenience, penalty or other consequence that may arise from any bona fide Manufacturing Interruptions, Manufacturing Quota Restrictions or Procurement/Import Quota Restrictions.

9. WARRANTIES; DISCLAIMER

9.1 Noramco Warranties. Noramco hereby represents, warrants and covenants to Buyer that (i) it has the corporate authority to enter into this Agreement and to perform its obligations hereunder; (ii) it is not subject to any legal, contractual or regulatory restriction, limitation or conditions that could reasonably be expected to affect adversely its ability to perform hereunder, subject to Article 8; and (iii) all API sold to Buyer under this Agreement shall, as of tender of delivery in accordance with Section 5.1 from the Noramco facility have been manufactured in accordance with cGMP and conform to the Specification.

9.2 Buyer Warranties. Buyer hereby represents, warrants and covenants to Noramco that (i) it has the corporate authority to enter into this Agreement and to perform its obligations hereunder; (ii) it is not subject to any legal, contractual or regulatory restriction, limitation or conditions that could reasonably be expected to affect adversely its ability to perform hereunder, subject to Article 8; and (iii) all API supplied to Buyer by Noramco hereunder shall be held, used and disposed of by Buyer in accordance with all applicable laws, rules and regulations, and Buyer will otherwise comply with all laws, rules and regulations applicable to Buyer's performance under this Agreement and its manufacture, distribution and/or sale of Products.

9.3 Disclaimer of Warranties. THE PARTIES AGREE THAT, EXCEPT AS EXPRESSLY SET FORTH IN THIS ARTICLE 9, NEITHER PARTY MAKES ANY REPRESENTATIONS OR EXTENDS ANY WARRANTIES OF ANY KIND, AND THE LIMITED REPRESENTATIONS AND WARRANTIES CONTAINED IN THIS ARTICLE 9 ARE THE SOLE REPRESENTATIONS AND WARRANTIES WITH RESPECT TO THE API AND THE PRODUCTS AND ARE MADE EXPRESSLY IN LIEU OF AND EXCLUDE ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES PROVIDED BY APPLICABLE LAW, INCLUDING BUT NOT LIMITED TO THE UCC AND THE UN CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS.

10. INDEMNIFICATION; LIMITATIONS OF LIABILITY; INSURANCE

10.1 Indemnification by Buyer. Buyer shall indemnify, defend and hold Noramco and each of its Affiliates and its and their respective officers, directors, employees and agents (each, a "Noramco Indemnitee") harmless from and against any liability, loss, costs, damage and/or expense, including without limitation, reasonable attorneys', experts' and consultants' fees and disbursements ("Losses") in connection with any and all suits, investigations (governmental or otherwise), claims, proceedings or demands (each, an "Action") initiated or filed against a Noramco Indemnitee by a third party to the extent resulting from or arising out of (i) any breach of any representation, warranty or covenant hereunder by any Buyer Indemnitee (ii) a Buyer Indemnitee's negligence or willful misconduct or (iii) the manufacture, use or sale of Product by or for Buyer, including in connection with intellectual property or product

liability; in each case except to the extent of Noramco's indemnity obligations pursuant to Section 10.2. In addition, Buyer shall indemnify, defend and hold the Noramco Indemnitees harmless from and against any Losses to the extent resulting from or arising out of any filings with any Regulatory Authority (including the FDA) by or for Buyer or any of its Affiliates or licensees, including filings under 21 U.S.C. 355 and/or Section 505 of the U.S. Food and Drug Act, as now or hereafter in effect, or under similar law (including non United States law), and related claims or proceedings (including Losses associated with Noramco's obligation to respond to third party subpoenas).

10.2 Indemnification by Noramco. Noramco shall indemnify, defend and hold Buyer and each of its Affiliates and its and their respective officers, directors, employees and agents (each, a "Buyer Indemnitee") harmless from and against any Losses in connection with any Action by a third party to the extent resulting from or arising out of (i) any breach of any representation, warranty or covenant hereunder by any Noramco Indemnitee or (ii) a Noramco Indemnitee's negligence or willful misconduct; in each case except to the extent of Buyer's indemnity obligations pursuant to Section 10.1.

10.3 Indemnification Procedure. Upon the occurrence of an event that entitles a Noramco Indemnitee or a Buyer Indemnitee to indemnification under Section 10.1 or 10.2, respectively, the indemnified Party shall give prompt written notice to the indemnifying Party providing reasonable details of the nature of the event and basis of the indemnity claim and further expressly stating therein that it is seeking indemnity pursuant to this Agreement. For the avoidance of doubt, and without prejudice to the indemnified Party's obligation to give prompt written notice, an indemnifying Party's knowledge of events or circumstances pursuant to which an indemnified Party might seek indemnification, including but not limited to correspondence between the Parties regarding a matter for which indemnity is not expressly sought, shall not constitute the notice required by this provision, and any attorneys, experts or consultant fees or expenses incurred by an indemnified Party prior to proper notice shall be the sole responsibility of such Party; *provided,* that any failure to give such timely notice shall not bar any indemnification claim unless and to the extent the indemnifying Party shall be or has been materially prejudiced by failure to receive such timely notice. The indemnifying Party will have the right, at its expense and with counsel of its choice, to defend, contest, or otherwise protect against any Action subject to indemnity. The indemnified Party will also have the right, but not the obligation, to participate, at its own expense, in the defense thereof with counsel of its choice. The indemnified Party shall cooperate to the extent reasonably necessary to assist the indemnifying Party in defending, contesting or otherwise protesting against any Action subject to indemnity so long as the reasonable cost in doing so is paid for by the indemnifying Party. If the indemnifying Party fails, within thirty (30) calendar days after receipt of a notice described in the first sentence of this Section 10.3 (1) to notify the indemnified Party of its intent to defend or (ii) to defend, contest or otherwise protect against any Action subject to indemnity or fails to diligently continue to provide the defense after undertaking to do so, the indemnified Party will have the right, upon ten (10) calendar days' prior written notice to the indemnifying Party, to defend, settle and satisfy any Action subject to indemnity and recover the costs of the same from the indemnifying Party. No Action subject to indemnity may be settled other than by the Party defending the same, and then only with the consent of the other Party, which shall not be unreasonably withheld; *provided,* however, that the indemnifying Party shall have no obligation to obtain the consent to any settlement that does not impose on the indemnified Party (including any Buyer Indemnitee or Noramco Indemnitee, as the case may be) any liability or obligation, whether financial or otherwise, and does not admit to any wrongdoing by the indemnified Party (including any Buyer Indemnitee or Noramco Indemnitee, as the case may be).

10.4 No Consequential Damages. Neither Party shall be liable to the other Party for special, indirect, incidental, punitive or consequential damages, or lost profits, revenues, anticipated savings, opportunity, business, goodwill or data, even if designated direct damages, whether **in** contract, warranty, negligence, tort, strict liability or otherwise, even if such Party has been advised of the possibility thereof.

10.5 Limitation on Liability. Noramco's maximum liability under this Agreement for any reason whatsoever, not including **its** indemnity obligations, shall not exceed the total Price paid to Noramco for the API giving rise to the claim; *provided,* that the foregoing shall not limit Noramco's liability for damages arising from its gross negligence or willful misconduct.

10.6 Insurance. Each Party shall, at its own expense, obtain and maintain during the Term and for ******* (Period of time. Redacted for confidentiality and as disclosure would be seriously prejudicial to interest of Cardiol) years thereafter, insurance on a claims-made basis, in amounts and types that would reasonably be expected to cover any liabilities arising from such Party's indemnification obligations under this Agreement. Such insurance shall be maintained with companies having an A.M. Best's rating of A- VII or better. Each Party shall provide the other Party, upon request, with certificates of insurance evidencing the insurance hereunder. Each Party shall name the other Party as additional insureds on all applicable policies of insurance hereunder.

11. CONFIDENTIALITY

11.1 Obligations of Non-Disclosure. Each Party agrees that (i) it will not disclose any Confidential Information to any third party at any time during the Term without the prior written consent of the disclosing Party and (ii) it will not make use of any Confidential Information for any purpose other than the performance of its obligations under this Agreement. Notwithstanding the foregoing, a Party may disclose Confidential Information to its Affiliates, and to its and their respective officers, directors, employees, independent contractors, professional consultants (including attorneys and accountants), and agents ("**Representatives**"), in each case who have a specific need to know such Confidential Information, who are bound by obligations of confidentiality and non-use at least as stringent as those set forth in this Agreement, and who have been made aware of the receiving Party's obligations under this Agreement. The receiving Party shall be liable to the disclosing Party for any breach of this Article 11 caused by the receiving Party's Representatives.

11.2 Compelled Disclosure. Notwithstanding Section 11.1, either Party may disclose Confidential Information as required by law, regulation or court order or by the listing standards, rules or agreements of any public exchange on which any securities of the receiving Party are listed so long as the receiving Party (i) uses commercially reasonable efforts to give the disclosing Party as much prior notice of such required disclosure as circumstances permit, (ii) allows the disclosing Party to contest such disclosure or to seek a protective order or similar remedy, and reasonably cooperates with the disclosing Party in such efforts, and (iii) limits the disclosure to only the information required to be disclosed. The receiving Party may disclose Confidential Information without notice to any Regulatory Authority in connection with any routine examination, investigation, regulatory sweep or other regulatory inquiry not specifically targeted to the disclosing Party.

11.3 Ownership. As between the Parties, Confidential Information is and shall remain the property of the disclosing Party, and the disclosing Party shall retain all right, title and interest in and to its Confidential Information. Neither this Agreement nor the disclosure of Confidential Information hereunder grants or implies to the receiving Party any right or license to use or practice any intellectual property of the disclosing Party.

11.4 Return. Upon the expiration or termination of this Agreement, or upon the disclosing Party's earlier written request, the receiving Party shall immediately cease using all Confidential Information and shall return all Confidential Information to the disclosing Party within thirty (30) calendar days (or, with the disclosing Party's permission, destroy it and certify as to such destruction), along with all copies and reproductions. Notwithstanding the foregoing, (i) the receiving Party may retain a single copy of Confidential Information in the files of its legal counsel for the sole purpose of proving

what was disclosed, (ii) the receiving Party is not required to return or destroy any Confidential Information if doing so would violate any law, regulation or court order, (c) the receiving Party shall not be required to expunge any minutes or written consents of its board of directors (or equivalent governance body), and (iv) to the extent that the receiving Party's computer back-up or archiving procedures create copies of Confidential Information, the receiving Party may retain such copies for the period it normally archives backed-up computer records, so long as such copies are not readily accessible and arc not used or consulted for any purpose other than disaster recovery. Any Confidential Information retained pursuant to the foregoing sentence shall remain subject to this Agreement until destroyed or no longer deemed Confidential Information based on the exclusions to the definition of Confidential Information.

11.5 Duration. The confidentiality and non-use obligations of this Article 11 shall remain in effect throughout the Term and for a period of ten (10) years thereafter; *provided,* that Confidential Information that is otherwise protected by law or regulation (e.g., trade secret and data privacy) shall remain protected as, and for as long as, such law or regulation requires.

12. INTELLECTUAL PROPERTY

12.1 Proprietary IP. For purposes of this Agreement: (i) all intellectual property owned by a Party or any of its Affiliates as of the Effective Date shall be deemed owned by such Party; (ii) all intellectual property licensed to a Party or any of its Affiliates by a third party at any time during the Term shall be deemed owned by such Party; and (iii) all intellectual property generated, conceived or reduced to practice by or for a Party or any of its Affiliates outside the scope of activities under this Agreement shall be deemed owned by such Party (the foregoing collectively, a Party's "**Proprietary IP**").

12.2 Inventions. All Inventions, to the extent (i) specific to the development, manufacture, use or sale of any Products or (ii) dependent on Buyer's Proprietary IP, shall be the exclusive property of Buyer. All other Inventions shall be the exclusive property of Noramco. The Parties shall cooperate to achieve the allocation of rights to Inventions anticipated herein. Each Party shall be solely responsible for the costs of filing, prosecution and maintenance of patents and patent applications on, and otherwise protecting, its Inventions.

12.3 Licenses. Buyer hereby grants to Noramco a non-exclusive, paid-up, royalty-free, nontransferable, sublicensable (solely to Noramco's subcontractors), license during the Term to use any intellectual property (including Buyer's Inventions pursuant to Section 12.2) necessary for the performance of Noramco's obligations under this Agreement, including any Buyer-provided specifications. Noramco shall notify Buyer in writing if it licenses any third party (other than a Noramco Affiliate that is bound by the requirements of this Agreement) to use Noramco's intellectual property rights to manufacture API, including providing notice of the name and address of the third party. The reason for the foregoing sentence is to assist Buyer in verifying the exclusivity granted in Section 1.1.

12.4 Infringement. If Noramco's process of manufacture of an API becomes or is likely to become the subject of an infringement claim or Action, Noramco may, in its sole discretion, (i) procure, at a cost to be reasonably allocated between the Parties, the right to use the applicable intellectual property in the process for manufacture of such API, (ii) change the process of manufacture with the intent of overcoming such allegation of infringement or (iii) if, in Noramco's sole discretion, neither (i) nor (ii) above are commercially reasonable, terminate this Agreement. The foregoing, together with any right to indemnity pursuant to Section 10.2 shall be Buyer's sole remedy in respect of any breach of the warranty set forth in Section 9.1(iii).

13. TERM AND TERMINATION

13.1 Term. The initial term of this Agreement shall commence as of the Effective Date and shall expire on December 31, 2038, unless sooner terminated as expressly provided for in this Agreement. Thereafter, the term of this Agreement shall automatically renew for successive periods of two (2) calendar Years each, unless written notice of termination is given by a Party to the other at least eighteen (18) months before the expiration of the initial term or the completion of the then-current renewal term, as the case may be, or unless sooner terminated as expressly provided for in this Agreement. The initial term and any renewal term are referred to as the "**Term**".

13.2 Termination for Breach. This Agreement may be terminated by either Party if the other Party (the "**Breaching Party**") is in material breach of any of its obligations hereunder (including, without limitation, any payment obligations) as follows: (i) the terminating Party must send written notice of the material breach to the Breaching Party, (ii) if the breach is of a payment obligation, the termination becomes effective ******* calendar days after the date of such written notice if the Breaching Party has not cured such breach within such period, and (iii) for all other breaches, the termination becomes effective ******* calendar days after the date of such written notice if the Breaching Party has not cured such breach within such period; *provided,* that if the material breach is not capable of being cured within that ******* day period, and the Breaching Party has commenced within that ******* day period activities reasonably expected to cure that material breach and thereafter uses diligent efforts to complete the cure as soon as practicable, the Breaching Party shall have up to an additional ******* days to cure such breach (for an aggregate cure period equal to ******* calendar days from the date written notice of the material breach was first given). (Period of days. Redacted for confidentiality and as disclosure would be seriously prejudicial to interest of Cardiol)

13.3 Termination for Bankruptcy. Either Party may terminate this Agreement without prior notice to the other upon the occurrence of any of the following involving the other Party:

(a) that other Party files a petition seeking an order for relief under the Federal Bankruptcy Code (Title 11 of the United States Code), as now or hereafter in effect, or under similar law (including non United States law), or files a petition in bankruptcy or for reorganization or for an arrangement pursuant to any state bankruptcy law or any similar state law (including non United States law); or

(b) an involuntary case against that Party as debtor is commenced by a petition under the Federal Bankruptcy Code (Title 11 of the United States Code), as now or hereafter in effect, or under similar law (including non United States law), or a petition or answer proposing the adjudication of that Party as a bankrupt or its reorganization pursuant to any state bankruptcy law or any similar state law (including non United States law) is filed in any court and not dismissed, discharged or denied within sixty (60) calendar days after the filing thereof; or

(c) a custodian, receiver, United States Trustee, trustee or liquidator of that Party or of all or substantially all of that other Party's property is appointed in any proceedings brought by that Party; or if any custodian, receiver, United States Trustee, trustee or liquidator is appointed in any proceedings brought against that Party and is not be discharged within sixty (60) calendar days after that appointment, or if that Party consents to or acquiesce in that appointment; or

(d) if that other Party generally does not pay its debts (including its debts to Noramco, if the other Party is the Buyer) as those debts become due, or makes an assignment for the benefit of creditors, or admits in writing its inability to pay its debts generally as they become due.

13.4 Other Termination Rights. Either Party may terminate this Agreement upon written notice as provided in Section 16.2; and Noramco may terminate this Agreement upon written notice to Buyer as provided in Section 12.4.

13.5 Obligations on Termination. Any expiration or termination of this Agreement does not release the Parties from any liabilities or obligations that accrued as of the date thereof. In addition, the obligations undertaken by each Party under Sections 4.1, 4.4 through 4.6 and 13.5, as well as Articles 6, 7, 9, 10, 11, 12 (except for Section 12.3) and Articles 14 through 25 (except for Section 22.2), shall survive termination or expiration of this Agreement indefinitely or for such shorter period as is provided in such Articles.

14. INDEPENDENT CONTRACTORS

The status of the Parties under this Agreement is that of independent contractors. Nothing is this Agreement may be construed as establishing a partnership or joint venture relationship between the Parties. Neither Party has the right to enter into any agreements on behalf of the other Party, nor may it represent to any person that it has that right or authority.

15. NOTICES

All notices, requests, demands and other communications under this Agreement shall be in writing, shall be deemed to have been duly given if addressed and sent to the contact information below, and shall be deemed to have been made: (i) on the date of service if served personally on the Party; (ii) on the second business day after delivery to an overnight courier service if first available delivery is indicated and paid for; (iii) on the third business day after mailing if mailed to the Party to whom notice is to be given, by first class mail, registered or certified, postage prepaid; or (iv) on the date of transmission, if sent by email with confirmation of transmission. Either Party may change its contact information for purposes of this Article 15 by giving the other Party written notice of the new contact information in the manner set forth above.

If to Buyer:	Cardiol Therapeutics Inc. 2275 Upper Middle Road East Suite 101 Oakville, ON, Canada L6H 0C3 ******* ******* *******
If to Noramco:	Noramco, Inc. 500 Swedes Landing Road Wilmington, Delaware 19801 ******* ******* *******

16. FORCE MAJEURE

16.1 Force Majeure Events. Neither Party will be liable for non-performance or delay in the fulfillment of its obligations when that non-performance or delay is occasioned by any cause beyond the reasonable control of such Party, including without limitation, acts of God, fire, flood, earthquakes,

explosions, sabotage, strikes, or labor disturbances (regardless of the reasonableness of the demands of the labor force), civil commotion, riots, military invasions, wars, failure of utilities, failure of carriers, inability to obtain any required raw material, energy source, equipment, labor or transportation, at prices and on terms Noramco deems practicable from its usual sources of supply or any acts, restraints, requisitions, regulations, or directives issued by a competent government authority, including changes in law or regulation ("**Force Majeure Events**"); *provided,* that a Force Majeure Event shall never excuse a Party from paying any sum of money owed under the terms of this Agreement.

16.2 Discharge of Obligations. In the event that either Party is prevented from discharging its obligations under this Agreement on account of a Force Majeure Event, that Party shall promptly notify the other, and shall nevertheless make every reasonable endeavor, in the utmost good faith, to discharge its obligations, even if in a partial or compromised manner. In the event that a Force Majeure Event continues for a period of ******* consecutive calendar days, or for periods which aggregate ninety ******* during any ******* period, the Party not claiming the Force Majeure Event will be entitled to terminate this Agreement on written notice to the affected Party, but without penalty or liability to the affected Party, subject to Section 13.5. (Period of days. Redacted for confidentiality and as disclosure would be seriously prejudicial to interest of Cardiol)

17. ENTIRE AGREEMENT; MODIFICATION

This Agreement, including the appendices hereto, which are hereby incorporated by reference, constitutes the entire agreement of the Parties with respect to its subject matter and supersedes all prior agreements, arrangements, dealings and writings between the Parties that relate to the matters covered herein. Any terms and conditions of an invoice, acknowledgement or similar document provided by Noramco for API, or any terms and conditions of Purchase Orders or similar document provided by Buyer for API which are inconsistent with or in addition to the terms of this Agreement shall be null and void. In the event of a conflict between the terms and conditions of this Agreement and the terms and conditions of the Quality Agreement set forth in Appendix B, this Supply Agreement shall prevail. Except as expressly provided herein, this Agreement may not be amended or modified except in writing executed by the duly authorized representatives of both Parties.

18. WAIVER

No waiver of a breach or default hereunder will be considered valid unless in writing and signed by the Party giving that waiver, and no waiver will be deemed a waiver of any subsequent breach or default of the same or similar nature.

19. DISPUTE RESOLUTION

19.1 Mediation. Any controversy or claim arising out of or relating to this Agreement, including any such controversy or claim involving any Affiliate of any Party (a "**Dispute**"), shall first be submitted to nonbinding mediation according to the *Commercial Mediation Procedures* of the American Arbitration Association **(**"**AAA**") *(see* www.adr.org). Such mediation shall be attended on behalf of each Party for at least one session by a senior business person with authority to resolve the Dispute. Any period of limitations that would otherwise expire between the initiation of a mediation and its conclusion shall be extended until twenty (20) calendar days after the conclusion of the mediation.

19.2 Arbitration. Any Dispute that cannot be resolved by mediation within forty-five (45) calendar days of notice by one Party to the other of the existence of a Dispute (unless the Parties agree to extend that period) shall be resolved by arbitration in accordance with the *Commercial Arbitration Rules* of the AAA ("AAA **Rules**"; *see* www.adr.org) and the Federal Arbitration Act, 9 §1 et seq. The

arbitration shall be conducted in Delaware, by one arbitrator appointed in accordance with the AAA Rules.

19.3 Limited Discovery. The arbitrator shall follow the *ICDR Guidelines for Arbitrators Concerning Exchanges of Information* in managing and ruling on requests for discovery. The arbitrator, by accepting appointment, undertakes to exert her or his best efforts to conduct the process so as to issue an award within eight (8) months of her or his appointment; *provided,* that failure to meet that timetable shall not affect the validity of the award.

19.4 Governing Law. The arbitrator shall decide the Dispute in accordance with the substantive law of Delaware. All documents and proceedings in connection with any Dispute shall be in the English language.

19.5 Awards. The arbitrator may not award any damages inconsistent with Article 10, nor may the arbitrator apply any multiplier to any award of actual damages, except as may be required by statute. The Party that prevails in any Dispute resolution proceeding shall have the right to recover from the other Party its costs and expenses incurred in such Dispute, including reasonable fees for attorneys, expert witnesses and court costs, in addition to any other relief awarded. The award of the arbitrator may be entered in any court of competent jurisdiction.

19.6 Injunctive Relief. Notwithstanding anything to the contrary in this Article 19, in connection with any actual or threatened breach of Article 11, the Parties acknowledge and agree that, due to the unique nature of the Confidential Information, a breach of Article 11 may cause irreparable damage to the disclosing Party for which monetary damages would be inadequate. Accordingly, the disclosing Party shall be entitled to seek injunctive relief or other remedies from any court of competent jurisdiction, and the Parties waive the requirement of any bond being posted as security in any application for such relief.

20. SEVERABILITY

Should any part or provision of this Agreement be held unenforceable or in conflict with applicable law, the invalid or unenforceable part or provision will, provided that it does not go to the essence of this Agreement, be replaced with a revision that accomplishes, to the extent possible, the original commercial purpose of that part or provision in a valid and enforceable manner, and the balance of this Agreement remains in full force and effect and binding upon the Parties.

21. SUCCESSORS AND ASSIGNS

This Agreement may not be assigned or otherwise transferred by a Party without the prior written consent of the other Party; *provided,* that either Party may, without such consent, but with notice to the other Party, assign this Agreement, in whole, (i) in connection with the transfer or sale of all or substantially all of its assets or the line of business for the API or Product to which this Agreement relates, (ii) to a successor entity or acquirer in the event of a merger, consolidation or change of control, or (iii) to any Affiliate. Any purported assignment in violation of the preceding sentence will be void. Any permitted assignee will assume the rights and obligations of its assignor under this Agreement.

22. THIRD PARTIES

21.1 No Benefit to Third Parties. The representations, warranties, covenants and agreements set forth in this Agreement are for the sole benefit of the Parties and their successors and permitted assigns, and shall not be construed as conferring any rights on any other persons or entities.

21.2 Participating Affiliates. From time to time, Noramco and Buyer may agree to permit one or more of Buyer's Affiliates to purchase API directly from Noramco under this Agreement. Upon such agreement, Noramco and each designated Affiliate shall execute a participation agreement substantially in the form of Appendix D (a "**Participation Agreement**"), whereupon such designated Affiliate shall be deemed a "**Participating Affiliate**". Each Participation Agreement shall constitute an independent contract between Noramco and such Participating Affiliate; *provided,* that (1) any and all requests by Buyer or any of its Affiliates for indemnification by Noramco pursuant to Section 10.2 shall be brought, pursued, managed and maintained solely by and through Buyer on behalf of itself and all of its Affiliates and (ii) any notice required or permitted to be made by Noramco hereunder may be made solely to Buyer in accordance with Section 15, and need not be separately sent to any Participating Affiliate. Buyer agrees that execution of a Participation Agreement by a Participating Affiliate shall represent such Participating Affiliate's independent acceptance of, and agreement to be bound by, the terms and conditions of this Agreement. Nonetheless, Buyer shall remain responsible and liable to Noramco for its Participating Affiliates.

22. PUBLICITY

******* (Circumstances public statements regarding the other party are allowed. Redacted for confidentiality and as disclosure would be seriously prejudicial to interest of Cardiol) neither Party may make any press release or public statement regarding the subject matter of this Agreement or the existence thereof or use the other Party's or its Affiliates' names, trademarks, logos, symbols or other image in any form of advertising, promotion or publicity without the prior written consent of the other Party (which consent shall not be unreasonably or arbitrarily withheld or delayed), except to the extent that the press release or public statement may be required by applicable law.

23. CONSTRUCTION

The division of this Agreement into Articles, sections, subsections and Appendices and the insertion of headings are for convenience of reference only and shall not affect the interpretation of this Agreement. Unless otherwise indicated, any reference in this Agreement to an Article, Section or Appendix refers to the specified Article, Section or Appendix to this Agreement. In this Agreement, the terms "this Agreement", "hereof", "herein", "hereunder" and similar expressions refer to this Agreement as a whole (including the Appendices) and not to any particular part, Article, Section, Appendix or the provision hereof. The word "including" (with its grammatical variations) means "including without limitation," "including but not limited to", or words of similar import. The language in this Agreement is to be construed in all cases according to its fair meaning. Noramco and Buyer acknowledge that each Party and its counsel have reviewed and revised this Agreement and that any rule of construction, to the effect that any ambiguities are to be resolved against the drafting Party, are not to be employed in the interpretation of this Agreement.

24. COUNTERPARTS

This Agreement may be executed in counterparts, each of which will be an original as against either Party whose signature appears thereon, but all of which together constitutes one and the same instrument. This Agreement may be delivered electronically by email of a signed PDF copy.

[Remainder of Page is Intentionally Blank]

IN WITNESS WHEREOF, each of the Parties has caused its duly authorized representative to execute this Agreement as of the Effective Date.

CARDIOL THERAPEUTICS INC.		**NORAMCO, INC.**	
Signature:	/s/ David Elsley	Signature:	/s/ Bill Grubb
Print Name:	David Elsley	Print Name:	William B Grubb III (Bill)
Title:	CEO	Title:	VP Global Business Development and Innovation

Exhibit 4.6

Certain identified information has been excluded from the exhibit pursuant to Item 601(a)(6) of Regulation S-K due to personal privacy concerns. Redacted information is indicated by: [***]

DEVELOPMENT AGREEMENT

THIS DEVELOPMENT AGREEMENT is entered into as of August 29th, 2018 (the "**Effective Date**")

BETWEEN:

CARDIOL THERAPEUTICS INC., a Canadian corporation

("**Cardiol**")

- and -

CLINICAL ACADEMIC RESEARCH ORGANIZATION, S.A. DE C.V., a Mexican corporation

("**CARO**")

RECITALS

A. Cardiol is a nanotherapeutics company focused on the research and development of proprietary drug formulations for the treatment of heart failure (collectively, the "**Compounds**").

B. CARO Is a company dedicated to providing clinical and scientific experimentation and consulting, as well as performing development activities by itself or through third-party providers.

C. Cardiol desires to work with CARO for further research and development of the Compounds.

D. This Agreement is intended to provide the terms and conditions under which Cardiol and CARO will collaborate for the development of the Compounds.

NOW THEREFORE, in consideration of the premises and the mutual covenants and agreements set forth herein, the Parties agree as follows:

ARTICLE 1
DEFINITIONS

1.1. Definitions

As used in this Agreement the following terms shall have the following definitions:

(a) "**Affiliate**" means, with respect to a Party, any person or entity directly or indirectly controlling, controlled by, or under common control with, such Party. For purposes of this Agreement, the term "**controlled**" (including the terms "**controlled by**" and "**under common control with**") as used in this context, means the direct or indirect ability or power to direct or cause the direction of management policies of a person or entity or otherwise direct the affairs of such person or entity, whether through ownership of equity, voting securities, beneficial interest, by contract or otherwise. A Party shall be presumed to control a person or entity if the Party owns fifty percent (50%) or more of the voting equity interests of such person or entity.

(b) "**Agreement**" means this Development Agreement, together with all exhibits and schedules hereto and any amendments to or restatements of this agreement.

(c) "**Applicable Laws**" means all laws, ordinances, rules, regulations, guidelines, and policies of any kind whatsoever of any governmental (including international, foreign, federal, state, provincial, and local) or regulatory body, including all laws, ordinances, rules, regulations, guidelines, and policies promulgated by any Regulatory Authority applicable to the activities contemplated by this Agreement.

(d) "**business day**" means any day that is not a Saturday, Sunday or statutory holiday in the Town of Oakville, in the Regional Municipality of Halton, Province of Ontario, Canada, or in the City of Monterrey, Nuevo Leon, Mexico.

(e) "**Calendar Quarter**" means, as applicable, the three (3) month period ending on March 31, June 30, September 30, or December 31. The initial Calendar Quarter will be deemed to begin on the Effective Date and end on the expiration of that Calendar Quarter in which the Effective Date falls.

(f) "**Cardiol**" means Cardiol Therapeutics Inc., one of the Parties to this Agreement, including its Affiliates.

(g) "CARO" means Clinical Academic Research Organization, S.A. de C.V., one of the Parties to this Agreement, and its Affiliates.

(h) "**CARO Compensation Warrants**" has the meaning ascribed to that term in Section 3.1.

(i) "**CARO's Property**" shall have the meaning set forth in Section 8.2.

(j) "**Compounds**" shall have the meaning set forth in the Recitals.

(k) "**Confidential Information**" means Information received (whether disclosed in writing, electronically, orally, or by observation) by one Party (the "**Receiving Party**") from the other Party (the "**Disclosing Party**") either before the Effective

Date in connection with the transactions contemplated by this Agreement, or thereafter, that the Disclosing Party reasonably considers proprietary and confidential unless in each case such Information, as shown by competent evidence:

(i) was known to the Receiving Party or to the public prior to the Disclosing Party's disclosure, as demonstrated by contemporaneous written records;

(ii) became known to the public, after the Disclosing Party's disclosure hereunder, other than through a breach of the confidentiality provisions of this Agreement by the Receiving Party or any person to whom such Receiving Party disclosed such Information;

(iii) was subsequently disclosed to the Receiving Party by a person having a legal right to disclose, without any restrictions, such Information or data; or

(iv) was developed by the Receiving Party independently of the Disclosing Party's Confidential Information by persons who have had no access to the Disclosing Party's Confidential Information as demonstrated by contemporaneous written records of Receiving Party.

The terms and conditions of this Agreement shall be deemed the Confidential Information of both Parties.

(l) "**Development Activities**" means those activities related with the methodology done by CARO directly and indirectly in relation to the Compounds that Cardiol is developing for the treatment of heart failure and other medical purposes, including CARO's scientific experimentation, research activities, medical drug development activities, medical drug formulation, and discovery, as set out in the Development Plan.

(m) "**Development Plan**" means the Development Plan for the Compounds, attached as Exhibit A to this Agreement.

(n) "**Disclosing Party**" shall have the meaning set forth in Section 1.1(k).

(o) "**Dispute(s)**" shall have the meaning set forth in Section 14.3.

(p) "**Effective Date**" shall have the meaning set forth at the head of this Agreement.

(q) "**Force Majeure**" shall have the meaning set forth in Article 14.

(r) "**Force Majeure Party**" shall have the meaning set forth in Article 14.

(s) "**Government or Public Official**" means any officer or employee or anyone acting in an official capacity on behalf of: a government or any department or agency thereof; a public international organization (such as the United Nations, the International Monetary Fund, the International Red Cross, and the World Health Organization), or any department, agency or institution thereof; or a government-owned or controlled company, institution, or other entity, including a government-owned hospital or university.

(t) "**Incorporated CARO Property**" shall have the meaning set forth in Section 8.2.

(u) "**Information**" means any and all data, information and Materials, related to the products or business of a Party including but not limited to, the Materials, any methodology, trade secrets, know-how, Intellectual Property Rights, drug product candidates, compounds, chemical structures, results or reports in written, electronic, or other form disclosed by a Party in connection with this Agreement or to which the other Party will be provided direct or indirect access under or pursuant to this Agreement, or which is generated by or on behalf of CARO in connection with its Development Activities.

(v) "**Intellectual Property Rights**" means any and all Intellectual property rights (whether applied for, issued, registered, or unregistered), including patents, patent-applications, know-how, trademarks, design rights, utility models, applications for and rights to apply for any of the same, rights to prevent passing off, copyright, database rights, topography rights and any other rights in any invention, discovery, or process in any jurisdiction in the world.

(w) "**Materials**" means any biological or chemical compounds or materials, assays, Cardiol's drug product candidates, including Compounds, or other materials that are used by CARO to engage in Development Activities.

(x) "**Nano4Heart**" means an association specialized in nanomedicine targeted for cardiovascular diseases, such as heart failure. Nano4Heart gathers scientific researchers in the aforementioned areas, and it will participate in the development activities as an authorized Third party consultant in accordance with Section 2.2(a).

(y) "**Party**" shall mean either Cardiol or CARO, as the context may require and "**Parties**" shall mean both Cardiol and CARO.

(z) "**Receiving Party**" shall have the meaning set forth in Section 1.1(k).

(aa) "**Regulatory Action**" shall have the meaning set forth in Section 10.2.

(bb) "**Regulatory Authority**" means any governmental regulatory body having jurisdiction over drug development or the Development Activities.

(cc) "**Shares**" means fully participating, voting, Class A Common Shares in the capital stock of Cardiol.

(dd) "**TecSalud**" means the strategic alliance that exists between Funded& Santos y de la Garza Evia, I.B.P. and Escuela de Medicina y Ciencias de la Salud of Instituto Tecnológico y de Estudios Superiores de Monterrey.

(ee) "**Third Party**" means a person or entity that is not a Party to this Agreement nor an Affiliate of a Party to this Agreement.

(ff) "**Third-Party Consultant**" means a non-Affiliate, non-CARO-employee, individual consultant retained by CARO In accordance with Section 2.2(c) to perform certain Development Activities in accordance with the Development Plan.

(gg) "**Third-Party Vendor**" means a non-Affiliate vendor retained by CARO in accordance with Section 2.2(c) to perform development activities in accordance with the Development Plan, or any advisory on behalf of CARO.

(hh) "**Work Product**" means the results of Development Activities engaged in by CARO or its Affiliates or Third-Party Consultants or Third-Party Vendors in the course of implementing the Development Plan and providing any advice, including inventions, reports, analysis, data, findings, summaries, Intellectual Property Rights, and documentation as further described in this Agreement and the Development Plan.

1.2. Rules of Construction

(a) Elements of this Agreement. When a reference is made in this Agreement to a Recital, an Article, a Section, a Schedule, an Attachment, or an Exhibit, such reference is to a Recital, Article or Section of, or a Schedule, Attachment, or Exhibit to, this Agreement, unless otherwise indicated.

(b) Meaning of "**include**" and variations thereof. Whenever the words "**include,**" "**Includes**" or "**including**" are used in this Agreement, they shall be understood to be followed by the words "without limitation."

(c) Use of pronouns. Pronouns, including "he," "she" and "it," when used in reference to any person, shall be deemed applicable to entities or individuals, male or female, as appropriate in any given case.

(d) Headings. Article, Section, and other headings contained in this Agreement are for reference purposes only and are not Intended to describe, interpret, define, or limit the scope, extent, or intent of any provision of this Agreement.

(e) Currency. Unless otherwise specifically expressed in U.S. dollars, all amounts expressed as dollars (or $) refer to the lawful currency of Canada.

(f) Variations on terms. Standard variations on defined terms (such as the plural form of a term defined in the singular form and the past tense of a term defined in the present tense) shall be deemed to have meanings that correlate to the meanings of the defined terms.

(g) Obligations of good faith and commercial reasonableness. The Parties shall use commercially reasonable efforts to collaborate with one another and otherwise to perform their obligations hereunder, except to the extent that a Party is expressly authorized to act otherwise (such as a provision authorizing a Party to make a decision in its sole discretion). Each Party will make and implement decisions and allocate resources designed to advance progress with respect to the objectives set forth in the Development Plan, and to ensure that it meets its obligations with respect to, such plan and budget. Each Party will respond to meeting requests in a timely matter and will agree upon deadlines for action items and decision making. When in-person meetings cannot be conducted in a timely fashion, timely communication will be made via teleconferences, webcasts, or emails such that the development of Compounds is enabled and not disadvantaged.

ARTICLE 2
DEVELOPMENT ACTIVITIES

2.1. Activities of CARO

(a) CARO shall engage in the Development Activities in accordance with the Development Plan and this Agreement. As part of its Development Activities, CARO will investigate and will perform scientific experimentation, research activities, medical drug development activities, medical drug formulation, and discovery as set out in the Development Plan.

(b) CARO may, as part of the Development Activities, manage Third Party providers of development activities in support of the Development Plan.

(c) CARO will engage in the Development Activities in accordance with:

(i) Applicable Laws; and

(ii) other clear arrangements agreed to in writing and signed by the Parties' legal representatives.

(d) In engaging in the Development Activities, CARO will utilize, to the extent practicable, CARO's or TecSalud's own research practices and development management processes, policies, guidelines, and quality requirements.

2.2. Management of Third Parties

The Parties anticipate that the involvement of Third Parties is likely to be limited to Third-Party Vendors of Materials. CARO will manage any Third-Party Vendors and Third Party Consultants who assist with the Development Activities, as follows:

(a) Authorized Third Party Vendors and Third Party Consultants. Cardiol acknowledges and authorizes CARO to utilize Nano4Heart as a Third-Party Consultant and TecSalud as a Third-Party Vendor, each of which will assist CARO In the execution of the Development Activities.

(b) Recommendation of other Third Parties. CARO may recommend to Cardiol other Third-Party Vendors and Third-Party Consultants, in addition of the parties stated in Section 2.2(a), that have special expertise to provide as part of the Development Activities under the Development Plan. The Parties will competitively bid any project whose total cost is greater than fifty thousand dollars ($50,000) to multiple Third-Party Vendors or Third-Party Consultants, as applicable. CARO's recommendation will take into consideration factors such as the Third Party's experience, stability, equipment and facilities, technical capabilities, qualified processes and their alignment with regulatory standards and local laws, commitment to timelines, contingency planning capabilities, communication plans, pricing relative to industry benchmarks, and other contractual terms relative to industry standards. The Parties shall collaborate in making the final selection of Third-Party Vendors and Third-Party Consultants. CARO shall share costs and other Information with Cardiol concerning such Third-Party Vendors and Third-Party Consultants on an "open book" basis.

(c) Negotiation of Third-Party Contracts. CARO will require that each Third-Party Vendor and Third-Party Consultant enter into an appropriate confidential disclosure agreement prior to sharing any Confidential Information with such Third Party. All Third-Party Vendors and Third-Party Consultants will be retained pursuant to written agreements unless CARO and Cardiol expressly agree to the contrary in writing. All terms and conditions negotiated by CARO, including without limitation pricing, fees and expenses payable to such Third-Party Vendors and Third-Party Consultants, shall be subject to agreement by the Parties. CARO will not engage any Third Party for any reason without the prior consent of Cardiol.

(d) Monitoring Performance. CARO will use its commercially reasonable efforts to monitor performance of all Third-Party Vendors and Third-Party Consultants in accordance with the terms of the agreements with such Third-Party Vendors and Third-Party Consultants and in accordance with the Development Plan and the usual practices of CARO's development unit applicable to development of CARO's own products. However, CARO does not guarantee the performance of any Third-Party Vendor or Third-Party Consultant, and provided that CARO is not in material breach of the standard set forth in the preceding sentence, and notwithstanding any provision in this Agreement to the contrary, CARO shall have no liability on account of any action or inaction of any such person.

2.3. Regulatory

(a) Cardiol will be responsible for making all necessary regulatory filings in Canada with the Regulatory Authority related to the Development Plan and will have all Canadian regulatory responsibilities and related liabilities.

(b) CARO will be responsible for making all necessary regulatory filings in Mexico with the Regulatory Authority related to the Development Plan and will have all Mexican regulatory responsibilities and related liabilities. Cardiol will be responsible for making all necessary regulatory filings outside Mexico with Regulatory Authorities outside Mexico related to the Development Plan and will have all regulatory responsibilities and related liabilities outside Mexico.

(c) Each Party shall be responsible for obtaining and complying with all applicable governmental licenses, authorizations, permits, and the like required in connection with the performance of its share of the Development Activities.

2.4. Development Timeline and Changes to Development Plan

(a) Development Timeline. The current estimated timelines for the Development Activities contemplated by the Development Plan are set forth in Exhibit A.

(b) Development Compensation. The CARO Compensation Warrants and the Shares to be issued upon the exercise of such warrants are acknowledged by both Parties to be fair and sufficient compensation for the Development Activities of CARO.

(c) Changes to Development Plan. Changes to the approved Development Plan will require approval by Cardiol if they include any of the following:

(i) Delay or acceleration in a major milestone by greater than or equal to one (1) month;

(ii) Material change in the scientific approach to the research and development;

(iii) Change in regulatory strategy; or

(iv) Any other change that is required to be approved by Cardiol pursuant to this Agreement.

Any change, addition, or deletion to any development milestone or milestone documentation or the Development Plan shall require the prior approval of Cardiol. Such changes will be captured in a change control log maintained by CARO that will *be* available to Cardiol. The change control log must be approved and signed by both parties' authorized representatives.

2.5. Data and Information Management

(a) Materials. Materials, documents, and Information necessary for engaging in the Development Activities shall be provided either by Cardiol or procured by CARO on behalf of Cardiol as set out in the Development Plan. Materials will be used only for purposes of the Development Plan.

(b) CARO shall submit the following regular reports to Cardiol:

Report	Frequency	Content Summary
Development Status Report	Monthly	Progress report on the overall Development Plan by functional area, identifying any issues, risks, and contingency plans
Change Control Log	As needed	Category of change control, reason for change, trigger met, revised plan

(c) In addition to the scheduled reports above, CARO shall communicate with Cardiol any material findings on key aspects of the Compounds, such as safety, toxicity, and efficacy, as soon as available and practicable. After notification, the Parties shall consult together to determine appropriate actions or changes to the Development Plan to Implement such actions or changes.

(d) Maintenance and Wind-Up Activities Upon Conclusion of Activities. At the conclusion of the Development Activities hereunder, CARO and Cardiol will agree upon appropriate asset maintenance and wind-up activities such as archival of reports and data, storage of samples, filing of regulatory notifications (if any), and such others as may be advisable.

2.6. Discontinuation of Development Activities

(a) In the event either Party believes, in good faith, that the continued performance of the Development Activities may be commercially unwise, jeopardize safety, or otherwise be unethical or illegal, such Party shall immediately consult with the other Party concerning the appropriate course of action. If the Parties are unable to agree promptly upon an appropriate course of action, either Party shall have the right to terminate its portion of the Development Activities or terminate this Agreement in accordance with Section 5.1(b).

(b) If CARO terminates this Agreement for any reason except breach of contract by Cardiol, or terminates the Development Activities prior to achievement of all milestones in the Development Plan, then any unexercised CARO Compensation Warrants that are not related to Development Activities and milestones in the Development Plan that have been attained up to the time of termination of this Agreement, shall be deemed terminated, null and void as of termination of this Agreement.

(c) If Cardiol terminates this Agreement for any reason (including breach of contract by CARO), or requires CARO to terminate the Development Activities prior to achievement of all milestones in the Development Plan, then the CARO Compensation Warrants issued to CARO that can be invoiced for Development Activities completed up to the time of termination shall be considered to have been earned notwithstanding such termination. The Compensation Warrants that cannot be exercised (because Invoices for Development Activities not completed cannot be issued) will be deemed terminated, null and void as of termination.

ARTICLE 3
COMPENSATION

3.1. Compensation for Development Activities

(a) Cardiol will immediately upon execution of this Agreement do the following:

(i) Cardiol shall issue to CARO Eight Hundred and Twenty Four Thousand (824,000) warrants (the "**CARO Compensation Warrants**"), each warrant having the following qualifications:

(A) an expiry date of August 31, 2022 or such earlier date as may be specified by a relevant stock exchange;

(B) an exercise price of four ($4.00) Dollars per Share; and

(C) each of the CARO Compensation Warrants entitles CARO to purchase one Share for the exercise price mentioned in Section 3.1(a)(i)(B).

(ii) Cardiol shall allot and set aside for CARO Eight Hundred and Twenty Four Thousand (824,000) Shares currently representing approximately 3.2% of the currently outstanding Class A common shares of Cardiol, calculated on a fully diluted basis. CARO's ultimate exercise of the CARO Compensation

Warrants and its acquisition upon exercise of one Share per warrant shall constitute partial consideration for CARO's Development Activities, which the Parties value at Three Million (US$3,000,000) Dollars.

(b) Cardiol shall also pay to CARO, on or before November 30, 2018 the amount of US$400,000 in cash.

(c) The Parties acknowledge that the aggregate of the Compensation Warrants and the cash payment mentioned in Section 3.1(b) constitutes full payment of all Development Activities, including CARO's invoice for US$475,741.50 dated 2018-09-05 for Development Activities of the Development Plan.

(d) Cardiol acknowledges that the Shares to be acquired through CARO's exercise of the CARO Compensation Warrants shall be fully paid and non-assessable.

(e) CARO acknowledges that the issuance of the CARO Compensation Warrants and the acquisition of Shares upon exercise of such warrants constitute full payment for its Development Activities, both past and future, under the Development Plan, except for the amount of the potential extra costs mentioned in Section 3.2 below.

(f) Subject to Section 3.2 below, Cardiol acknowledges that CARO shall not issue invoices for any of CARO's Development Activities under the Development Plan (other than the invoice referred to in Section 3.1(b)) **until such time** as CARO, in its discretion, wishes to exercise CARO Compensation Warrants. When CARO wishes to exercise any of its CARO Compensation Warrants, it shall carry out the following steps:

(i) CARO shall provide Cardiol with notice in writing that it wishes to exercise a certain number of its CARO Compensation Warrants, specifying, at its own discretion, that number;

(ii) CARO shall provide Cardiol with one or more invoices, tied to completed milestones in the Development Plan, and the aggregate amount of the invoices shall constitute payment in full of the aggregate exercise prices of the warrants being exercised, in accordance with Section 3.1(f)(i), on the following basis:

V/4 = N, where

V is the aggregate amount of the invoices issued by CARO in respect of a particular milestone, expressed in Canadian dollars; and

4 is the exercise price, expressed in Canadian dollars, per warrant and

N is the number of CARO Compensation Warrants being exercised, as well as the number of Shares to which CARO is entitled to be issued upon exercise of those warrants

(g) Cardiol shall, following each issuance of Shares to CARO, confirm to CARO in writing:

(i) the number of CARO Compensation Warrants CARO has exercised;

(ii) the number of CARO Compensation Warrants remaining to be exercised; and

(iii) the aggregate number of Shares issued to CARO to date.

(h) CARO acknowledges that, until such time as Cardiol becomes a public company, there is no market for any of the Shares or for the CARO Compensation Warrants, and that each certificate for the CARO Compensation Warrants shall contain a legend on its face stating that such warrants cannot be traded until after the appropriate public company lock-up period, as determined by the stock exchange or Cardiol's underwriters, has lapsed. CARO further acknowledges that once the CARO Compensation Warrants have lapsed, they cannot be exercised for the acquisition of Shares. CARO covenants to provide Cardiol with one week's written notice of its intention to sell Shares, so that Cardiol will have an opportunity to manage public perceptions in connection with the sale.

(i) Cardiol acknowledges that Nano4Heart as an authorized Third-Party Consultant will be paid for its "in kind" work by CARO with the Shares received once the CARO Compensation Warrants are exercised by CARO, and Cardiol hereby authorizes CARO to proceed with such payment method to Nano4Heart.

3.2. No Invoices

CARO will not provide invoices to Cardiol until such time as it elects to exercise CARO Compensation Warrants.

ARTICLE 4
TERM AND TERMINATION OF THE AGREEMENT

4.1. Term

This Agreement shall take effect on the Effective Date and shall continue until terminated in accordance with Article 5 ("**Term**").

ARTICLE 5
TERMINATION

5.1. Right to Terminate

This Agreement may be terminated as follows:

(a) By either Party if the other Party commits a material breach of this Agreement and the breaching Party fails to remedy the material breach within sixty (60) days following its receipt from the non-breaching Party of written notice of such breach and the non-breaching Party's intention to terminate this Agreement pursuant to this Section 5.1(a); and

(b) By either Party by giving thirty (30) days' written notice to the other Party of the effective date of such termination in the event that such Party, acting reasonably and in good faith, determines that the continued performance of Development Activities contemplated by this Agreement would (i) constitute a potential or actual violation of Applicable Law or any policy of a Party adopted by such Party in good faith to ensure compliance with Applicable Law, (ii) constitute a potential or actual violation of any regulatory, medical, or scientific standard of integrity or ethics, or (iii) potentially jeopardize patient safety; provided that during such thirty- (30) day notice period, the Parties shall discuss in good faith possible changes to the Development Activities to avoid the situations described in clauses (i), (ii), and (iii) and, unless and until the Parties enter into an amendment reflecting such changes, CARO shall not be required to engage in Development Activities that would result In the situations described in clauses (i), (ii,) and (iii).

5.2. Effect of Termination

If this Agreement is terminated:

(a) Wrap Up of Development Activities. Upon the effective date of a termination notice (as provided in Section 5.1), CARO will:

(i) immediately commence the orderly wrap up and cessation of Development Activities as soon as practicable;

(ii) if requested by Cardiol, use commercially reasonable efforts to transfer the applicable Development Activities to Cardiol or a Third Party designated by Cardiol as expeditiously as practicable and in accordance with all Applicable Laws. Cardiol and CARO shall cooperate with each other during such termination to preserve the value of the underlying Work Product and to comply with Applicable Laws, provided that Cardiol shall approve in writing the specific activities and tasks to be carried out by Cardiol and CARO pursuant to this sentence, such approval not to be unreasonably withheld, conditioned or delayed.

(b) Return and Delivery of Confidential Information, Materials, and Reports. In the event of termination of this Agreement for any reason, CARO shall promptly return to Cardiol (or destroy, in accordance with prior written instructions to do so by Cardiol and certify such destruction) all Confidential Information of Cardiol and Materials provided or made available to CARO or generated by CARO in connection with the Development Activities. Likewise, Cardiol shall promptly return to CARO (or destroy, in accordance with prior written instructions to do so by CARO and certify such destruction) all Confidential Information of CARO in possession of Cardiol. Not later than thirty (30) days following the termination of this Agreement for any reason other than material breach by Cardiol, CARO shall deliver to Cardiol all statistical data, all statistical reports, all data entries, and all the documentation, reports, and findings produced as a result of Development Activities engaged in by CARO under this Agreement, together with all Information and documentation anticipated by Section 2.5(d). In the event of non-payment by Cardiol, such data, reports and findings shall not be delivered until CARO has received all payments required under this Agreement. On termination of this Agreement for any reason, CARO shall only retain any Information to the extent

and for the duration required by any Applicable Laws. CARO, however, reserves the right to retain, at its own cost and subject to the confidentiality provisions herein, copies of all materials, data, reports, and documentation produced as a result of Development Activities engaged in by CARO that may be needed to satisfy regulatory requirements, to resolve Disputes regarding Development Activities, and to comply with CARO's internal document retention policies.

ARTICLE 6
WARRANTIES

6.1. CARO Warranties.

(a) CARO warrants to Cardiol that:

(i) Development Activities will be performed in all material respects in accordance with:

(A) the terms of this Agreement;

(B) the standard of care usually and reasonably expected for Development Activities, including adherence to Good Laboratory Practice (GLP) promulgated by the Organization for Economic Co-operation and Development and applicable Regulatory Authorities in the six (6) months following the signature of this Agreement; and

(C) all Applicable Laws;

(ii) CARO shall use commercially reasonable efforts in meeting the timelines relating to Development Activities as set forth in the Development Plan; and

(iii) CARO has not been debarred under the U.S. *Generic Drug Enforcement Act* or other similar law and that it will not knowingly employ any person or entity that has been so debarred to engage in Development Activities under this Agreement.

(b) Notwithstanding Section 6.1(a), but subject to the requirements of Section 2.2(d), CARO makes no representation or warranty with respect to the performance by any Third-Party Vendors or Third-Party Consultants.

6.2. Cardiol Warranties

(a) Cardiol warrants to CARO that Cardiol is the legal and beneficial owner and has full title to and interest in the Materials, or is otherwise licensed to use the Materials; and

(b) to the best of the knowledge of Cardiol after having made due inquiry, CARO's performance of its obligations under this Agreement, provided they are undertaken in accordance with this Agreement, and CARO's use or possession of the Materials for the purposes of, and in the manner contemplated under, this Agreement, will not infringe the rights (including Intellectual Property Rights) of any Third Party.

ARTICLE 7
LIABILITIES

7.1. Limitation of Damages

Neither Party shall have any liability (including without limitation, contract, negligence, tort, and strict liability) to the other Party or its Affiliates for any loss of profits, opportunities, or goodwill or any type of indirect, consequential or punitive damages in connection with this Agreement, this provision shall not limit any liability of either Party for any material breach of Article 9 or any willful material breach of Article 8.

ARTICLE 8
INVENTIONS AND PROPRIETARY INFORMATION

8.1. Cardiol Intellectual Property

Subject to Section 8.2, CARO agrees:

(a) to promptly disclose and assign (and hereby does assign) to Cardiol as Cardiol's property all Work Product and Intellectual Property Rights that CARO creates, develops, or conceives, solely or in conjunction with others, that:

(i) are based on or involve any Confidential Information or other Information of Cardiol;

(ii) arise from engaging in the Development Activities or carrying out the Development Plan;

(iii) relate to, constitute, result from, or include the work CARO is performing for Cardiol; or

(iv) are otherwise made through the use of any time, facilities, or Materials of Cardiol or that are paid for or reimbursed by Cardiol;

(b) that if for any reason the assignment of Work Product in Section 8.1(a) is ineffective, all Work Product developed by CARO in engaging in Development Activities (including any documentation produced and/or Intellectual Property Rights created or developed) under this Agreement shall be deemed to be owned fully and exclusively by Cardiol;

(c) to execute all necessary documents and provide Cardiol proper assistance (at Cardiol's expense) sufficient to enable patent, copyright, or other legal protections to be obtained by Cardiol for any such inventions or innovations as described in Sections 8.1(a) or (b), and to make and maintain reasonably detailed accurate records of any such inventions or Innovations; and

(d) not to utilize in the course of Development Activities any proprietary or confidential information of others or any inventions of Cardiol that are not included within the scope of this Agreement.

8.2. CARO's Property

Cardiol acknowledges that CARO possesses certain inventions, processes, know-how, trade secrets, improvements, other intellectual properties, Intellectual Property Rights, and other assets including, but not limited to, analytical methods, procedures and techniques, procedure manuals, personnel data, financial information, computer technical expertise and software, that have been developed by CARO independent of any Materials, any Confidential Information or other Information of Cardiol or any activities and that relate exclusively to CARO's business or operations (collectively "**CARO's Property**"). Cardiol and CARO agree that, if it is necessary to use any of CARO's Property for proper fabrication, use, development or commercialization of the Work Product or to incorporate any of CARO's Property into the Work Product ("**Incorporated CARO Property**"), CARO hereby grants to Cardiol a non-exclusive, fully paid-up, worldwide license to use Incorporated CARO Property only as necessary for further developing, improving, and commercializing the Work Product, limited to all intellectual property developed by CARO's team of cardiology investigation. Cardiol shall have no right to use any Incorporated CARO Property for any other reason or purpose whatsoever.

8.3. Third Party Agreements

CARO shall require that all of its employees, and all agents, contractors, Third-Party Vendors, and Third-Party Consultants are parties to appropriate agreements containing confidentiality and invention assignment provisions consistent with the terms of this Agreement.

ARTICLE 9
CONFIDENTIAL INFORMATION

9.1. Mutual Obligations

Each Party agrees, except as required as part of the performance of this Agreement or as permitted pursuant to any other agreement between the Parties:

(a) not to disclose any Confidential Information belonging to the other Party to any person (other than on a need-to-know basis to such directors, employees, or other persons engaged in activities required for the performance of the obligations set out in this Agreement who have entered legally binding written obligations at least as protective as those set out in this Article 9);

(b) not to use any Confidential Information belonging to the other Party for any purpose other than in accordance with this Agreement or in accordance with any other agreement between the Parties; and

(c) to take all reasonable steps necessary to prevent the unauthorized disclosure and/or use of any Confidential Information belonging to the other Party.

ARTICLE 10
REGULATORY COMPLIANCE

10.1. Compliance with Applicable Laws

(a) Cardiol and CARO each agree that it will perform this Agreement, and will handle and retain any Materials in material compliance with all Applicable Laws.

(b) Cardiol represents and warrants that:

(i) it will not require CARO to perform any assignments or tasks in a manner that would violate any Applicable Law, CARO policy, or CARO quality requirements;

(ii) it will cooperate with CARO in taking any actions that CARO reasonably believes are necessary to comply with any regulatory obligations that have been transferred to CARO.

(c) Cardiol specifically acknowledges that CARO maintains, and from time to time revises, comprehensive policies and procedures intended to ensure compliance with Applicable Laws and CARO's ethical standards, and that in no event shall CARO be required to engage in any activities inconsistent with such policies, procedures, and standards. CARO intends to conduct all activities to be conducted by CARO on behalf of Cardiol for non-regulated work under this Agreement in accordance with the established practices and policies of CARO.

10.2. Regulatory Actions

If any Regulatory Authority:

(a) contacts CARO with respect to any Development Activities of CARO under this Agreement;

(b) conducts, or gives notice of its intent to conduct with respect to any Development Activities of CARO under this Agreement, an inspection at a CARO site at which work Is being performed that directly involves any Development Activities of CARO under this Agreement; or

(c) takes, or gives notice of its intent to take, any other Regulatory Action alleging improper or inadequate research practices (including the issuance of a notice of inspectional observations or a warning letter) with respect to any activity of CARO that directly involves any Development Activities of CARO under this Agreement,

CARO shall notify Cardiol within two (2) business days of such contact or notice, or sooner if reasonably practicable and if necessary to provide Cardiol an opportunity to be present at, or otherwise participate in, any such inspection or Regulatory Action to the extent that it directly involves any Development Activities of CARO under this Agreement, subject to such restrictions, including protection of Confidential Inform and know-how of CARO, as CARO may deem advisable. In addition, if CARO becomes aware of any such regulatory contacts, inspections, or other actions (each, a "**Regulatory Action**") relating to Third-Party Vendors or Third-Party Consultants that relates to any Development Plan activities, CARO will, if reasonably practicable,

provide Cardiol notice of the same. Subject to the terms of any applicable agreements with Third-Party Vendors or Third-Party Consultants, to the extent reasonably practicable, Cardiol shall have the right to be present at, or otherwise participate in, any meetings, conference calls, or other actions with any Regulatory Authority that involve Development Plan activities or relating to services of Third-Party Vendors or Third-Party Consultants and to be present at any inspection of facilities of Third-Party Vendors or Third-Party Consultants, subject to such restrictions, including protection of Confidential Information and know-how of CARO and Third-Party Vendors or Third-Party Consultants, as CARO may deem advisable. CARO and Cardiol agree to cooperate in the response to any Regulatory Action.

10.3. Disclosures

Each Party agrees that, during an inspection or other Regulatory Action concerning a Development Plan activity in respect of which CARO is engaging in Development Activities, it will not disclose Information and Materials that are not required to be disclosed to such agency, without the prior consent of the other Party.

10.4. Expenses

As between the Parties hereto, the expenses of CARO (and Cardiol, if applicable) incurred in connection with a Regulatory Action shall be borne as follows:

(a) if and to the extent that the Regulatory Action relates to the activities required to implement the Development Plan itself, including without limitation any activities specified in this Agreement for such Development Plan, such expense shall be borne by Cardiol, and

(b) if and to the extent that the Regulatory Action relates to the general clinical research practices of CARO, such expense shall be borne by CARO.

ARTICLE 11
INDEPENDENT CONTRACTOR STATUS

11.1. CARO

It is understood and agreed that CARO is an independent contractor and that CARO employees will not have any rights to any of Cardiol's benefits or any other compensation from Cardiol, nor for any purposes be deemed or intended to be an employee of Cardiol. CARO agrees to make any payments or withholding required by statute, social security laws, and any related statutes or regulations, for CARO employees. It is further understood that, except to the extent otherwise expressly contemplated elsewhere in this Agreement, CARO is not an agent of Cardiol and Cardiol is not an agent of CARO, and neither Party is authorized to bind the other Party with respect to any Third Party.

ARTICLE 12
NON-SOLICITATION AND NO HIRE

12.1. Cardiol Obligations

Cardiol agrees that, for the duration of this Agreement and for two (2) years thereafter, it will not directly solicit for hire or hire any employee of CARO involved in the Development Activities to Cardiol without the prior written consent of CARO.

12.2. CARO Obligations

CARO agrees that, for the duration of this Agreement and for two (2) years thereafter, it will not directly solicit for hire or hire any employee of Cardiol without the prior written consent of Cardiol.

ARTICLE 13
OTHER ACTIVITIES

13.1. Waiver of Conflicts of Interest

(a) This Agreement shall not prevent either Party from using any publicly available research results or other Information (including any publicly available information of the other Party) to the same extent as Third Parties generally are legally permitted to do.

(b) Each Party shall inform its key personnel assigned to the performance of this Agreement of the limitations on use of Confidential Information of the other Party and instruct such personnel to comply with such restrictions, and where appropriate, adopt other measures to minimize the potential for misuse of Information.

(c) CARO and Cardiol have discussed the CARO personnel expected to be assigned to engage in Development Activities, including the extent to which any such personnel are expected to simultaneously participate in activities on behalf of CARO that may involve similar technologies or products that may be competitive with the Compounds (provided that CARO shall not be obligated to disclose any Confidential Information relating to such activities).

(d) The burden of proof that Confidential Information has been misappropriated shall fall upon the Party alleging breach of confidence.

13.2. Adherence to CARO Procedures

CARO's research and Development Activities are conducted in accordance with CARO's standard operating procedures and policies. Cardiol acknowledges that CARO reserves the right to adhere to such procedures and policies with respect to Development Activities related to the Development Plan, and Cardiol agrees to cooperate with CARO in the application of such procedures and policies to the Development Plan; provided, however, that:

(a) CARO shall upon request, discuss with Cardiol the material features of such standard operating procedures and policies; and

(b) no portion of such standard operating procedures or policies shall conflict materially with any of the provisions of this Agreement and, in the event of any such conflict, the provisions of this Agreement shall control, unless such operating procedures and policies are put in place due to mandatory regulatory changes.

13.3. Anti-Bribery Commitments

(a) In connection with any activities of the Parties under this Agreement, the Parties confirm that they have not given, offered, promised, or authorized, and will not give, offer, promise, or authorize, any payment, benefit, or gift of money, or anything else of value, directly or through a Third Party, to:

(i) any Government or Public Official;

(ii) any political party, party official, or candidate for public or political office;

(iii) any person while knowing or having reason to know that all or a portion of the value will be given, offered or promised, directly or indirectly, to anyone describe in terms 13.3(a)(i) or (ii) above; or

(iv) any owner, director, employee, representative, or agent of any actual or potential customer of the Parties, for purposes of influencing any act or decision of such individual in his official capacity, inducing such individual to do or omit to do any act in violation of the individual's duty, inducing the individual to use the individual's official influence with a government to affect or influence an act or decision of the government, or to secure any improper advantage in order to assist in obtaining or retaining business.

(b) The Parties shall comply with all applicable anti-bribery laws of any jurisdiction, including any record keeping requirements of such laws, in the countries where the Parties have their principal places of business and where they conduct any activities under this Agreement.

ARTICLE 14
FORCE MAJEURE

14.1. Waiver of Liability

If either Party is affected by any extraordinary, unexpected, and unavoidable event such as acts of God, floods, fires, riots, war, terrorism, labor disturbances, failures of sources of supply, infectious diseases of animals, or by the reason of any law, order, proclamation, regulation, ordinance, demand or requirement of the relevant government or any authority or representative thereof, or by reason of any other cause whatsoever (provided that in all such cases the Party claiming relief on account of such event can demonstrate that such event was extraordinary, unexpected, and unavoidable by the exercise of reasonable care) ("**Force Majeure**"), it shall notify the other Party as soon as practicable of the nature and extent thereof and take all reasonable steps to overcome the Force Majeure as quickly as possible and to minimize the loss occasioned to the other Party. Such notice will identify the requirements of this Agreement or such of its obligations as may be affected, and, subject to the provisions below, to the extent so affected, said obligations will be suspended during the period of such disability. The Party prevented from performing hereunder (the "**Force Majeure Party**") will use reasonable efforts to remove such

disability as quickly as possible and will continue performance whenever such causes are removed.

14.2. Remedies in the Event of Force Majeure

Subject to compliance with the provisions of Section 14.1, an incident of Force Majeure shall not constitute a breach of this Agreement and the time for performance shall be extended accordingly. However, if the Force Majeure event prevents the Force Majeure Party from performing its obligations for more than thirty (30) days:

(a) the Parties may enter into discussions with a view to alleviating its effects and, if possible, agreeing on such alternative arrangements as may be reasonable in the circumstances; or

(b) the Party that is not the Force Majeure Party may immediately, on written notice to the Force Majeure Party, terminate this Agreement pursuant to Article 5 hereof.

14.3. Dispute Resolution

(a) There is a high level of trust between the current management of CARO and the current management of Cardiol. Therefore, if any dispute, controversy, or difference arises relating to this Agreement ("**Dispute(s)**"), prior to instituting any legal proceeding on account of such Dispute, the Parties will attempt in good faith to settle such Dispute first by negotiation and consultation between themselves, Including referral of such Dispute to the President of each Party, who will attempt in good faith to resolve the Dispute within thirty (30) days following reference of the Dispute to them. If such executives are unable to resolve such Dispute or agree upon a mechanism to resolve such Dispute within such thirty (30) day period, then the Parties shall be free to pursue arbitration, as set out in Section 14.3(b).

(b) Any Dispute, controversy, or claim arising out of or relating to this Agreement including any question regarding its existence, interpretation, validity, breach, or termination or the business relationship created by it shall be referred to and finally resolved by under the Rules of Arbitration of the International Chamber of Commerce (the "**ICC Rules**") in force on the date the Dispute is submitted for arbitration, by a sole arbitrator appointed in accordance with the ICC Rules. The arbitrator shall apply Mexican law in resolving any Disputes. Without prejudice to the application of the ICC Rules, Cardiol and CARO agree that the taking of evidence in any arbitration commenced pursuant to this clause shall be conducted according to the International Bar Association Rules on the Taking of Evidence in International Commercial Arbitration. The place of the arbitration shall be Monterrey, Nuevo Leon, Mexico, and the language of the arbitration shall be English. The fees and expenses of the arbitrator, as well as the administrative fees of the ICC, shall be borne equally (50/50) by the Parties. Cardiol and CARO shall each bear Its own costs, expenses, and attorneys' fees incurred in connection with the arbitration.

(c) The Dispute resolution provisions of this Section 14.3 are intended to encompass all possible claims between Cardiol and CARO, including Disputes related to this Agreement, its negotiation, performance, non-performance, interpretation, termination, or the relationship between Cardiol and CARO established by this

Agreement. Cardiol and CARO agree that the award issued by the sole arbitrator shall be final and binding upon the parties to the Dispute and shall not be subject to appeal. Cardiol and CARO also agree that a judgment recognizing and enforcing the arbitrator's award may be entered in any court with jurisdiction, and irrevocably submit to the jurisdiction of any such court over the Parties or their assets for purposes of recognizing and enforcing the award.

(d) The provisions of Sections 14.3(a), (b) and (b) above shall not preclude either Party from seeking immediate injunctive relief in the event such Party believes that irreparable harm will occur.

14.4. Notices

Any notices required or permitted to be given hereunder by either Party shall be in writing and shall be deemed given on the date received if delivered personally or by a reputable overnight delivery service, or three (3) business days after the date postmarked if sent by registered or certified mail, return receipt requested, to the following address:

(a) If to Cardiol: 2275 Upper Middle Rd East, Suite 101, Oakville, ON, Canada, L6H 0C3 –Email to: ******* and ******* and *******

(b) If to CARO: Avenida Eugenio Garza Sada No. 427, Int. 2, Col. Altavista, Monterrey, N.L., Mexico, C.P. 64840 – Email to: *******, ******* and *******.

ARTICLE 15
GENERAL PROVISIONS

15.1. Insurance

(a) Each of CARO and Cardiol shall maintain at its own expense full insurance coverage for itself and its employees and agents.

(b) The insurance of CARO shall include:

(i) commercial general liability insurance covering (i) claims for damages because of bodily injury (including death), personal injury, advertising injury, and property damage arising out of acts or omissions of its employees and agents, (ii) claims in respect of deliverables, products, and completed operations (with no exclusions for cannabis or cannabis derivatives), each case with minimum indemnity limits of one million dollars ($1,000,000) per occurrence and three million dollars ($3,000,000) in the aggregate and including coverage for contractual liabilities; and

(ii) errors and omissions insurance covering medical malpractice services of the type performed by CARO under this Agreement, with minimum indemnity limits of one million dollars ($1,000,000) per event and three million dollars ($3,000,000) general aggregate.

(c) CARO shall ensure that Cardiol is added to its insurance policy mentioned in Section 15.1(b)(i) as a named insured.

(d) Each of the above policies of insurance:

(i) shall cover claims arising out of the performance of this Agreement that are made within a period of not less than three (3) years after its expiration or earlier termination; and

(ii) shall be primary to any liability insurance carried by such Party which insurance shall be excess and non-contributory for claims and losses arising out of the performance of this Agreement.

(e) Maintenance of insurance coverage shall not relieve an insuring Party of any responsibility under this Agreement for damages in excess of insurance limits or otherwise.

15.2. Governing Law

This Agreement and the obligations of the Parties shall be governed by and construed in accordance with the substantive laws of Mexico, without regard to any principles of conflicts of laws that would result in the application of the laws of any other state or jurisdiction, as to all matters, including, but not limited to, matters of validity, construction, effect, and performance.

15.3. Assignment

(a) Other than what its already authorized in Sections 2.2(a) and 3.1(i), neither Party will assign any right or delegate any obligation under this Agreement without the prior written consent of the other Party, not to be unreasonably withheld; provided, however, that either Party may, without such consent, but with notice to the other Party, assign this Agreement, in whole or in part:

(i) in connection with the transfer or sale of all or substantially all of its assets or the line of business to which this Agreement relates;

(ii) to a successor entity or acquirer in the event of a merger, consolidation, or change of control involving such Party; or

(iii) to any Affiliate.

(b) Any purported assignment in violation of the Section 15.3(a)(i) will be void.

(c) Any permitted assignee will assume the rights and obligations of its assignor under this Agreement and any permitted assignment shall not release the assigning Party from its obligations under this Agreement.

15.4. Publication and Publicity

Results of the Development Activities may not be published or referred to, in whole or in part, by CARO without the prior express written consent of Cardiol. Except to the extent required under

Applicable Laws, neither Party will use the other Party's name in connection with any publication or promotion without the other Party's prior written consent.

15.5. Invalidity

If any parts or part of this Agreement are held to be invalid, the remaining parts of the Agreement will continue to be valid and enforceable.

15.6. Waiver

The failure to enforce any right or provision herein shall not constitute a waiver of that right or provision. Any waiver of a breach of a provision shall not constitute a waiver of any subsequent breach of that provision.

15.7. Survival

The expiration or termination of this Agreement shall not affect the rights of either Party that accrue prior to expiration or termination or any rights or obligations of the Parties under the following sections of this Agreement, each of which shall survive such expiration or termination: Article 1, Sections 2.5(d) and 5.2, Article 7, Sections 8.1 and 8.2, Article 9, Article 10, Article 11, Article 12, Article 13 and Article 15. Termination of this Agreement in accordance with the provisions hereof shall not limit remedies that may otherwise be available in law or equity.

15.8. Entire Agreement

This Agreement (including all Exhibits) contain the complete understanding of the Parties with respect to the subject matter hereof and supersede any prior written or oral agreements regarding such subject matter. In making this Agreement, neither Party relies on any promise, action, or statement made by the other Party, other than those contained in this Agreement and its exhibits. In the event of a conflict between the provisions of the exhibits to this Agreement and the provisions of this Agreement itself, the conflicting provision of the Agreement shall control over the language in the exhibit, unless otherwise agreed by the Parties.

15.9. Amendments

No amendment, waiver, alteration, or modification of any of the provisions of this Agreement will be binding unless it is in writing and signed by a duly authorized representative of each Party.

15.10. Counterparts

This Agreement may be executed in multiple counterparts, and all such counterparts shall constitute one and the same agreement.

THE NEXT PAGE IS THE SIGNING PAGE.

SIGNED BY THE PARTIES AS OF THE EFFECTIVE DATE:

CARDIOL THERAPEUTICS INC.

By: /s/ David Elsley
Name: David Elsley
Title: CEO

CLINICAL ACADEMIC RESEARCH ORGANIZATIONAL, S.A. DE C.V.

By: /s/ Bruno Felipe
Name: Bruno Felipe Zepeda Blouin
Title: Authorized Representative

By:
Name:
Title:

WITNESS:
By: /s/ Pascual Alcocer
Name: Pascual Alcocer Alcocer

WITNESS:
By: /s/ Jose Andres Sierra Hernandez
Name: José Andrés Sierra Hernández

Exhibit 4.7

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED FROM THE EXHIBIT PURSUANT TO ITEM 601(A)(6) OF REGULATION S-K DUE TO PERSONAL PRIVACY CONCERNS. REDACTED INFORMATION IS INDICATED BY: [***]

EXECUTIVE EMPLOYMENT AGREEMENT

This Executive Employment Agreement dated the 19th day of January 2017

BETWEEN:

CARDIOL THERAPEUTICS INC., a corporation carrying on business in the Province of Ontario (the **"Company")**

- and -

DAVID ELSLEY, an individual resident in Oakville, Ontario (the **"Executive")**

Whereas:

A. The Company wishes to retain the services of the Executive as the President and Chief Executive Officer and the Executive wishes to provide such services in accordance with the terms and conditions of this Executive Employment Agreement;

B. The Executive has been provided with the terms and conditions contained herein, which the Executive acknowledges as good and sufficient consideration;

C. The Parties agree that should the Executive cease to be employed by the Company and compete with the Company and its Affiliates, or otherwise solicit the customers, employees or suppliers of the Company and its Affiliates, that the Company and its Affiliates would be irreparably harmed; and

D. This Agreement imposes obligations of secrecy on the Company's information and the Executive has been given an opportunity to review all of these terms and to obtain advice from its advisors, and has been strongly encouraged to obtain independent legal advice prior to executing this Agreement.

The Parties agree as follows:

DEFINITIONS AND INTERPRETATIONS

1.1. In this Agreement, including the recitals hereto:

(a) **"Affiliate"** has the meaning set out in the *Business Corporations Act* (Ontario), as amended from time to time;

(b) **"Agreement"** means this Executive Employment Agreement, as from time to time supplemented or amended by one or more agreements entered into pursuant to the applicable provisions hereof;

(c) **"Applicable Laws"** means, in relation to this Agreement, all applicable provisions of laws, statutes, rules, regulations, official directives and orders of and the terms of all judgments, orders and decrees issued by any authorized authority by which such person is bound or having application to the Agreement;

(d) **"Applicable Privacy Laws"** means any and all Applicable Laws relating to privacy and the collection, use and disclosure of Personal Information in all applicable jurisdictions, including but not limited to the *Personal Information Protection and Electronic Documents Act* (Canada) and/or any comparable provincial law;

(e) **"Base Salary"** means the amount paid to the Executive by the Company pursuant to Article 4.1;

(f) **"Board"** means the Board of Directors of the Company;

(g) **"Business of the Company"** means a biotechnology company focused on the research and commercial development of proprietary drug delivery technologies designed to enhance the bioavailability and drug targeting characteristics of lipophilic drugs including cannabinoids;

(h) **"Cause"** means any reason which would entitle the Company to terminate the Executive's employment without notice or payment in lieu of notice at common law and includes, without limiting the generality of the foregoing:

(i) the criminal conviction of the Executive of an offence involving dishonesty or a breach of trust as regards the Company or its Affiliates;

(ii) the commission by the Executive of any act of theft, fraud, embezzlement or misappropriation of property or funds of the Company or any of its Affiliates, regardless of whether a criminal conviction is obtained;

(iii) the material breach by the Executive of any of his covenants or obligations under this Agreement including, without limitation, any non-solicitation, non-competition or confidentiality covenants with the Company; and

(iv) the knowing or willful material violation of Applicable Laws relating to securities by the Executive;

(i) **"Company"** has the meaning ascribed to it in the Recitals;

(j) **"Confidential Information"** means any information of a confidential or proprietary nature which relates to the Company, including trade secrets, technical expertise or information, marketing strategies, sales and pricing policies, financial information, business, marketing or technical plans, programs, methods, techniques, concepts, formulas, documentation, intellectual property, software, industrial designs, products, technical studies and data, strategic studies, engineering information, client and supplier lists, personnel information, and all documents relating to intellectual property, discoveries, concepts, ideas, improvements, inventions, patents, activities, technology, machinery, equipment, developments and know-how, and any other materials or information related to the business or activities of the Company which has not been made available generally to the

public. Notwithstanding the foregoing, Confidential Information shall not include any information which is or becomes public knowledge through no fault of the Executive;

(k) **"Corporate Property"** includes all property issued by the Company to the Executive for the purposes of carrying out the Executive's duties under this Agreement, all documents relating to the business of the Company, and any and all Confidential Information, proprietary technology, financial, operating and training information, all works of expression and any copyrights in such works, current or potential business contacts and contract development information, patentable inventions, discoveries or trade secrets, and any materials, tools, equipment, devices, records, files, data, tapes, computer programs, computer disks, software, communications, letters, proposals, memoranda, lists, drawings, blueprints, correspondence, specifications or any other documents or property belonging to the Company or relating to the Business of the Company, and all copies thereof and therefrom;

(l) **"Effective Date"** means January 19, 2017;

(m) **"Executive"** has the meaning ascribed to it in the Recitals;

(n) **"Notice"** means any Notice given by one Party to the other Party in accordance with Article 14;

(o) **"Party"** means one or other of the Executive and the Company, and **"Parties"** means the Executive and the Company;

(p) **"Permanent Disability"** means a mental or physical state whereby:

(i) the Executive is unable, due to illness, disease, mental or physical disability or similar cause, to fulfill his obligations as an employee or officer of the Company for a cumulative period of six (6) months out of nine (9) consecutive calendar months;

(ii) the Executive is declared by a Court of competent jurisdiction to be mentally incompetent or incapable of managing his affairs; or

(iii) the Company cannot accommodate that disability without causing undue hardship to the Company;

(q) **"Person"** includes an individual, partnership, association, body corporate, trustee, executor, administrator or legal representative, and **"Persons"** means a group of more than one Person;

(r) **"Personal Information"** means information about an identifiable individual;

(s) **"Personal Information Disclosure"** has the meaning ascribed to it in Article 13.2;

(t) **"Restricted Capacity"** means the involvement of the Executive in a capacity that, whether directly or indirectly, individually or in partnership or otherwise jointly or in concert with any other Person: (i) provides advice to or has a financial interest in any Person in a business that is the same as the Business of the Company; or (ii) lends money to, provides

financial assistance to or guarantees the debts or obligations of any Person for the purpose of conducting a business that is the same as the Business of the Company;

(u) **"Restricted Area"** means the provinces of Alberta, Ontario and Quebec;

(v) **"Restricted Period"** means the period lasting twelve (12) months from the Termination Date;

(w) **"Term"** means the period during which this Agreement remains in force pursuant to Term 2.2; and

(x) **"Termination Date"** means the last day actively worked by the Executive for the Company, and specifically excludes the Notice Period provided under Article 7, regardless of the reason for or method of the termination of the Executive.

1.2. The headings in this Agreement are inserted for convenience and ease of reference only, and shall not affect the construction or interpretation of this Agreement.

1.3. All words in this Agreement importing the singular number include the plural, and vice versa. All words importing gender include the masculine, feminine and neutral genders.

1.4. Unless stated otherwise herein, all monetary amounts are in Canadian dollars, and subject to any and all withholding by the Company as required by applicable law.

1.1. The word "including", when following any general statement or term, is not to be construed as limiting the general statement or term to the specific items or matters set forth or to similar items or matters, but rather as permitting the general statement or term to refer to all other items or matters that could reasonably fall within its broadest possible scope.

1.2. A reference to a statute includes all regulations made thereunder, all amendments to the statute or regulations in force from time to time, and any statute or regulation that supplements or supersedes such statute or regulations.

1.3. A reference to an entity includes any successor to that entity.

1.4. A reference to "approval", "authorization" or "consent" means written approval, authorization or consent.

1.5. A reference to an Article is to an Article of this Agreement and the reference to a Section followed by a number or some combination of numbers and letters refers to the section, paragraph, subparagraph, clause or sub-clause of this Agreement so designated.

ARTICLE 2
EMPLOYMENT OF EXECUTIVE

2.1. The Company agrees to employ the Executive as the President and Chief Executive Officer of the Company, and the Executive agrees to accept such employment, all in accordance with the terms and conditions of this Agreement.

2.2. The Term of this Agreement and the Executive's employment with the Company shall commence on the Effective Date and continue for a period of five (5) years (the **"Initial Term"),** unless

terminated earlier by the Company or the Executive pursuant to the terms and conditions of this Agreement. Following the Initial Term, the parties will have the option to renew this Agreement for successive three (3) year terms (each, a **"Renewal Term")** commencing on the expiration of the Initial Term and on the expiration of each subsequent Renewal Term, subject to mutual agreement between the Executive and the Company. Notwithstanding the above, the employment of the Executive is subject to earlier termination under Article 7. If the Executive elects not to renew this Agreement at the end of the Initial Term or any Renewal Term, termination of the Executive's employment will not be characterized as a Termination Without Cause as defined under Section 7.1(e).

ARTICLE 3
DUTIES OF THE EXECUTIVE

3.1. During the Term of this Agreement, the Executive shall:

(a) report directly to the Board;

(b) perform such duties and responsibilities of the President and Chief Executive Officer of the Company, including those duties and responsibilities customarily performed by a person holding the same or equivalent position in entities of a similar size to the Company, engaged in a business similar to that of the Company, as well as such other related duties and responsibilities as may be assigned to the Executive from time to time;

(c) accept the position of Director of the Board, and such other office or offices in the Company which the Executive may be elected or appointed to by the Company;

(d) observe and follow the policies and procedures established by the Company, which the Executive acknowledges and agrees have been provided to the Executive for review prior to the Effective Date, and such policies and procedures adopted by the Company from time to time, all of which are subject to change by the Company in its sole discretion; and

(e) devote substantially all of the Executive's working time, attention, efforts and skill to the performance of the Executive's employment duties and responsibilities and business of the Company, provide exclusive services to the Company and truly and faithfully serve the best interests of the Company at all times.

3.2. The Executive will work primarily out of the Company's head office located in Oakville, Ontario, or such other location as the Company may determine is appropriate for the Company's head office. The Executive agrees that travel to other cities or locations in which the Company operates will be required as part of the Executive's employment duties.

ARTICLE 4
REMUNERATION

4.1. As of the Effective Date, the Company shall pay to the Executive a salary of $108,000.00 per annum (the **"Base Salary"),** less all applicable deductions, payable bi-monthly and in accordance with the Company's payroll practices and policies. The Base Salary is subject to be increased as follows:

(a) If the Company secures not less than $3,000,000.00 in total gross financing proceeds during the period of February 1, 2017 to December 31, 2018, the Base Salary will be

increased to $200,000.00 per annum effective immediately upon the closing of such financing.

(b) If the Company secures not less than $4,500,000.00 in total gross financing proceeds during the period of February 1, 2017 to December 31, 2019, the Base Salary will be increased to $300,000.00 per annum effective immediately upon the closing of such financing.

(c) If the Company secures not less than $10,000,000.00 in total gross financing proceeds during the period of February 1, 2017 to December 31, 2019, the Base Salary will be increased effective immediately upon the closing of such financing to a market rate salary (the **"Market Rate Salary").** The Market Rate Salary will be set by the Board's compensation committee in accordance with Board-approved compensation policies and guidelines and will be consistent with compensation paid to the president and chief executive officer of similar entities within the North American biotechnology industry.

4.2. The Company shall reimburse the Executive for all reasonable out-of-pocket expenses, provided that such reasonable expenses were incurred in the performance of the Executive's employment duties and are payable in accordance with the applicable policies and procedures of the Company, as may be amended by the Company in its sole discretion from time to time. All payments or reimbursements of expenses shall be subject to the submission by the Executive of appropriate vouchers, bills and receipts.

4.3. The Executive shall be eligible to receive an annual incentive bonus, in an amount up to fifty percent (50%) of the Executive's Base Salary as determined by the Board based on the attainment of individual and corporate metrics, pro-rated for partial years of service (the **"Bonus").** The Bonus, if payable, shall be paid after the Company has completed its annual audited financial statements.

4.4. The Executive will be granted the opportunity to participate in any stock option plan adopted by the Company at a level to be determined by the Board's compensation committee.

ARTICLE 5
BENEFITS

5.1. During the Term of this Agreement, the Executive will be eligible to participate in any benefit programs generally applicable to executives of the Company in force or adopted by the Company from time to time and as amended by the Company in its sole discretion (including health, dental, disability, life insurance, travel and critical illness), all subject to the terms of the policies provided by the relevant insurer.

The Executive's participation in any of the Company's benefit plans shall be in accordance with and subject to all of the terms and conditions of such plans or policies in force or adopted by the Company from time to time and as amended by the Company in its sole discretion.

ARTICLE 6
VACATION

6.1. The Executive shall be entitled to an annual paid vacation of six (6) weeks, pro-rated for partial years of service.

ARTICLE 7
TERMINATION

7.1. This Agreement and the employment relationship hereunder may be terminated in any of the following circumstances:

(a) **Death:** This Agreement shall automatically terminate upon the death of the Executive, in which case the Executive's estate shall have no claim against the Company for damages or otherwise arising out of or in respect of this Agreement or the Executive's employment with the Company, except for payment of any compensation accrued to the date of death, as outlined in Section 7.2.

(b) **Permanent Disability:** In the event that the Executive suffers a Permanent Disability, the employment of the Executive may be terminated by the Company upon thirty (30) days' notice to the Executive; except that if the termination of the Executive's employment would impair the Executive's ability to receive long term disability benefits in whole or in part the Executive shall, in lieu of termination, be placed on an unpaid leave of absence, it being understood that the Executive shall not be entitled to re-employment by the Company after such leave of absence or when the Executive ceases to be in receipt of such benefits. The Executive agrees that if the Company terminates the Executive for a Permanent Disability, this Agreement will have been frustrated and, in any event, that accommodating a Permanent Disability would impose an undue hardship on the Company.

(c) **Voluntarily:** The Executive may voluntarily terminate this Agreement by providing the Company with 90 days written notice of his intention to do so (the **"Resignation Period").** The Company may waive its entitlement to notice by providing the Executive with a payment equivalent to that portion of the Executive's Base Salary which would have been payable to him during the Resignation Period.

(d) **Cause:** Notwithstanding any other term of this Agreement, the Company may terminate the employment of the Executive and terminate this Agreement at any time for just Cause without any compensation, payment or liability whatsoever to the Executive except for payment of the Executive's Base Salary, to the Termination Date, and payment of any outstanding vacation pay. The Executive's benefits, including group health benefits, will cease on the Termination Date save and except for any obligations under the *Employment Standards Act,* 2000 (Ontario) or other applicable provincial employment legislation. For clarity, without limiting the foregoing, the Executive shall not be entitled to any bonus or pro rata bonus payment not already paid on or before the Termination Date.

(e) **Without Cause:** The Company may, in its absolute discretion, terminate this Agreement and the employment of the Executive without Cause at any time and for any reason **("Termination Without Cause")** by providing the Executive with prior written notice of termination or payment in lieu of notice, or any combination thereof (the **"Notice Period")** in accordance with the following:

(i) if the Executive is Terminated Without Cause on or after July 1st, 2017, the Notice Period will be equal to twelve (12) months;

(ii) if the executive is Terminated Without Cause on or after July 1st, 2022, the Notice Period will be equal to eighteen (18) months.

The Executive will receive any unpaid annual Base Salary earned up to and including the Termination Date and any expense reimbursement approved up to and including the Termination Date. The Executive will be entitled to payment of all unused accrued vacation, calculated as prescribed by the *Employment Standards Act, 2000* (Ontario) or other applicable provincial employment legislation, including, where applicable, any accrual relating to the minimum notice period prescribed by the *Employment Standards Act, 2000* (Ontario) or other applicable provincial employment legislation. If the Company elects to provide pay in lieu of notice it is calculated as:

(i) prorated annual Base Salary; and

(ii) an additional ten (10%) percent for loss of fringe benefits.

7.2. If the Executive is Terminated Without Cause, subject to and in accordance with the terms of the applicable group benefit plan, the Company will continue to provide those group insurance benefits in which the Executive is participating at the Termination Date for the Notice Period or until the Executive obtains alternate employment, whichever occurs first. If any such benefits cannot be continued, the Company will provide the Executive with monetary compensation in lieu thereof in an amount equal to the Company's premium cost for the continuation of those benefits in respect of any period of non-continuation that falls during the Notice Period.

7.3. Upon termination of the Executive's employment pursuant to subsections 7.1(a), (b), (c) or (d), the Executive or the Executive's estate (where applicable) shall only be entitled to: (i) payment of any portion of the Base Salary due and owing up to the Termination Date; (ii) reimbursement of all expenses properly incurred up to the Termination Date; (iii) provision of all benefits up to the Termination Date; and (iv) payment for any accrued but unused vacation pay due and outstanding up to the Termination Date.

7.4. If the Executive is Terminated Without Cause, all unvested stock options held by the Executive will vest immediately and be exercisable by the Executive at any time up to the original expiry date of the options as outlined in the stock option certificate(s).

7.5. The Executive's right to receive the Notice Period shall not be subject to any duty to mitigate, nor affected by any actual mitigation by the Executive.

7.6. Receipt of the Notice Period shall be subject to the prior execution by the Executive of a Release in substantially the same form as **Schedule "A"** to this Agreement.

7.7. The Executive agrees that by complying with the terms of this Article 7, the Company shall have satisfied all of its obligations to the Executive in relation to the termination of the Executive's employment and the Company shall not be obligated to make any other payments (except for those amounts specified in this Article 7), and any payment specified in this Article 7 shall be accepted and received by the Executive in lieu of any common law notice, statutory notice or payment or claim for any dismissal damages.

7.8. The Executive grants the Company the right to set-off against the Notice Period, or any other payment outlined in this Article 7, any amount which the Executive owes to the Company, whether immediately due and owing or not.

7.9. All payments outlined in this Article 7 shall be subject to any and all withholdings and deductions required to be made by the Company by Applicable Laws.

7.10. Upon termination of the Executive's employment for any reason, the Executive shall be deemed to have resigned as a director and officer of the Company and its Affiliates as of the Termination Date. The Executive shall promptly execute and deliver upon termination any document reasonably required by the Company to evidence the foregoing resignation.

ARTICLE 8
COVENANT NOT TO SOLICIT

8.1. Except with the prior written consent of the Company, the Executive shall not, at any time during the Term or the Restricted Period, solicit or attempt or cause to be solicited, directly or indirectly, any person reasonably known by the Executive to be an actual officer, employee, contractor, consultant or agent of the Company or its Affiliates, who was working in the service of the Company up to and including the Termination Date, for the purposes of offering such person employment, consulting or business opportunities with any person or entity other than the Company or its Affiliates.

8.2. Except with the prior written consent of the Company, the Executive shall not, at any time during Term and the Restricted Period, solicit or attempt or cause to be solicited, directly or indirectly, whether for the Executive's own account or for the account of any other Person, business in the Restricted Area that is the same as or similar to the Business of the Company from any actual customer or supplier of the Company or its Affiliates, who was such a customer up to and including the Termination Date, with whom the Executive had more than fleeting contact as a result of the Executive's employment with the Company and whom the Executive can reasonably identify as such a customer or client or supplier.

ARTICLE 9
COVENANT NOT TO COMPETE

9.1. Except with the prior written consent of the Company, during the Term and the Restricted Period, the Executive shall not become a party to or be involved in any Restricted Capacity, directly or indirectly, whether as an employer, employee, consultant, director, officer, owner, advisor, broker, finder, partner, lender, lessor or lessee of equipment, guarantor, shareholder, joint venturer, or otherwise, with any Person operating or intending to operate in the Restricted Area who is utilizing or pursuing an opportunity in, or is involved in, engaged in, or has an interest in, business that is the same as or similar to the Business of the Company. Notwithstanding the foregoing, the Executive is not prohibited from being involved with an entity in a capacity that is unrelated to the Business of the Company in the Restricted Area.

ARTICLE 10
FIDUCIARY OBLIGATIONS AND CONFIDENTIAL INFORMATION

10.1. The Executive acknowledges and agrees that in performing the Executive's duties and responsibilities pursuant to this Agreement, the Executive will occupy a position of high fiduciary trust and confidence with the Company, pursuant to which the Executive will develop and acquire wide experience and knowledge with respect to all aspects of the Business of the Company and the manner in which such business is conducted. It is the express intent and agreement of the Executive and the Company that such knowledge and experience shall be used solely and exclusively in furtherance of the business interests of the Corporation and not in any manner detrimental to them. The Executive therefore agrees that the Executive is a fiduciary of the Company, and shall not engage in any practice or business that is detrimental to the interests of the Corporation. The Executive further agrees that the Executive's fiduciary duties, as outlined in this Agreement and as

determined at common law, shall survive the termination of the Executive's employment for any reason.

10.2. The Executive further acknowledges and agrees that in performing the duties and responsibilities of the Executive's employment, he will become knowledgeable with respect to a wide variety of Confidential Information which is the exclusive property of the Company, the disclosure of which would cause irreparable harm to the Company. The Executive therefore agrees that during the Term and following the Termination Date, the Executive shall: (i) treat confidentially all Confidential Information; (ii) hold Confidential Information in the strictest of confidence and in trust for the sole benefit of the Company; (iii) not disclose, publish or make available by any method Confidential Information to any unauthorized person; and (iv) not use any Confidential Information for any purpose other than for the specific purpose of acting in the best interests of the Company and carrying out the Executive's duties pursuant to this Agreement, unless the Executive has obtained the prior written consent of the Board, which consent may be refused in its sole discretion.

ARTICLE 11
CORPORATE PROPERTY AND BUSINESS RECORDS

11.1. The Executive agrees to promptly deliver to the Company, upon termination of the Executive's employment, or at any other time when the Company so requests, all Corporate Property and Confidential Information. The obligation of confidentiality set forth in Article 10 shall continue notwithstanding the Executive's delivery of any such documents to the Company.

11.2. The Executive confirms that all of the Corporate Property and Confidential Information which is required to be delivered to the Company pursuant to this Article 11 constitute the exclusive property of the Company.

ARTICLE 12
REASONABLENESS OF COVENANTS

12.1. The Executive hereby agrees that all restrictions contained in this Agreement are reasonable, valid and necessary protections of the Company's proprietary business interests and hereby waives any and all defenses to the strict enforcement thereof by the Company. If any covenant or provision of this Agreement is determined to be void or unenforceable in whole or in part, for any reason, it shall be deemed not to affect or impair the validity of any other covenant or provision of this Agreement, which shall remain in full force and effect. If any of the covenants in Articles 8 or 9 are held to be unreasonable or unenforceable by reason of their temporal, geographic or business scope, or otherwise, then such covenants will be given effect to in such reduced form as a court of competent jurisdiction may hold to be reasonable and enforceable.

12.2. The Executive acknowledges and agrees that the Company will suffer irreparable harm if the Executive breaches any of the obligations under Articles 8, 9, or 10 and that monetary damages would be impossible to quantify and would be inadequate to compensate the Company for such a breach. Accordingly, the Executive agrees that in the event of a breach, or a threatened breach, by the Executive of any of the provisions of Articles 8, 9 or 10, the Company shall be entitled to obtain, in addition to any other rights, remedies or damages available to the Company at law or in equity, a preliminary and permanent injunction, without having to prove damages, in order to prevent or restrain any such breach, or threatened breach, by the Executive, or by any or all of the Executive's partners, employers, executives, servants, agents, representatives and any other persons directly or indirectly acting for, or on behalf of, or with, the Executive, and that the Company shall be entitled to all of its costs and expenses incurred in obtaining such relief.

ARTICLE 13
PRIVACY

13.1. The Executive acknowledges and agrees that he will take all necessary steps to protect and maintain Personal Information of the employees, consultants or customers of the Company obtained in the course of his employment with the Company. The Executive shall at all times comply, and shall assist the Company to comply, with all Applicable Privacy Laws.

13.2. The Executive acknowledges and agrees that the disclosure of the Executive's Personal Information may be required as part of the ongoing operations of the Company's business, as required by law or regulatory agencies, as part of the Company's audit process, or as part of a potential business or commercial transaction or as part of the Company's management of the employment relationship (the **"Personal Information Disclosure"),** and the Executive hereby grants consent as may be required by Applicable Privacy Laws to the Personal Information Disclosure.

ARTICLE 14
NOTICES

14.1. Any Notice required to be given hereunder may be provided by personal delivery, by registered mail or by facsimile to the Parties hereto at the following addresses:

To the Company:

CARDIOL THERAPEUTICS INC.
2275 Upper Middle Road East, Suite 101
Oakville, Ontario
L6H 03C

Email: [***]

Attention: Terry Lynch

To the Executive:

***
***
***

14.2. Any Notice, direction or other instrument shall, if delivered, be deemed to have been given and received on the business day on which it was so delivered, and if not a business day, then on the business day next following the day of delivery, and, if mailed, shall be deemed to have been given and received on the fifth day following the day on which it was so mailed, and, if sent by facsimile transmission, shall be deemed to have been given and received on the next business day following the day it was sent.

14.3. Either Party may change his or its address for the sending of Notice to such Party by providing Notice to the other Party sent in accordance with the provisions hereof.

ARTICLE 15
MISCELLANEOUS

15.1. The invalidity or non-enforceability of any provision or portion of such provision of this Agreement in any respect shall not affect the validity or enforceability of this Agreement in any other respect or of any other provision of this Agreement. In the event that any provision or portion of such provision of this Agreement shall be held invalid or unenforceable by a court of competent jurisdiction, it shall be deemed not to affect or impair the validity of any other covenant or provision of this Agreement, which shall remain in full force and effect.

15.2. The Executive agrees that the breach or alleged breach by the Company of any term, condition or covenant contained in this Agreement, or any obligation owed to the Executive by the Company shall not affect the validity or enforceability of the covenants of the Executive set forth in this Agreement.

15.3. The provisions of Articles 7-13 shall continue in effect notwithstanding termination of the Executive's employment and the termination of this Agreement for any reason.

15.4. This Agreement shall be construed and enforced in accordance with the laws of the Province of Ontario. The Parties hereby attorn to the exclusive jurisdiction of the Province of Ontario in order to settle any disputes relating to this Agreement, except insofar as a court of another jurisdiction is requested to enforce the restrictive covenants contained herein.

15.5. This Agreement shall enure to the benefit of and be binding upon the Parties, together with their personal representatives, successors and permitted assigns. This Agreement is an employment agreement and may not be assigned by either Party without the prior consent of the other, except that the Company may assign this agreement to any of its Affiliates without the consent of the Executive.

15.6. The Executive represents and warrants to the Company that the Executive is free to enter into this Agreement and is not barred by or subject to any contractual or other obligation that would be violated by the execution or performance of this Agreement.

15.7. The waiver by either Party of any breach of the provisions of this Agreement shall not operate or be construed as a waiver by that Party of any other breach of the same or any other provision of this Agreement.

15.8. This Agreement may not be amended or modified in any way except by written consent of the Executive and the Company.

15.9. This Agreement may be executed in counterparts, each of which shall be an original and all of which together shall constitute one and the same instrument.

15.10. This Agreement, along with the Company's policies and the applicable benefit plans and agreements referred to herein, constitute the entire agreement of the Parties relating to the subject matter hereof, and supersede all previous agreements, arrangements, and understandings, whether express or implied, relating to the subject matter hereof. No other agreements, oral, implied or other, regarding the subject matter of this Agreement shall be deemed to exist or bind the Parties. The Executive further agrees that in entering into this Agreement, the Executive has not relied on any warranty, representation, assurance or promise of any kind whatsoever other than as expressly set out in this Agreement.

[The remainder of this page has been left intentionally blank]

IN WITNESS WHEREOF, the Parties hereto have executed this agreement the day and year first above written.

CARDIOL THERAPEUTICS INC.

By: /s/ Terry Lynch
Name: Terry Lynch
Title: Director

SIGNED AND DELIVERED by the Executive)
in the presence of:)

/s/ Mary Hulbert
Witness

16 Geoffrey Street
Address

Toronto, ON M6R 1P3

/s/ David Elsley
DAVID ELSLEY

SCHEDULE "A"

FINAL RELEASE

I, **DAVID ELSLEY,** of the City of Oakville, in the Province of Ontario, in consideration of the amounts provided in the Executive Employment Agreement executed by myself and **CARDIOL THERAPEUTICS INC.** (the **"Employment Agreement")** outlining the settlement arrangement between myself and **CARDIOL THERAPEUTICS INC.** (the **"Company")** and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, do for myself, my executors and assigns hereby remise, release and forever discharge the Company, and any associated, affiliated, predecessor or parent company of the Company and their present and former directors, officers, agents and employees (the **"Releasees"),** including each of their respective successors, heirs, administrators and assigns, from all manner of actions, causes of action, debts, obligations, covenants, claims or demands, whatsoever which I may ever have had, now have, or can, shall or may hereafter have against the Releasees or any of them, by reason of or arising out of any cause, matter or thing whatsoever done, occurring or existing up to and including the present date and, in particular, without in any way restricting the generality of the foregoing, in respect of all claims of any nature whatsoever, past, present or future, directly or indirectly related to or arising out of or in connection with my relationship with the Releasees, as an employee, and the termination of my employment from the Company including, but not limited to, any claims related to any entitlement I may have or may have had to any payment or claim either at common law or under the Ontario *Employment Standards Act, 2000,* Ontario *Human Rights Code,* Federal *Personal Information Protection and Electronic Delivery Act* or any other applicable legislation governing or related to my employment with the Releasees.

AND FOR THE SAID CONSIDERATION, I, DAVID ELSLEY, present and warrant that I have not assigned to any person, firm or company any of the actions, causes of action, claims, suits, executions or demands which I release by this Release, or with respect to which I agree not to make any claim or take any proceeding herein.

IT IS FURTHER ACKNOWLEDGED that the payment to me includes full compensation and consideration for the loss of my employment benefits, as provided by the Releasees, and that all of my employment benefits and privileges shall cease on the Termination Date of my employment, except as otherwise provided in the Employment Agreement. I further acknowledge that I have received all benefits due to me and have no further claim against the Releasees for such benefits. I further accept sole responsibility to replace such benefits which I wish to continue or to exercise conversion privileges where applicable with respect to such benefits and, in particular any life insurance and long-term disability benefits. In the event that I become disabled following termination of my employment, I covenant not to sue the Releasees for insurance or other benefits or loss of same and hereby release the Releasees from any and all further obligations or liabilities arising therefrom.

IT IS FURTHER ACKNOWLEDGED that I am in receipt of all wages, overtime pay, vacation pay and general holiday pay and I further reconfirm that there are no entitlements, overtime pay or wages due and owing to myself by the Company. I confirm and agree that I have not received any Employment Insurance benefits from Service Canada, and I further confirm that there are no amounts owed for Employment Insurance benefits. I hereby agree to indemnify and hold harmless the Company for any amounts owing for Employment Insurance. I further agree to indemnify and save harmless the Company and shall be liable to the Company for any claims in regards to non-deduction or insufficient deduction of taxes or employment insurance monies in regards to the settlement agreed to herein, including any legal costs, interest or penalties as may be assessed or alleged against the Company.

IT IS HEREBY AGREED that the terms of the Employment Agreement and of this Release will be kept confidential. No party hereto shall communicate any such terms to any third party under any circumstances whatsoever, excepting any necessary communication with my legal and financial advisors, as required, on the express condition that they maintain the confidentiality thereof, and any disclosure which is required by law, although either party shall be at liberty to disclose to third parties that a mutually acceptable Release was agreed upon. The invalidity and unenforceability of any provision of this Release shall not affect the validity or enforceability of any other provision of this Release, which shall remain in full force and effect.

I ACKNOWLEDGE that the satisfactory arrangements made between me and the Company do not constitute any admission of liability by or on behalf of the Company.

I ACKNOWLEDGE AND AGREE that my execution of this Release constitutes a resignation of any directorship I may hold with the Company.

I HEREBY DECLARE that I have read all of this Release, fully understand the terms of this Release and voluntarily accept the consideration stated herein as the sole consideration for this Release for the purpose of making a full and final settlement with the Releasees. I further acknowledge and confirm that I have been given an adequate period of time to obtain independent legal counsel regarding the meaning and the significance of the terms herein and the covenants mutually exchanged.

IN WITNESS WHEREOF, signed this _____ day of _____, 20___.

_____
DAVID ELSLEY

_____
Witness Signature

_____
Witness (Print Name)

Exhibit 4.8

EMPLOYMENT AGREEMENT ADDENDUM dated as of the 23rd day of December, 2021 (the "**Addendum Agreement**").

BETWEEN:

CARDIOL THERAPEUTICS INC. (the "**Corporation**")

-and-

DAVID ELSLEY (the "**Employee**")

(Each a "**Party**" and together the "**Parties**")

WHEREAS the Employee is currently employed by the Corporation and the terms and conditions of his employment are governed by an employment agreement dated January 19, 2017 (the "**Employment Agreement**");

AND WHEREAS this Addendum Agreement shall be attached as an appendix to the Employment Agreement;

AND WHEREAS any terms of the Employment Agreement not addressed in this Addendum Agreement shall remain unchanged;

NOW THEREFORE, in consideration of the foregoing and the mutual agreements contained herein (the receipt and adequacy of which are acknowledged), the Parties agree as follows:

1. This Addendum Agreement is subject in all respects to the terms and provisions of the Employment Agreement except to the extent that the terms and provisions of the Employment Agreement are modified by this Addendum Agreement. For greater certainty, all provisions of the Employment Agreement not otherwise modified by the terms of this Addendum Agreement shall be read as provisions applicable to the Employee's continued employment with the Corporation.

2. Section 4.1(d) shall be added to the Employment Agreement:

   "*Effective December 9, 2021, the Market Rate Salary shall be $525,000.00 per annum, payable in accordance with the Company's regular payroll practices and less statutory deductions."*

3. Section 7.1(c) is deleted in its entirety and replaced with the following:

   "*The Executive may resign his employment with the Company at any time upon providing ninety (90) days' written notice (the "**Resignation Notice Period**"). In the event the Company does not wish to employ the Executive until the expiry of the Resignation Notice Period, the Company may, at its sole discretion, waive in whole or in part its decision to continue to employ the Executive by providing payment in lieu and continuation of the Executive's benefits, if any, until the expiry of the Resignation Notice Period. The Company will also provide the Executive any accrued and outstanding salary and vacation pay*."

4. Section 7.1(d) is deleted in its entirety replaced with the following:

   "*The Company may terminate the Executive's employment for cause, at any time, by providing the Executive only with the minimum notice, or pay in lieu thereof, and severance, if applicable, as*

prescribed by the ESA. In addition, the Company will continue to pay for and/or provide continuation of all applicable employment benefits for the duration of the notice of termination period if required by the ESA."

5. Section 7.1(e) is deleted in its entirety replaced with the following:

"*The Company may, in its absolute discretion, terminate this Agreement and the employment of the Executive without cause at any time and for any reason (hereinafter "**Terminated Without Cause**") by providing the Executive with written notice of termination or payment in lieu thereof, or any combination thereof for a period of twenty-four (24) months (the "**Notice Period**").*

The Executive will receive any unpaid annual Base Salary earned up to and including the Termination Date and any expense reimbursement approved up to and including the Termination Date. The Executive will be entitled to payment of all accrued vacation, calculated as prescribed by the Employment Standards Act, 2000 (Ontario), including, where applicable, any accrual relating to the minimum notice period prescribed by the Employment Standards Act, 2000 (Ontario). If the Company elects to provide payment in lieu of notice, it shall be based solely upon the following:

(i) annual Base Salary; and

(ii) an additional ten per cent (10%) for loss of fringe benefits."

6. Section 7.3 is amended to read as follows:

"*Upon termination of the Executive's employment pursuant to subsections 7.1(a) or (b), the Executive or the Executive's estate (where applicable) shall only be entitled to: (i) payment of any portion of the Base Salary due and owing up to the Termination Date; (ii) reimbursement of all expenses properly incurred up to the Termination Date; (iii) provision of all benefits up to the Termination Date; and (iv) payment for any accrued but unused vacation pay due and outstanding on the Termination Date*."

7. This Addendum Agreement and the Employment Agreement contain the entire agreement between the Parties. There are no other agreements, understandings, representations or warranties, collateral, oral or otherwise. The Employee agrees that the Employee has read the entire Addendum Agreement and understands its contents.

8. The Employee acknowledges and agrees that the Employee had an opportunity to obtain the Employee's own independent legal with respect to the Addendum Agreement and that the Employee is fully aware of the nature of the Employee's rights and obligations hereunder.

[*signature page follows*]

IN WITNESS WHEREOF the Parties have executed this Agreement this 27th day of December, 2021.

/s/ David Elsley	/s/ Susan Elsley
David Elsley	Witness

By: /s/ Chris Waddick

CARDIOL THERAPEUTICS INC.

Exhibit 4.9

CERTAIN CONFIDENTIAL INFORMATION (MARKED BY BRACKETS AS "[***]") HAS BEEN EXCLUDED FROM THIS EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) THE REGISTRANT CUSTOMARILY AND ACTUALLY TREATS THE INFORMATION AS PRIVATE OR CONFIDENTIAL.

PERSONAL AND CONFIDENTIAL

August 16 2018

Delivered via e-mail

Dear Christopher Waddick:

Further to our recent discussions, we are pleased to offer you employment at Cardiol Therapeutics Inc. (the **"Corporation")** as the Chief Financial Officer, on a part-time basis on the following terms and conditions.

Once you have signed and returned this Agreement (defined below), it will constitute a binding agreement between you and the Corporation.

SECTION 1 DEFINITIONS

1.1 For the purpose of the Agreement, the following words shall have the meanings set out below:

(a) **"Agreement"** means this employment agreement and Schedules A to D as may be amended by the Parties (defined below) in writing from time to time.

(b) **"Board"** means the board of directors of the Corporation.

(c) **"Cause"** means the repeated and demonstrated failure on your part to perform the material duties of your position in a competent manner, which you fail to substantially remedy within a reasonable period of time after receiving warning and counselling from Corporation; you engaging in theft, dishonesty or falsification of records; your willful refusal to take reasonable directions; or any act(s) or omission(s) that would amount to cause at common law or pursuant the ESA (defined below).

(d) **"Confidential Information"** has the meaning set forth in Section 7.1 hereof.

(e) **"Corporation Property"** includes any and all proprietary technology, financial, operating and training information, all works of expression and any copyrights in such works, Developments (defined below), current or potential business contacts and contract development information, patentable inventions, discoveries or trade secrets, and any materials, tools, equipment, devices, records, files, data, tapes, computer programs, computer disks, software, communications, letters, proposals, memoranda, lists, drawings, blueprints, correspondence, specifications or any other documents or property belonging to Corporation.

(f) **"Developments"** means any discovery, invention, industrial or artistic design, improvement, concept, specification, creation, treatment, computer program, method, process, apparatus, specimen, formula, formulation, product, hardware or firmware, any drawing, report, memorandum, article, letter, notebook and any other invention, work of authorship and ideas (whether or not patentable or copyrightable) and legally recognized proprietary rights (including, but not limited to, patents, copyrights, trademarks and service marks, topographies, know-how and trade secrets), possessory and ownership rights and interests of all kinds whatsoever, and all records and copies of records relating to the foregoing, that:

(i) result or derive from your employment with Corporation or from your knowledge or use of Confidential Information;

(ii) are conceived or made by you (individually or in collaboration with others) in the discharge of your duties hereunder;

(iii) result from or derive from the use or application of the resources of Corporation; or

(iv) relate to the business operations or actual or demonstrably anticipated research and development by Corporation,

whether such Developments were created during your employment with Corporation or afterwards. In respect of item (iv) above, Developments shall not include any Developments made more than two years following termination of your employment with Corporation.

(g) **"ESA"** means Ontario *Employment Standards Act, 2000.*

(h) **"Law"** means any Canadian or foreign federal, state, provincial or local statute, law, ordinance, decree, order, injunction, rule, directive, or regulation of any governmental authority, and includes rules and regulations of any regulatory or self-regulatory authority compliance with which is required by law, in each case, in force or effect on the date hereof or thereafter.

(i) **"Parties"** means you and the Corporation.

(j) **"Person"** means any individual, partnership, limited partnership, joint venture, syndicate, sole proprietorship, company or corporation with or without share capital, unincorporated association, limited liability company, trust, trustee, executor, administrator or other legal personal representative, governmental authority or entity however designated or constituted; and pronouns when they refer to a Person shall have a similarly extended meaning.

(k) **"Term"** has the meaning set forth in Section 2.2 hereof.

(l) **"Totally Disabled"** means, subject to Corporation's duty to accommodate under applicable human rights and workplace safety legislation, your absence from work or inability to perform the essential duties of your position for a period of six (6) months in any twelve (12) month period.

SECTION 2 POSITION AND START DATE

2.1 You shall be employed on a part-time basis as Chief Financial Officer and shall report to the Chief Executive Officer. You are expected to work 10 hours a week for the Corporation. Your duties shall include those set out at Schedule A. The Corporation may change your duties from time to time consistent with your position without having any effect upon any other term of the Agreement.

2.2 Your employment with the Corporation pursuant to the terms of this Agreement shall commence August 16, 2018 (the **"Effective Date")** and will continue until the Agreement is terminated in accordance with the provisions of Section 4 hereof (the **"Term")**.

2.3 The Corporation has an accommodation process in place that provides accommodation for employees with disabilities. If you require accommodation because of a disability or specific medical need, please contact your manager.

SECTION 3 COMPENSATION

3.1 Your weekly compensation will be $3,500.00 payable in accordance with the Corporation's regular payroll practices and less statutory deductions.

3.2 You will receive 100,000 stock options upon signing in accordance with the Terms and Conditions outlined in Schedule B.

3.3 You will receive a signing bonus equal to 50,000 Signing Bonus Stock Options in accordance with the Terms and Conditions outlined in Schedule C.

3.4 The Corporation shall maintain Director and Officer insurance coverage for your benefit. Subsequent to your employment ending with the Corporation, the Corporation shall ensure that the insurance coverage is continued with respect to any claims made against you with respect to acts or omissions during the time you were employed by the Corporation.

3.5 You will be entitled to five (5) weeks' vacation. Vacation shall be accrued and scheduled on a calendar basis (pro-rated for the first year of employment), in accordance with Corporation's policy and procedure. You will be provided with no less than the minimum vacation time and pay, as required by the ESA, to be taken during the Corporation's vacation year. Any unused vacation beyond your allowance pursuant to the ESA may not be carried over into the next year without specific written authorization from the Corporation.

3.1 The Corporation shall reimburse you for all reasonable entertainment and travel expenses actually and properly incurred by you in the performance of your duties under the Agreement, such reimbursement to be made in accordance with, and subject to, the policies of the Corporation from time to time. You will be required to keep proper accounts and to furnish invoices and/or other supporting documents to the Corporation within sixty (60) days of incurring the expense, failing which you will not receive reimbursement. Any expenditure over one thousand dollars ($1000.00) requires prior written authorization,

SECTION 4 TERMINATION

Resignation

4.1 You may resign your employment with the Corporation at any time upon providing two (2) weeks prior written notice (the **"Resignation Notice Period"). In** the event the Corporation does not wish to employ you until the expiry of the Resignation Notice Period, the Corporation may, at its sole discretion, waive in whole or in part its decision to continue to employ by providing payment in lieu until the expiry of the Resignation Notice Period. The Corporation will also provide you any accrued and outstanding salary and vacation pay.

Termination For Cause

4.2 The Corporation may terminate your employment at any time for Cause without payment of any kind,including notice of termination or payment in lieu thereof, or severance pay, if applicable, save and except accrued and outstanding salary and vacation pay.

Termination Without Cause

4.3 The Corporation may terminate your employment in its sole discretion for any reason whatsoever without Cause by providing you the greater of;

(a) $91,000, which is an amount equal to six (6) months of your current wages, less statutory deductions and paid by way of salary continuance or as a lump sum, subject to the Corporation's sole discretion; or

(b) notice of termination, or payment in lieu thereof, or a combination of both, and severance pay, if applicable, pursuant to the ESA.

In addition, the Corporation will continue to pay its share of your benefits, if any, for the duration of the notice of termination period, pursuant to the ESA. The Corporation will also provide you any accrued and outstanding salary and vacation pay.

4.4 You agree that such notice is fair and reasonable and further acknowledge that you understand and agree that such payments are the only monies and benefits owing by the Corporation to you for notice of termination, or pay in lieu thereof, and/or severance pay, if applicable, of any kind. For clarity, you acknowledge and understand that you shall not receive any monies, payments or entitlements of any kind whatsoever for reasonable notice at common law.

Frustration

4.5 In the event that you are Totally Disabled, your employment shall terminate and the Corporation shall provide you with the greater of:

(a) $91,000, which is an amount equal to six (6) months of your current wages, less statutory deductions and paid by way of salary continuance or as a lump sum, subject to the Corporation's sole discretion; or

(b) notice of termination, or payment in lieu thereof, or a combination of both, and severance pay, if applicable, pursuant to the ESA.

4.6 In addition, the Corporation will continue to pay its share of your benefits, if any, for the duration of the notice of termination period, pursuant to the ESA. The Corporation will also provide you any accrued and outstanding salary and vacation pay as calculated pursuant to the ESA.

4.7 You agree that such notice is fair and reasonable and further acknowledge that you understand and agree that such payments and continuation of benefits are the only monies and benefits owing by the Corporation arising from the frustration of your employment. For clarity, you acknowledge and understand that you shall not receive any monies, payments, benefits or entitlements of any kind whatsoever for common law notice.

Resignation as Officer and Director

4.8 Upon termination of your employment, for any reason, you shall, as and when requested by the Corporation, resign as an officer and director of the Corporation (as and when applicable) and of any other affiliates or related companies, for no further compensation or remuneration.

Return of the Corporation Property

4.9 You further acknowledge and agree that pursuant to the terms of the Agreement, you will acquire the Corporation Property which is and shall remain the sole and exclusive property of the Corporation. Immediately upon the termination of your employment for any reason, all the Corporation Property in your possession or control shall be delivered by you to the Corporation immediately and any Confidential

Information of which you came into possession of, that is stored or saved on any home or other computer system, network, server or personal digital assistant (including any iPad, cell phone and the "cloud") that does not belong to the Corporation shall be permanently deleted and purged by you therefrom immediately and you shall provide the Corporation with satisfactory evidence thereof. You shall also provide to the Corporation all passwords and pass codes used by you in the performance of your employment with the Corporation.

Co-operation and Assistance with Regulatory and Litigation Matters

4.10 You agree that following the termination of your employment, for any reason, you will cooperate with and assist the Corporation and its affiliates in connection with any investigation, regulatory matter, legal dispute, lawsuit or arbitration in which the Corporation or any of its affiliates is a subject, target or party and as to which you may have pertinent information. You agree that you will make yourself reasonably available, relative to your other commitments, for preparation for hearings, proceedings or litigation and for attendance at any pre-trial discoveries and trials. The Corporation agrees to make every reasonable effort to provide you with reasonable notice and reasonably compensate you for your time in the event your participation is required. You further agree to perform all acts and execute any and all documents that may be necessary to carry out your obligations under s. 4.9 hereof.

SECTION 5 NON-SOLICITATION

5.1 You covenant with the Corporation that for so long as you employed by the Corporation pursuant to the terms and conditions of this Agreement and for a period of twelve (12) months thereafter, you will not hire any employees, consultants or other agents of the Corporation or induce or attempt to induce any employees, consultants or other agents of the Corporation to leave his or her employment, consultant or other agent arrangements or contact any customers of the Corporation for the purpose of selling to those customers any products or services which are the same as or substantially similar to, or competitive with, the products or services sold by the Corporation.

SECTION 6 NON-COMPETITION

6.1 You shall not, during your employment with the Corporation and for a period of six (6) months immediately thereafter, for any reason, on your own behalf or on behalf of or in connection with any Person, directly or indirectly, in any capacity whatsoever, alone, through or in connection with any Person, carry on, participate in or be engaged in or have any financial or other interest in or be otherwise commercially involved in business competitive with the Corporation in the Province of Ontario.

SECTION 7 INTELLECTUAL PROPERTY

7.1 All Developments will be the exclusive property of the Corporation and the Corporation will have sole discretion to deal with Developments. You agree that no rights, including without limitation in intellectual property rights, in the Developments are or will be retained by you. You acknowledge that all works created during the Term by you for the Corporation are works in respect of which the Corporation is the "first owner" for copyright purposes and in respect of which all copyright will vest in the Corporation. In consideration of the benefits and consideration to be received by you under the Agreement, you hereby irrevocably transfers and assigns, and agree in the future to transfer and assign, all right, title and interest in and to the Developments and further irrevocably transfers and assigns, and agrees in the future to transfer and assign all intellectual property rights in respect of the Developments including, without limitation, all rights in respect of patents, copyrights, industrial designs, circuit topographies and trademarks, and any goodwill associated therewith in Canada, the United States and worldwide to the Corporation and you will

hold all the benefits of the rights title and interest mentioned above in trust for the Corporation prior to the assignment to the Corporation.

7.2 You hereby irrevocably waive and agree to waive in the future all moral rights that you may have now or in the future with respect to the Developments, in any applicable jurisdiction, or at common law or otherwise, including, without limitation, any rights you may have to have your name associated (or not associated) with the Developments and any rights you may have to prevent the alteration, translation or destruction of the Developments, and any rights you may have to control the use of the Developments in association with any product, service, cause or institution. You agree that this waiver may be invoked by the Corporation, and by any of its authorized agents or assignees, in respect of any or all of the Developments. You agree that such waiver (and agreement to waive) is total and complete, and is effective in respect of all Persons worldwide, and that the Corporation may assign the benefit of this waiver to any Person.

7.3 You will keep complete, accurate and authentic notes, reference materials, data and records of all Developments in the manner and form requested by the Corporation. All these materials will be confidential information upon their creation.

7.4 You shall specify at Schedule D, all pre-existing developments, not assigned to the Corporation, and created prior to the Term in which you have any right, title or interest. If no such specification is made on Schedule 13, or if you write “none” or similar designation thereon, you shall be conclusively deemed not to have any such developments.

7.5 You hereby irrevocably waive and agree to waive in the future all moral rights that you may have now or in the future with respect to the Developments, in any applicable jurisdiction., or at common law or otherwise, including, without limitation, any rights you may have to have your name associated (or not associated) with the Developments and any rights you may have to prevent the alteration, translation or destruction of the Developments, and any rights you may have to control the use of the Developments in association with any product, service, cause or institution. You agree that this waiver may be invoked by the Corporation, and by any of its authorized agents or assignees, in respect of any or all of the Developments. You agree that such waiver (and agreement to waive) is total and complete, and is effective in respect of all Persons worldwide, and that the Corporation may assign the benefit of this waiver to any Person.

7.6 You will do all further things that may be reasonably necessary or desirable in order to give full effect to this Agreement including, without limitation:

(a) assisting in making patent applications for the Developments, including providing information and assistance to lawyers and/or patent agents as to the characteristics of the Developments created by You (whether individually or in conjunction with others) in sufficient detail to enable the preparation of a suitable patent specification, to execute all formal documentation incidental to an application for letters patent (including powers of attorney) and to execute assignment documents in favour of the Corporation for such applications;

(b) assisting in making applications for all other forms of intellectual property registration relating to the Developments;

(c) assisting in prosecuting and maintaining the patent applications and other intellectual property relating to the Developments; and

(d) assisting in registering, maintaining and enforcing the patents and other intellectual property registrations relating to the Developments, whether during, or following your employment with the Corporation.

7.7 If your cooperation is required in order for the Corporation to obtain or enforce legal protection of the Developments following the termination of your employment, you shall be reimbursed for any reasonable costs associated in so doing.

SECTION 8 CONFIDENTIALITY AND NON-DISPARAGEMENT

8.1 You covenant to keep in strictest confidence, and shall not disclose and shall not use (other than for purposes of performing duties as an employee, consultant, director or officer of the Corporation) any non-public information pertaining to or concerning the Corporation including; without limitation, all financial information, all supplier and customer lists, all non-public intellectual property, including trade secrets, unfiled trademarks, unfiled patent applications, patent applications that have been filed but not opened for public inspection, technical expertise and know how, and all other information not generally known outside the Corporation (collectively, **"Confidential Information");** provided, however, that Confidential Information does not include information which:

(a) was already in, or enters into, the public domain, through no breach hereof by you;

(b) is required to be disclosed pursuant to applicable Laws, provided that such party has first given written notice to the Corporation that it intends to disclose such information;

(c) is required to be disclosed in any arbitration or legal proceeding, provided that such party has first given written notice to the Corporation that it intends to disclose such information; or

(d) has been authorized by the Board to be disclosed by you.

8.2 You covenant with the Corporation that for so long as you are employed pursuant to the terms and conditions of this Agreement and for a period of one year thereafter, you will not undertake any harassing or disparaging conduct directed at the Corporation, and you shall refrain from making any negative or derogatory statements concerning the Corporation publicly, including through any online or social media.

8.3 You further recognize that any information concerning the officers, employees, clients, and other individuals about whom the Corporation holds information may be subject to the requirements of the *Personal Information Protection and Electronic Documents Act, 2000,* the Corporation's privacy policies (as amended), and such other Laws governing privacy and you hereby agree to abide by such terms. You hereby consent to the collection, use and disclosure of your personal information, as may be required from time to time, for purposes relating to your employment with the Corporation, this Agreement and to facilitate and promote the performance of your duties.

SECTION 9 AUTHORIZATION TO DEDUCT PAYMENTS FROM WAGES

9.1 As you are aware, the Corporation has provided you with the following Corporation Property for your use in the performance of your duties. Should you fail to return the below-noted items within seven (7) business days following the termination of your employment, you hereby authorize and permit the Corporation to deduct the cost of the items set out below from your final pay.

Item	Cost
Laptop; serial number ***	
Office key	
Security badge	

9.2 Any lost or stolen items must be reported to head office immediately as each item under your control is also your responsibility. Losses or theft can be reported to ***.

SECTION 10 GENERAL

10.1 The Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein. By way of the Agreement, both you and the Corporation attorn to the jurisdiction of the courts of Ontario with respect to any matter arising hereunder or pursuant to your employment.

10.2 If any term or other provision of the Agreement is determined to be invalid, illegal or incapable of being enforced for any reason, all other terms and provisions of the Agreement shall nevertheless remain in full force and effect.

10.3 The Agreement contains the entire agreement between you and the Corporation. There are no other agreements, understandings, representations or warranties, collateral, oral or otherwise. You agree that you read the entire Agreement and understand its contents.

10.4 You acknowledge and agree that you had an opportunity to obtain your own independent legal and financial advice with respect to the Agreement and that you are fully aware of the nature of your rights and obligations hereunder.

10.5 You acknowledge that you received adequate consideration for the obligations set out under the Agreement.

10.6 The Agreement may be executed in any number of counterparts (including counterparts by facsimile) and all such counterparts taken together shall be deemed to constitute one and the same instrument.

We look forward to your involvement with the Corporation and to a rewarding career with us. Yours truly,

CARDIOL THERAPEUTICS INC.
Per: /s/David Elsley
Name: David Elsley
Title: President & CEO

ACKNOWLEDGED AND AGREED THIS 16 DAY OF August, 2018 BY:

/s/ Christopher Waddick
Christopher Waddick

SCHEDULE "A"

JOB DUTIES

As noted in the Agreement, you are employed on a part-time basis. You agree to spend your 10 hours a week for the Company focused on the following responsibilities:

Strategy & Executive Leadership

- Oversee the development of tools and systems to provide financial and operational information to the CEO and make recommendations on both strategy and operations.
- Lead long-term budgetary planning and costs management in alignment with company strategic plans.
- Participate in board Audit committee meetings.
- Participate in identifying and securing external funding and funding sources, participate in fundraising meetings with potential. investors.
- Perform financial analysis of proposed collaborations, merger and acquisition and business development deals with external organizations.
- Ensure legal and regulatory compliance regarding all financial functions.
- Make recommendations re accounting/financial ERP systems as necessary.

Financial Planning & Analysis

- Assess organizational performance against both the annual budget, periodic forecast updates and the company's long-term strategy.
- Establish yearly financial objectives and targets.
- Select and engage outside consultants for the purposes of audit and investment guidance.

Accounting

- Establish and maintain the organization's accounting principles, practices, and procedures; ensure development and maintenance of appropriate internal controls and financial procedures.
- Manage existing and future debt and compliance with debt reporting requirements and covenants, if any. Lead discussions with current and potential lenders; make recommendations related to relationships with financial partners.
- Coordinate audits and proper filing of tax returns.

Other

- Manage the Stock Option Plan in coordination with outside counsel.
- Work with outside brokers to obtain required business insurance and identify new insurance needs and changing levels of coverage for current insurance.

SCHEDULE B

STOCK OPTION CERTIFICATE

CARDIOL THERAPEUTICS INC.

STOCK OPTION CERTIFICATE

This Option Certificate is issued pursuant to the provisions of the Corporation's Stock Option Plan. Capitalized terms herein shall the have the meanings set out in the Plan. This Option Certificates evidences that Chris Waddick is the holder of Options to purchase up to 100,000 Shares at an exercise price of $5.75 per Share. Subject to the provisions of the Plan:

(a) the Grant Date of the Options is August 16th, 2018; and
(b) the Expiry Date of the Options is August 16th, 2023.

Vesting:

These Options vest on the following terms:

These Options vests in its entirety on the earlier to occur of the following milestones:

(a) The completion by the Corporation of an initial public offering which results in the Class A common shares of the Corporation being listed on a recognized stock exchange in the Province of Ontario; and
(b) December 31, 2018.

Exercise Period:

Notwithstanding the terms of the Plan, if the Optionee Ceases to be an Employee the Optionee shall be entitled to exercise these Options for the full term of these Options (being the Expiry Date set out above), unless the Optionee ceases to be an Employee as a result of:

termination for cause as defined in the Optionee's employment agreement with the Corporation;

Or

(ii) an order of the Commission, the Exchange, or any regulatory body having jurisdiction to so order;

in which case the Expiry Date shall be the date the Optionee ceases to be an Employee of the Corporation.

Other Restrictions:

Subject to the vesting provisions noted above, this Option may be exercised from the Grant Date until 5:00 p.m. local time in Toronto, Ontario on the Expiry Date, by delivering to the Administrator of the Plan an Option Exercise Notice, in the form provided in the Plan, together with this Option Certificate and a certified cheque or bank draft payable to **CARDIOL THERAPEUTICS INC.** or as the Corporation may direct, in an amount equal to the aggregate of the exercise price of the Shares in respect of which the Options are being exercised; provided that the Optionee will have satisfied the conditions precedent, if any, to the exercise of the Options set out in the Plan. When due notice and payment are received, the Corporation covenants and agrees to issue and deliver to the Optionee Share certificates in the name of the Optionee for the number of Shares so purchased.

It is a condition of the exercise of any vested Options that the Optionee be bound by a voting trust agreement in the Corporation's standard form authorizing the Chief Executive Officer of the Corporation to exercise the votes associated with the Shares to be purchased for so long as the Corporation is not a reporting issuer.

This Option Certificate and the Options evidenced hereby are not assignable, transferable or negotiable. This Option Certificate is issued for convenience only and in the case of any dispute with regard to any matter in respect hereof, the provisions of the Plan and records of the Corporation shall prevail.

THE EXERCISE/SURRENDER OF THESE OPTIONS ARE SUBJECT TO THE TERMS AND RESTRICTIONS SET OUT IN THE PLAN.

Dated this 16th day of August, 2018

CARDIOL THERAPEUTICS INC.	**ACKNOWLEDGED BY:**
Per:	
/s/ David Elsley	/s/ Chris Waddick
Authorized Signatory	Name of Holder: Chris Waddick

SCHEDULE C

STOCK OPTION AGREEMENT

STOCK OPTION AGREEMENT

THIS AGREEMENT is made as of the 16th day of August, 2018

BETWEEN:

CARDIOL THERAPEUTICS INC. of Suite 101, 2275 Upper Middle Road East, Oakville, ON L6H 0C3 (the **"Corporation")**

OF THE FIRST PART

AND:

CHRIS WADDICK of 9 McMaster Street, Georgetown, ON L7G 5G7 (the **"Optionee")**

OF THE SECOND PART

WHEREAS:

A. The Optionee is an employee of the Corporation; and

B. The Board of Directors of Corporation has authorized the granting to the Optionee in respect of the Optionee's employment with the Corporation a standalone option to purchase Class A common shares in the capital of the Corporation.

For value received the parties hereto agree as follows:

11. The Corporation hereby grants the Optionee as an incentive and **not** in lieu of salary or any other compensation for services, an option (the **"Option")** to purchase a total of 50,000 common shares in the capital of the Corporation (the **"Option Shares")** at a price of $0.001 per share exercisable, subject to the provisions of this Agreement, on or before August 16th, 2023 (the **"Expiry Date")**.

12. In order to exercise the Option, the Optionee shall, before 5:00 p.m. on the Expiry Date, give notice to the Corporation of the Optionee's intention to exercise the Option in whole or in part, such notice subject to Section 3 below, in to be accompanied by cash, bank draft, money order or certified cheque, payable to the Corporation, in the appropriate amount.

13. The Optionee agrees that he may only exercise the Option as vested as set out in the vesting provision in section 4 hereof.

14. The Option vests in its entirety on the date hereof.

5. If the Optionee:

(a) dies prior to the expiration of the Option, the Optionee's legal representatives may, prior to the Expiry Option, exercise that portion of the Option which had vested and become exercisable in accordance with the terms hereof as of the date of the Optionee's death, after which time the Option shall terminate; or

(b) ceases to be an employee of the Corporation by reason of (i) his termination for cause as defined in the Optionee's employment agreement or (ii) his resignation, the Option shall terminate on the date of termination of his employment.

For the purposes hereof, an Optionee who has been terminated by the Corporation, ceases to be an employee of the Corporation on the date which is designated by the Corporation as the last day of the Optionee's employment or services.

6. Subject to any required action by the shareholders of the Corporation, the class(es) and number of securities covered by the Option, as well as the price per Option Share covered by the Option, shall be proportionately adjusted for any increase or decrease in the number of issued Shares or other change to the Shares resulting from a stock split, reverse stock split, liquidating dividend, stock dividend, dividend in property other than cash, combination of shares, exchange of shares, combination, consolidation, recapitalization, reincorporation, reorganization, change In corporate structure or reclassification of the Shares, or any other increase or decrease in the number of issued Shares effected without receipt of consideration by the Corporation; provided, however, that conversion of any convertible securities of the Corporation shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Corporation of shares of any class, or securities convertible into shares of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of Shares subject to the Option.

7. (a) The Corporation shall use its reasonable commercial efforts to give the Optionee

written notice of any proposed Transaction (as hereinafter defined) at least 10 days prior to the effective date of any such Transaction.

(b) Notwithstanding any other provision of this Agreement or the applicable vesting period of the Option, in the event that the Corporation or its shareholders propose to enter into a Transaction, the Board shall have the right, in its discretion, to deal with the Option (or any portion thereof) in the manner it deems fair and reasonable in the circumstances of the Transaction. Without limiting the generality of the foregoing, in connection with a Transaction, the Board, without any action or consent required on the part of the Optionee, shall have the right to: (i) determine that. the Option, in whole or in part and whether vested or unvested, shall remain in full force and effect in accordance with its terms after the Transaction; (ii) provide for the conversion or exchange of the Option (or any portion thereof, whether vested or unvested) into or for options, rights or other securities in any entity participating in or resulting from a Transaction; (iii) accelerate the vesting of the Option; (iv) provide for the Option to be purchased; (v) accelerate the date by which the Option or any portion thereof, whether vested or unvested, must be exercised either in

whole or in part; (vi) deem the Option or any portion thereof, whether vested or unvested to have been exercised in whole or in part, tender, on behalf of the Optionee, the underlying Option Shares that would have been issued pursuant to the exercise of the Option to any third party purchaser in connection with the Transaction, and pay to the Optionee on behalf of such third party purchaser an amount per underlying Share equal to the positive difference between the Transaction price of the Shares and the applicable exercise price; (vii) cancel the Option either in whole or in part and pay to the Optionee an amount per underlying Option Share equal to the positive difference between the Transaction price of the Shares and the applicable exercise price; or (viii) take such other actions, and combinations of the foregoing actions or any other actions permitted under this Section 7(b), as it deems fair and reasonable under the circumstances.

(c) **"Transaction" means:**

(i) the dissolution or liquidation of the Corporation, or

(ii) (A) any reorganization, merger, amalgamation or consolidation of the Corporation with one or more corporations (other than any of the foregoing which involves only the Corporation and wholly-owned subsidiaries of the Corporation), or (B) the sale by shareholders of a majority of the issued and outstanding **Shares; or**

(iii) a sale of substantially all of the assets of the Corporation.

8. The Option granted is personal to the Optionee and may not be assigned or transferred in whole or in part.

9. If the Corporation determines that under the requirements of applicable taxation laws it is obliged to withhold for remittance to a taxing authority any amount upon exercise of the Option, the Corporation may, prior to and as a condition of issuing the Option Shares, require the Optionee exercising the Option to pay to the Corporation, in addition to and in the same manner as the purchase price for the Option Shares, such amount as the Corporation is obliged to remit to such taxing authority in respect of the exercise of the Option. Any such additional payment shall, in any event, be due no later than the date as of which any amount with respect to the Option exercised first becomes includable in the gross income of the Optionee for tax purposes.

10. If requested by any agreement, such Option shall not be validly exercised unless and until the Optionee has signed and delivered to the Corporation, (i) an accession to the then current voting trust agreement by the then current shareholders' agreement of the Corporation in the form attached to such shareholders' agreement, or such other.

11. This Agreement constitutes and expresses the whole agreement of the parties with reference to the subject matter herein, all promises, representations and understandings relative thereto being merged herein.

12. This Agreement shall be construed and enforced in accordance with the laws of Ontario and the federal laws of Canada applicable therein. The parties agree to attorn to the exclusive jurisdiction of the courts of Ontario.

13. This Agreement may be executed in several parts and such parts shall together form one original agreement and may be signed by facsimile.

14. Time is of the essence of this Agreement.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the day and year first above written.

CARDIOL THERAPEUTICS INC.

/s/ David Elsley

Authorized Signatory David Elsley
President & CEO

/s/ Chris Waddick l/s

[Signature]

Chris Waddick

[Please print name]

SCHEDULE D

PRE-EXISTING DEVELOPMENTS

Exhibit 4.10

EMPLOYMENT AGREEMENT ADDENDUM dated as of the 23rd day of December, 2021 (the "**Addendum Agreement**").

BETWEEN:

CARDIOL THERAPEUTICS INC. (the "**Corporation**")

-and-

CHRISTOPHER WADDICK (the "**Employee**")

(Each a "**Party**" and together the "**Parties**")

WHEREAS the Employee is currently employed by the Corporation and the terms and conditions of his employment are governed by an employment agreement dated April 16, 2018 (the "**Employment Agreement**");

AND WHEREAS this Addendum Agreement shall be attached as an appendix to the Employment Agreement;

AND WHEREAS any terms of the Employment Agreement not addressed in this Addendum Agreement shall remain unchanged;

NOW THEREFORE, in consideration of the foregoing and the mutual agreements contained herein (the receipt and adequacy of which are acknowledged), the Parties agree as follows:

1. This Addendum Agreement is subject in all respects to the terms and provisions of the Employment Agreement except to the extent that the terms and provisions of the Employment Agreement are modified by this Addendum Agreement. For greater certainty, all provisions of the Employment Agreement not otherwise modified by the terms of this Addendum Agreement shall be read as provisions applicable to the Employee's continued employment with the Corporation.

2. Section 3.1 is deleted in its entirety and replaced with the following:

   "*Effective December 9, 2021, your annual compensation will be $220,000.00 payable in accordance with the Corporation's regular payroll practices and less statutory deductions*."

3. Section 4.1 is deleted in its entirety and replaced with the following:

   "*You may resign your employment with the Corporation at any time upon providing two (2) weeks' written notice (the "**Resignation Notice Period**"). In the event the Corporation does not wish to employ you until the expiry of the Resignation Notice Period, the Corporation may, at its sole discretion, waive in whole or in part its decision to continue to employ you by providing payment in lieu and continuation of your benefits, if any, until the expiry of the Resignation Notice Period. The Corporation will also provide you any accrued and outstanding salary and vacation pay*."

4. Section 4.2 is deleted in its entirety replaced with the following:

   "*The Corporation may terminate your employment with cause, at any time, by providing you only with the minimum notice, or pay in lieu thereof, and severance, if applicable, as*

prescribed by the ESA. In addition, the Corporation will continue to pay for and/or provide continuation of all applicable employment benefits for the duration of the notice of termination period if required by the ESA."

5. Section 4.3 is deleted in its entirety and replaced with the following:

"*The Corporation may terminate your employment in its sole discretion for any reason whatsoever without cause by providing you the greater of:*

(a) six (6) months of your regular salary, less statutory deductions and paid by way of salary continuance or as a lump sum, subject to the Corporation' sole discretion; or

(b) notice of termination, or payment in lieu thereof, or a combination of both, and severance pay, if applicable, pursuant to the ESA.

In addition, the Corporation will continue to pay its share of your benefits, if any, for the duration of the notice of termination period, pursuant to the ESA. The Corporation will also provide any accrued and outstanding salary and vacation pay."

6. Section 4.5 is deleted in its entirety and replaced with the following:

"*In the event that you are Totally Disabled, your employment shall terminate and the Corporation shall provide the greater of:*

(a) six (6) months of your regular salary, less statutory deductions and paid by way of salary continuance or as a lump sum, subject to the Corporation' sole discretion; or

(b) notice of termination, or payment in lieu thereof, or a combination of both, and severance pay, if applicable, pursuant to the ESA."

7. This Addendum Agreement and the Employment Agreement contain the entire agreement between the Parties. There are no other agreements, understandings, representations or warranties, collateral, oral or otherwise. The Employee agrees that the Employee has read the entire Addendum Agreement and understands its contents.

8. The Employee acknowledges and agrees that the Employee had an opportunity to obtain the Employee's own independent legal with respect to the Addendum Agreement and that the Employee is fully aware of the nature of the Employee's rights and obligations hereunder.

[*signature page follows*]

IN WITNESS WHEREOF the Parties have executed this Agreement this 23rd day of December, 2021.

/s/ Christopher Waddick	/s/ Claudine Waddick
Christopher Waddick	Witness

By: /s/ David Elsleuy

CARDIOL THERAPEUTICS INC.

Exhibit 4.11

EMPLOYMENT AGREEMENT ADDENDUM dated as of the 2nd day of March, 2022 (the "**Addendum Agreement**").

BETWEEN:

CARDIOL THERAPEUTICS INC. (the "**Corporation**")

-and-

CHRISTOPHER WADDICK (the "**Employee**")

(Each a "**Party**" and together the "**Parties**")

WHEREAS the Employee is currently employed by the Corporation and the terms and conditions of his employment are governed by an employment agreement dated April 16, 2018, including the addendum agreement dated December 23, 2021 (the "**Employment Agreement**");

AND WHEREAS this Addendum Agreement shall be attached as an appendix to the Employment Agreement;

AND WHEREAS any terms of the Employment Agreement not addressed in this Addendum Agreement shall remain unchanged;

NOW THEREFORE, in consideration of the foregoing and the mutual agreements contained herein (the receipt and adequacy of which are acknowledged), the Parties agree as follows:

1. This Addendum Agreement is subject in all respects to the terms and provisions of the Employment Agreement except to the extent that the terms and provisions of the Employment Agreement are modified by this Addendum Agreement. For greater certainty, all provisions of the Employment Agreement not otherwise modified by the terms of this Addendum Agreement shall be read as provisions applicable to the Employee's continued employment with the Corporation.

2. Section 4.3 is deleted in its entirety and replaced with the following:

   "*The Corporation may terminate your employment in its sole discretion for any reason whatsoever without cause by providing you the greater of*:

   (a) twelve (12) months of your regular salary, less statutory deductions and paid by way of salary continuance or as a lump sum, subject to the Corporation' sole discretion; or

   (b) notice of termination, or payment in lieu thereof, or a combination of both, and severance pay, if applicable, pursuant to the ESA.

   In addition, the Corporation will continue to pay its share of your benefits, if any, for the duration of the notice of termination period, pursuant to the ESA. The Corporation will also provide any accrued and outstanding salary and vacation pay."

3. Section 4.5 is deleted in its entirety and replaced with the following:

   "*In the event that you are Totally Disabled, your employment shall terminate and the Corporation shall provide the greater of:*

(a) twelve (12) months of your regular salary, less statutory deductions and paid by way of salary continuance or as a lump sum, subject to the Corporation' sole discretion; or

(b) notice of termination, or payment in lieu thereof, or a combination of both, and severance pay, if applicable, pursuant to the ESA."

4. This Addendum Agreement and the Employment Agreement contain the entire agreement between the Parties. There are no other agreements, understandings, representations or warranties, collateral, oral or otherwise. The Employee agrees that the Employee has read the entire Addendum Agreement and understands its contents.

5. The Employee acknowledges and agrees that the Employee had an opportunity to obtain the Employee's own independent legal with respect to the Addendum Agreement and that the Employee is fully aware of the nature of the Employee's rights and obligations hereunder.

[*signature page follows*]

IN WITNESS WHEREOF the Parties have executed this Agreement this 2nd day of March, 2022.

/s/ Christopher Waddick	/s/ Claudine Waddick
Christopher Waddick	Witness

By: /s/David Elsley

CARDIOL THERAPEUTICS INC.

Exhibit 4.12

PERSONAL AND CONFIDENTIAL

December 3, 2020

Delivered via e-mail

Dear Bernard Lim:

Further to our recent discussions, we are pleased to offer you employment at Cardiol Therapeutics Inc. (the "**Corporation**") as Chief Operating Officer on the following terms and conditions.

Once you have signed and returned this Agreement (defined below), it will constitute a binding agreement between you and the Corporation.

SECTION 1 DEFINITIONS

1.1 For the purpose of the Agreement, the following words shall have the meanings set out below:

(a) **"Agreement"** means this employment agreement and Schedules A to C as may be amended by the Parties (defined below) in writing from time to time.

(b) **"Board"** means the board of directors of the Corporation.

(c) **"Confidential Information"** has the meaning set forth in Section 7.1 hereof.

(d) **"Corporation Property"** includes any and all proprietary technology, financial, operating and training information, all works of expression and any copyrights in such works, Developments (defined below), current or potential business contacts and contract development information, patentable inventions, discoveries or trade secrets, and any materials, tools, equipment, devices, records, files, data, tapes, computer programs, computer disks, software, communications, letters, proposals, memoranda, lists, drawings, blueprints, correspondence, specifications or any other documents or property belonging to Corporation.

(e) "**Developments**" means any discovery, invention, industrial or artistic design, improvement, concept, specification, creation, treatment, computer program, method, process, apparatus, specimen, formula, formulation, product, hardware or firmware, any drawing, report, memorandum, article, letter, notebook and any other invention, work of authorship and ideas (whether or not patentable or copyrightable) and legally recognized proprietary rights (including, but not limited to, patents, copyrights, trademarks and service marks, topographies, know-how and trade secrets), possessory and ownership rights and interests of all kinds whatsoever, and all records and copies of records relating to the foregoing, that:

(i) result or derive from your employment with Corporation or from your knowledge or use of Confidential Information;

(ii) are conceived or made by you (individually or in collaboration with others) in the discharge of your duties hereunder;

(iii) result from or derive from the use or application of the resources of Corporation; or

(iv) relate to the business operations or actual or demonstrably anticipated research and development by Corporation,

whether such Developments were created during your employment with Corporation or afterwards. In respect of item (iv) above, Developments shall not include any Developments made more than two years following termination of your employment with Corporation.

(f) **"ESA"** means Ontario *Employment Standards Act, 2000*.

(g) "**Law**" means any Canadian or foreign federal, state, provincial or local statute, law, ordinance, decree, order, injunction, rule, directive, or regulation of any governmental authority, and includes rules and regulations of any regulatory or self-regulatory authority compliance with which is required by law, in each case, in force or effect on the date hereof or thereafter.

(h) **"Parties"** means you and the Corporation.

(i) "**Person**" means any individual, partnership, limited partnership, joint venture, syndicate, sole proprietorship, company or corporation with or without share capital, unincorporated association, limited liability company, trust, trustee, executor, administrator or other legal personal representative, governmental authority or entity however designated or constituted; and pronouns when they refer to a Person shall have a similarly extended meaning.

(j) "**Term**" has the meaning set forth in Section 2.2 hereof.

SECTION 2 POSITION AND START DATE

2.1 You shall be employed on a full-time basis as Chief Operating Officer and shall report to the Chief Executive Officer, or whomever the Corporation may designate from time to time. Your duties shall include those set out at Schedule A. The Corporation may change your duties from time to time consistent with your position without having any effect upon any other term of the Agreement.

2.2 Your employment with the Corporation pursuant to the terms of this Agreement shall commence December 3, 2020 (the "**Effective Date**") and will continue until the Agreement is terminated in accordance with the provisions of Section 4 hereof (the "**Term**").

2.3 The Corporation has an accommodation process in place that provides accommodation for employees with disabilities. If you require accommodation because of a disability or specific medical need, please contact your manager.

SECTION 3 COMPENSATION

3.1 Your annual compensation will be $240,000 payable in accordance with the Corporation's regular payroll practices and less statutory deductions.

3.2 Subject to Board of Directors' approval, you will receive 120,000 stock options (the "Options") in accordance with the Terms and Conditions outlined in Schedule C. You will be eligible to participate in any management bonus program implemented at the Corporation during your employment, that is applicable to the other members of management of the Corporation

3.3 You shall be entitled, as of the Effective Date, to participate in the group benefits and insurance program made available to the Corporation's employees generally, subject to your eligibility under the terms and

conditions of the formal policies and insurance plan documents (as may be amended from time to time). The Corporation reserves the right to amend the group benefits and insurance program that are provided at any time, which may include the discontinuance of certain benefits. You shall not have any right to compensation as a consequence of any such amendment or discontinuance.

3.4 You will be entitled to four (4) weeks vacation. Vacation shall be accrued and scheduled on a calendar basis (pro-rated for the first year of employment), in accordance with Corporation's policy and procedure. You will be provided with no less than the minimum vacation time and pay, as required by the ESA, to be taken during the Corporation's vacation year. Any unused vacation beyond your allowance pursuant to the ESA may not be carried over into the next year without specific written authorization from the Corporation. You will have the option to take additional unpaid vacation subject to mutual agreement with the Corporation. Such agreement by the Corporation shall not be withheld unreasonably.

3.5 The Corporation shall reimburse you for all reasonable entertainment and travel expenses actually and properly incurred by you in the performance of your duties under the Agreement, such reimbursement to be made in accordance with, and subject to, the policies of the Corporation from time to time. You will be required to keep proper accounts and to furnish invoices and/or other supporting documents to the Corporation within sixty (60) days of incurring the expense, failing which you will not receive reimbursement. Any expenditure over one thousand dollars ($1000.00) requires prior written authorization.

SECTION 4 TERMINATION

Resignation

4.1 You may resign your employment with the Corporation at any time upon providing two (2) weeks prior written notice (the "**Resignation Notice Period**"). In the event the Corporation does not wish to employ you until the expiry of the Resignation Notice Period, the Corporation may, at its sole discretion, waive in whole or in part its decision to continue to employ by providing payment in lieu until the expiry of the Resignation Notice Period. The Corporation will also provide you any accrued and outstanding salary and vacation pay.

Termination For Cause

4.2 The Corporation may terminate your employment at any time for just cause pursuant to the ESA without payment of any kind, including notice of termination or payment in lieu thereof, or severance pay, if applicable, save and except accrued and outstanding salary and vacation pay.

Termination Without Cause

4.3 The Corporation may terminate your employment in its sole discretion for any reason whatsoever without cause by providing you the greater of:

(a) during your initial year of employment, three months' notice of termination, or payment in lieu thereof, or a combination of both, and, thereafter, for each additional year of employment, an additional one months' notice of termination, or payment in lieu thereof, or a combination of both, up to a maximum of six months' notice of termination, or payment in lieu thereof, or a combination of both; or

(b) notice of termination, or payment in lieu thereof, or a combination of both, and severance pay, if applicable, pursuant to the ESA.

In addition, the Corporation will continue to pay its share of your benefits, if any, for the duration of the notice of termination period, pursuant to the ESA. The Corporation will also provide you any accrued and outstanding salary and vacation pay.

4.4 You agree that such notice is fair and reasonable and further acknowledge that you understand and agree that such payments are the only monies and benefits owing by the Corporation to you for notice of termination, or pay in lieu thereof, and/or severance pay, if applicable, of any kind. For clarity, you acknowledge and understand that you shall not receive any monies, payments or entitlements of any kind whatsoever for reasonable notice at common law.

In addition, the Corporation will continue to pay its share of your benefits, if any, for the duration of the notice of termination period, pursuant to the ESA. The Corporation will also provide you any accrued and outstanding salary and vacation pay. You agree that such notice is fair and reasonable and further acknowledge that you understand and agree that such payments are the only monies owing by the Corporation to you for notice of termination, or pay in lieu thereof, and/or severance pay, if applicable, of any kind. For clarity, you acknowledge and understand that you shall not receive any monies, payments or entitlements of any kind whatsoever for reasonable notice at common law. In order to process and pay any payment in excess of your entitlements under the ESA, you shall deliver a signed release in a form provided and in favour of the Corporation. You agree that you shall sign a release in a form provided and in favour of the Corporation.

Resignation as Officer and Director

4.5 Upon termination of your employment, for any reason, you shall, as and when requested by the Corporation, resign as an officer and director of the Corporation (as and when applicable) and of any other affiliates or related companies, for no further compensation or remuneration.

Return of the Corporation Property

4.6 You further acknowledge and agree that pursuant to the terms of the Agreement, you will acquire the Corporation Property which is and shall remain the sole and exclusive property of the Corporation. Immediately upon the termination of your employment for any reason, all the Corporation Property in your possession or control shall be delivered by you to the Corporation immediately and any Confidential Information of which you came into possession of, that is stored or saved on any home or other computer system, network, server or personal digital assistant (including any iPad, cell phone and the "cloud") that does not belong to the Corporation shall be permanently deleted and purged by you therefrom immediately and you shall provide the Corporation with satisfactory evidence thereof. You shall also provide to the Corporation all passwords and pass codes used by you in the performance of your employment with the Corporation.

Co-operation and Assistance with Regulatory and Litigation Matters

4.7 You agree that following the termination of your employment, for any reason, you will cooperate with and assist the Corporation and its affiliates in connection with any investigation, regulatory matter, legal dispute, lawsuit or arbitration in which the Corporation or any of its affiliates is a subject, target or party and as to which you may have pertinent information. You agree that you will make yourself reasonably available, relative to your other commitments, for preparation for hearings, proceedings or litigation and for attendance at any pre-trial discoveries and trials. The Corporation agrees to make every reasonable effort to provide you with reasonable notice and reasonably compensate you for your time in the event your participation is required. You further agree to perform all acts and execute any and all documents that may be necessary to carry out your obligations under s. 4.9 hereof.

SECTION 5 NON-SOLICITATION

5.1 You covenant with the Corporation that for so long as you employed by the Corporation pursuant to the terms and conditions of this Agreement and for a period of twelve (12) months thereafter, you will not hire any employees, consultants or other agents of the Corporation or induce or attempt to induce any employees, consultants or other agents of the Corporation to leave his or her employment, consultant or other agent arrangements or contact any customers of the Corporation for the purpose of selling to those customers any products or services which are the same as or substantially similar to, or competitive with, the products or services sold by the Corporation.

SECTION 6 NON-COMPETITION

6.1 You shall not, during your employment with the Corporation and for a period of six (6) months immediately thereafter, for any reason, on your own behalf or on behalf of or in connection with any Person, directly or indirectly, in any capacity whatsoever, alone, through or in connection with any Person, carry on, participate in or be engaged in or have any financial or other interest in or be otherwise commercially involved in business competitive with the Corporation in the Province of Ontario.

SECTION 7 INTELLECTUAL PROPERTY

7.1 All Developments will be the exclusive property of the Corporation and the Corporation will have sole discretion to deal with Developments. You agree that no rights, including without limitation in intellectual property rights, in the Developments are or will be retained by you. You acknowledge that all works created during the Term by you for the Corporation are works in respect of which the Corporation is the "first owner" for copyright purposes and in respect of which all copyright will vest in the Corporation. In consideration of the benefits and consideration to be received by you under the Agreement, you hereby irrevocably transfers and assigns, and agree in the future to transfer and assign, all right, title and interest in and to the Developments and further irrevocably transfers and assigns, and agrees in the future to transfer and assign all intellectual property rights in respect of the Developments including, without limitation, all rights in respect of patents, copyrights, industrial designs, circuit topographies and trademarks, and any goodwill associated therewith in Canada, the United States and worldwide to the Corporation and you will hold all the benefits of the rights title and interest mentioned above in trust for the Corporation prior to the assignment to the Corporation.

7.2 You hereby irrevocably waive and agree to waive in the future all moral rights that you may have now or in the future with respect to the Developments, in any applicable jurisdiction, or at common law or otherwise, including, without limitation, any rights you may have to have your name associated (or not associated) with the Developments and any rights you may have to prevent the alteration, translation or destruction of the Developments, and any rights you may have to control the use of the Developments in association with any product, service, cause or institution. You agree that this waiver may be invoked by the Corporation, and by any of its authorized agents or assignees, in respect of any or all of the Developments. You agree that such waiver (and agreement to waive) is total and complete, and is effective in respect of all Persons worldwide, and that the Corporation may assign the benefit of this waiver to any Person.

7.3 You will keep complete, accurate and authentic notes, reference materials, data and records of all Developments in the manner and form requested by the Corporation. All these materials will be confidential information upon their creation.

7.4 You shall specify at Schedule B, all pre-existing developments, not assigned to the Corporation, and created prior to the Term in which you have any right, title or interest. If no such specification is made on Schedule

B, or if you write "none" or similar designation thereon, you shall be conclusively deemed not to have any such developments.

7.5 You hereby irrevocably waive and agree to waive in the future all moral rights that you may have now or in the future with respect to the Developments, in any applicable jurisdiction, or at common law or otherwise, including, without limitation, any rights you may have to have your name associated (or not associated) with the Developments and any rights you may have to prevent the alteration, translation or destruction of the Developments, and any rights you may have to control the use of the Developments in association with any product, service, cause or institution. You agree that this waiver may be invoked by the Corporation, and by any of its authorized agents or assignees, in respect of any or all of the Developments. You agree that such waiver (and agreement to waive) is total and complete, and is effective in respect of all Persons worldwide, and that the Corporation may assign the benefit of this waiver to any Person**.**

7.6 You will do all further things that may be reasonably necessary or desirable in order to give full effect to this Agreement including, without limitation:

(a) assisting in making patent applications for the Developments, including providing information and assistance to lawyers and/or patent agents as to the characteristics of the Developments created by You (whether individually or in conjunction with others) in sufficient detail to enable the preparation of a suitable patent specification, to execute all formal documentation incidental to an application for letters patent (including powers of attorney) and to execute assignment documents in favour of the Corporation for such applications;

(b) assisting in making applications for all other forms of intellectual property registration relating to the Developments;

(c) assisting in prosecuting and maintaining the patent applications and other intellectual property relating to the Developments; and

(d) assisting in registering, maintaining and enforcing the patents and other intellectual property registrations relating to the Developments,

whether during, or following your employment with the Corporation.

7.7 If your cooperation is required in order for the Corporation to obtain or enforce legal protection of the Developments following the termination of your employment, you shall be reimbursed for any reasonable costs associated in so doing.

SECTION 8 CONFIDENTIALITY AND NON-DISPARAGEMENT

8.1 You covenant to keep in strictest confidence, and shall not disclose and shall not use (other than for purposes of performing duties as an employee, consultant, director or officer of the Corporation) any non-public information pertaining to or concerning the Corporation including, without limitation, all financial information, all supplier and customer lists, all non-public intellectual property, including trade secrets, unfiled trademarks, unfiled patent applications, patent applications that have been filed but not opened for public inspection, technical expertise and know how, and all other information not generally known outside the Corporation (collectively, "**Confidential Information**"); provided, however, that Confidential Information does not include information which:

(a) was already in, or enters into, the public domain, through no breach hereof by you;

(b) is required to be disclosed pursuant to applicable Laws, provided that such party has first given written notice to the Corporation that it intends to disclose such information;

(c) is required to be disclosed in any arbitration or legal proceeding, provided that such party has first given written notice to the Corporation that it intends to disclose such information; or

(d) has been authorized by the Board to be disclosed by you.

8.2 You covenant with the Corporation that for so long as you are employed pursuant to the terms and conditions of this Agreement and for a period of one year thereafter, you will not undertake any harassing or disparaging conduct directed at the Corporation, and you shall refrain from making any negative or derogatory statements concerning the Corporation publicly, including through any online or social media.

8.3 You further recognize that any information concerning the officers, employees, clients, and other individuals about whom the Corporation holds information may be subject to the requirements of the *Personal Information Protection and Electronic Documents Act, 2000*, the Corporation's privacy policies (as amended), and such other Laws governing privacy and you hereby agree to abide by such terms. You hereby consent to the collection, use and disclosure of your personal information, as may be required from time to time, for purposes relating to your employment with the Corporation, this Agreement and to facilitate and promote the performance of your duties.

SECTION 9 AUTHORIZATION TO DEDUCT PAYMENTS FROM WAGES

9.1 As you are aware, the Corporation has provided you with the following Corporation Property for your use in the performance of your duties. Should you fail to return the below-noted items within seven (7) business days following the termination of your employment, you hereby authorize and permit the Corporation to deduct the cost of the items set out below from your final pay.

Item	**Cost**
Office access keycard	$35.00
Logitech WebCam	$169.99

9.2 Any lost or stolen items must be reported to head office immediately as each item under your control is also your responsibility. Losses or theft can be reported to the Director of Finance.

SECTION 10 GENERAL

10.1 The Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein. By way of the Agreement, both you and the Corporation attorn to the jurisdiction of the courts of Ontario with respect to any matter arising hereunder or pursuant to your employment.

10.2 If any term or other provision of the Agreement is determined to be invalid, illegal or incapable of being enforced for any reason, all other terms and provisions of the Agreement shall nevertheless remain in full force and effect.

10.3 The Agreement contains the entire agreement between you and the Corporation. There are no other agreements, understandings, representations or warranties, collateral, oral or otherwise. You agree that you read the entire Agreement and understand its contents.

10.4 You acknowledge and agree that you had an opportunity to obtain your own independent legal and financial advice with respect to the Agreement and that you are fully aware of the nature of your rights and obligations hereunder.

10.5 You acknowledge that you received adequate consideration for the obligations set out under the Agreement.

10.6 The Agreement may be executed in any number of counterparts (including counterparts by facsimile) and all such counterparts taken together shall be deemed to constitute one and the same instrument.

We look forward to your involvement with the Corporation and to a rewarding career with us.

Yours truly,

Cardiol Therapeutics Inc.

Per: /s/ David Elsley
Name: David Elsley
Title: President & CEO

ACKNOWLEDGED AND AGREED THIS 3 DAY OF December, 2020 BY:

/s/ Bernard Lim
Bernard Lim

Exhibit 4.13

EMPLOYMENT AGREEMENT ADDENDUM dated as of the 23rd day of December, 2021 (the "**Addendum Agreement**").

BETWEEN:

CARDIOL THERAPEUTICS INC. (the "**Corporation**")

-and-

BERNARD LIM (the "**Employee**")

(Each a "**Party**" and together the "**Parties**").

WHEREAS the Employee is currently employed by the Corporation and the terms and conditions of his employment are governed by an employment agreement dated December 3, 2020 (the "**Employment Agreement**");

AND WHEREAS this Addendum Agreement shall be attached as an appendix to the Employment Agreement;

AND WHEREAS any terms of the Employment Agreement not addressed in this Addendum Agreement shall remain unchanged;

NOW THEREFORE, in consideration of the foregoing and the mutual agreements contained herein (the receipt and adequacy of which are acknowledged), the Parties agree as follows:

1. This Addendum Agreement is subject in all respects to the terms and provisions of the Employment Agreement except to the extent that the terms and provisions of the Employment Agreement are modified by this Addendum Agreement. For greater certainty, all provisions of the Employment Agreement not otherwise modified by the terms of this Addendum Agreement shall be read as provisions applicable to the Employee's continued employment with the Corporation.

2. Section 3.1 is deleted in its entirety and replaced with the following:

   "*Effective December 9, 2021, your annual compensation will be $385,000.00 payable in accordance with the Corporation's regular payroll practices and less statutory deductions*."

3. Section 4 is deleted in its entirety replaced with the following:

   "*Resignation*

   *4.1 You may resign your employment with the Corporation at any time upon providing two (2) weeks' written notice (the "**Resignation Notice Period**"). In the event the Corporation does not wish to employ you until the expiry of the Resignation Notice Period, the Corporation may, at its sole discretion, waive in whole or in part its decision to continue to employ you by providing payment in lieu and continuation of your benefits, if any, until the expiry of the Resignation Notice Period. The Corporation will also provide you any accrued and outstanding salary and vacation pay.*

Termination For Cause

4.2 The Corporation may terminate your employment with cause, at any time, by providing you only with the minimum notice, or pay in lieu thereof, and severance, if applicable, as prescribed by the ESA. In addition, the Corporation will continue to pay for and/or provide continuation of all applicable employment benefits for the duration of the notice of termination period if required by the ESA.

Termination Without Cause

4.3 The Corporation may terminate your employment in its sole discretion for any reason whatsoever without cause by providing you the greater of:

a) during your initial year of employment, three months' notice of termination, or payment in lieu thereof, or a combination of both, and, thereafter, an additional one months' notice of termination, or payment in lieu thereof, or a combination of both, up to a maximum of six months' notice of termination, or payment in lieu thereof, or a combination of both; or

b) notice of termination, or payment in lieu thereof, or a combination of both, and severance pay, if applicable, pursuant to the ESA.

In addition, the Corporation will continue to pay its share of your benefits, if any, for the duration of the notice of termination period, pursuant to the ESA. The Corporation will also provide you any accrued and outstanding salary and vacation pay.

You agree that such notice is fair and reasonable and further acknowledge that you understand and agree that such payments are the only monies and benefits owing by the Corporation to you for notice of termination, or pay in lieu thereof, and/or severance pay, if applicable, of any kind. For clarity, you acknowledge and understand that you shall not receive any monies, payments or entitlements of any kind whatsoever for reasonable notice at common law."

4. This Addendum Agreement and the Employment Agreement contain the entire agreement between the Parties. There are no other agreements, understandings, representations or warranties, collateral, oral or otherwise. The Employee agrees that the Employee has read the entire Addendum Agreement and understands its contents.

5. The Employee acknowledges and agrees that the Employee had an opportunity to obtain the Employee's own independent legal with respect to the Addendum Agreement and that the Employee is fully aware of the nature of the Employee's rights and obligations hereunder.

[*signature page follows*]

IN WITNESS WHEREOF the Parties have executed this Agreement this 23rd day of December, 2021.

/s/ Bernard Lim	/s/ Jamey Lim
Bernard Lim	Witness

By: /s/ David Elsley

CARDIOL THERAPEUTICS INC.

Exhibit 4.14

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (the "Agreement") is entered into on May 30th 2022 by and between Cardiol Therapeutics USA Inc. (the "Company") and Andrew Warwick Hamer (the "Executive") (collectively, the "Parties").

WHEREAS, the Parties wish to enter into an employment agreement to employ the Executive as Chief Medical Officer of Cardiol Therapeutics Inc.

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements contained herein and intending to be bound hereby, the Parties agree as follows:

1. Duration of Agreement. Executive's employment by the Company under this Agreement shall commence on March 29, 2022 (the "Effective Date") and continue until terminated in accordance with Section 5 below. The period of time between the Effective Date and the termination of the Executive's employment hereunder shall be referred to herein as the "Employment Period."

2. Position; Duties. The Executive will be employed as Cardiol Therapeutics Inc.'s Chief Medical Officer. In such position, the Executive shall provide services to both Cardiol Therapeutics Inc. and the Company, and such duties shall include, but are not limited those services described in Exhibit B.

The Executive shall at all times perform his duties and responsibilities honestly, diligently, in good faith and devote his best efforts and substantially all of his business time and services to the Company. The Executive shall not, in any capacity, engage in other business activities or perform services for any other person or entity without the prior written consent of the President / Chief Executive Officer; *provided*, *however*, that without such consent, the Executive may engage in charitable or public service, so long as such activities do not interfere with the Executive's performance of his duties and obligations hereunder and no compensation is paid to the Executive in connection therewith.

3. Place of Performance. Place of Performance. The Executive shall perform his services hereunder from his home office in New York. The Executive shall also engage in travel as needed to the Company's offices in Ontario.

4. Compensation.

4.1. Base Salary. The Executive's annual salary will be $375,000 US (such salary, as in effect from time to time, the "Base Salary"). Executive's Base Salary shall be reviewed at least annually by the Board of Directors of the Company ("Board"), which may, but shall not be required to, increase the Base Salary during the Employment Period. The Corporate Governance and Compensation Committee of the Board ("Compensation Committee") shall perform an annual review and make recommendations for cost of living salary increases to the Board, if warranted. The Company shall pay the Base Salary, less such withholdings and deductions as required by applicable law, to the Executive in accordance with the Company's usual payroll practices as in effect from time to time.

4.2. Employee Benefits. The Executive will receive a monthly health insurance stipend of [$3910.80 US], less such withholdings and deductions as required by applicable law.

4.3. Annual Bonus. During the Employment Period, for each fiscal year, the Executive will be eligible to earn an annual bonus. The targeted amount of that bonus will be 40% of Executive's Base Salary for the applicable fiscal year. The actual bonus payable with respect to a particular year will be determined by the Board based on the achievement of corporate and/or individual performance objectives established by the Board, in each case as determined by the Board in its sole discretion. Any bonus payable under this paragraph will only be paid if the Executive remains continuously employed by the Company through the date the annual bonus is paid.

4.4. Equity Award. The Executive's existing Class A Common Shares and stock options (100,000 Class A Common Shares with 25% vesting every 6 months and 400,000 stock options with a 5 year term and 1/3 vesting per year) shall continue as originally granted, in accordance with the Corporations' Equity Compensation Plan. The Class A Common Shares shall bear the securities legend as described in Exhibit C.

4.5. Paid Time Off. The Executive will be eligible for five weeks of paid time off each calendar year, inclusive of vacation, sick leave and personal days, in accordance with the policies of the Company, as may be amended from time to time. Paid time off shall accrue evenly over the course of a calendar year. Accrued, unused paid time off will not carry over from year to year. Accrued, unused paid time off (with respect to the calendar year in which employment is terminated) will be paid out upon termination of employment.

4.6. Reimbursement of Expenses. The Company will pay or reimburse the Executive for all reasonable business expenses incurred or paid by the Executive in the performance of his duties and responsibilities for the Company in accordance with the business expense reimbursement policies of the Company, as may be amended from time to time.

5. Termination. The Executive's employment hereunder shall terminate (i) on the date not less than one (1) year following written notice from the Company that Executive's employment with the Company will be terminated for any reason other than Cause (as defined below), death or Disability, (ii) on the date not less than one (1) year following written notice from the Executive that he is resigning from the Company, (iii) on the date of his death, (iv) on the date of his Disability, as defined herein, or (v) on the date that the Company provides the Executive with written notice that the Executive's employment with the Company is terminated for Cause, which written notice shall describe the Cause, and if curable, the failure to cure the Cause within the applicable cure period.

Upon cessation of the Executive's employment for any reason, unless otherwise consented to in writing by the Board, the Executive shall resign immediately from any and all officer, director and other positions he then holds with the Company.

At any time during the notice period (whether in the case of termination by the Company or the Executive), the Company may, in its sole discretion, require that the Executive perform only transition services, or that Executive not perform services at all. In the case of a resignation by the

Executive, upon receipt of such notice, the Company may, in its sole discretion, waive such notice period. During the notice period, the Executive shall continue to be paid Executive's Base Salary and monthly health insurance allowance, but will not be eligible to be paid any bonuses, vest in any stock grants, or accrue any paid time off.

For purposes of this Agreement, Cause means: (i) indictment, commission of, or other entry of a plea of guilty or no contest to, (A) a felony, or (B) any crime (other than a felony) that causes the Company public disgrace or disrepute, or adversely affects the Company's operations or financial performance or the relationship the Company has with its customers and suppliers; (ii) commission of an act of gross negligence, willful misconduct, fraud, embezzlement, theft or material dishonesty with respect to the Company; (iii) a breach of the Executive's fiduciary duties to the Company; (iv) alcohol abuse or use of controlled substances (other than prescription drugs taken in accordance with a physician's prescription); (v) material breach of any agreement with the Company, including this Agreement; (vi) a material breach of any Company policy; or (vii) refusal to perform or repeated failure to perform, the lawful directives of the Board, if not cured within 15 days following receipt by the Executive from the Company of written notice thereof.

For purposes of this Agreement, Disability means: a condition entitling the Executive to benefits under the Company's long-term disability plan, policy or arrangement; *provided*, *however*, that if no such plan, policy or arrangement is then maintained by the Company and applicable to the Executive, "Disability" will mean the Executive's inability to perform the Executive's duties under this Agreement due to a mental or physical condition (disregarding any reasonable accommodation) that can be expected to result in death or that can be expected to last (or has already lasted) for a continuous period of ninety (90) days or more, or for one hundred twenty (120) days in any one hundred eighty (180) consecutive day period.

6. Confidentiality.

6.1. The Executive agrees that the Executive's services to the Company are of a special, unique and extraordinary character, and that the Executive's position places him in a position of confidence and trust with the Company's customers and employees. The Executive also recognizes that the Executive's position with the Company will give him substantial access to Confidential Information, the unauthorized disclosure or use of which would cause the Company to suffer substantial and irreparable damage. The Executive recognizes, therefore, that it is in the Company's legitimate business interest to restrict the Executive's use of Confidential Information for any purposes other than the discharge of the Executive's duties at the Company, and to limit any potential appropriation of Confidential Information by the Executive for the benefit of the Company's competitors or to the detriment of the Company.

6.2. At all times during the Executive's employment with the Company and thereafter, the Executive shall hold in strictest confidence, and not directly or indirectly use, except for the benefit of the Company, or disclose to any person or entity ("Person") without written authorization of the Company, any Confidential Information of the Company. The Executive understands that "Confidential Information" means any information which is confidential and proprietary to the Company, including but not limited to technical data, trade secrets, know-how, research, plans, products, operating and training information, services, client lists and clients, markets, software, source code, object code, developments, inventions, processes,

technology, designs, drawings, engineering, hardware configuration information, marketing, financial or other business information, disclosed to the Executive by the Company, directly or indirectly, in writing, orally, electronically, or otherwise, or coming into the Executive's possession, or to which the Executive has access, as a result of the Executive's employment with the Company. Confidential Information shall not include any information that the Executive can establish by competent proof (i) was lawfully obtained from a third party who was not under any obligation of confidentiality; or (ii) is or becomes public knowledge or part of the public domain through none of the Executive's acts or omissions. Notwithstanding the foregoing, the Executive shall be permitted to disclose Confidential Information pursuant to a court order, government order or any other legal requirement of disclosure if no suitable protective order or equivalent remedy is available, provided that the Executive gives the Company written notice of such court order, government order or legal requirement of disclosure immediately upon knowledge thereof and allows the Company a reasonable opportunity to seek to obtain a protective order or other appropriate remedy prior to such disclosure to the extent permitted by law.

The Executive will not, during the Executive's employment with the Company, improperly use or disclose any proprietary information or trade secrets of any former employer, and the Executive will not bring onto the premises of the Company any unpublished documents or proprietary information belonging to any such former employer unless consented to in writing by such former employer.

6.3. Upon the termination of the Executive's employment with the Company, the Executive will not take with him or retain without written authorization any documents, files or other property of the Company, and the Executive will return promptly to the Company any such documents, files or property in his possession or custody. The Executive recognizes that all documents, files and property which the Executive has received and will receive from the Company, including but not limited to customer lists, handbooks, memoranda, policy manuals, product specifications, and other materials (with the exception of documents relating to the Executive's compensation and benefits), are for the exclusive use of the Company and its officers, directors, full-time or part-time employees, consultants, independent contractors or other agents, who are discharging their responsibilities on behalf of the Company, and that the Executive has no claim or right to the continued use, possession or custody of such documents, files or property following the termination of the Executive's employment with the Company.

6.4. The Executive also agrees that the Executive's obligation not to disclose or to use information and materials of the types set forth in this section and the Executive's obligation to return materials and tangible property also extends to such types of information, materials and tangible property of customers, licensors, and suppliers to the Company or other third parties who may have disclosed or entrusted the same to the Company or to the Executive.

6.5. The Executive agrees that any inventions, ideas, improvements, discoveries, methods, developments, software and works of authorship, whether patentable or not, which are created, made, conceived or reduced to practice by the Executive or under the Executive's direction or jointly with others during or after the Executive's employment with the Company or which are made through the use of any of the Confidential Information or any of the Company's equipment, facilities, or time, or which result from any work the Executive

performs for the Company, whether before or after the date hereof shall belong exclusively to the Company and shall be considered part of the Confidential Information for purposes of this Agreement whether or not fixed in a tangible medium of expression.

6.6. DEFEND TRADE SECRETS ACT NOTICE AND RELATED PROVISIONS: The Defend Trade Secrets Act of 2016 provides as follows: (1) An individual shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that is made in confidence to a federal, state or local government official or to an attorney and such disclosure is made (a) solely for the purpose of reporting or investigating a suspected violation of law or (b) in a complaint or other document filed in a lawsuit or other proceeding if such filing is made under seal. (2) An individual may disclose a trade secret to that individual's attorney for the purpose of filing a lawsuit for retaliation by an employer for reporting a suspected violation of law and use the trade secret information in the court proceeding provided the individual files any document containing the trade secret under seal and the individual does not disclose the trade secret except pursuant to court order. The Defend Trade Secrets Act also provides that a court enforcing that law may, if a trade secret is found to have been willfully and maliciously misappropriated, award (a) "exemplary damages" in an amount of up to two times the amount of damages awarded for actual loss caused by the misappropriation of a trade secret and damages for unjust enrichment caused by the misappropriation of the trade secret, or a reasonable royalty for the misappropriation, and (b) reasonable attorneys' fees against the misappropriating party.

7. Intellectual Property.

7.1. The Executive will make full and prompt disclosure to the Company of all inventions, ideas, improvements, discoveries, methods, developments, software and works of authorship, whether patentable or not, which are created, made, conceived or reduced to practice by the Executive or under the Executive's direction or jointly with others during and relating to employment with the Company and whether before or after the date hereof and whether or not during normal working hours or on the premises of the Company (all of which are collectively referred to in this Agreement as "Developments"). Exhibit A specifies all pre-existing developments not assigned to the Company and created prior to the Executive's employment, in which the Executive shall have any rights, title or interest ("Prior Developments"). If and to the extent the Executive incorporates any Prior Development in any work product that the Executive creates for the Company, the Executive hereby grants to the Company an exclusive, royalty-free, transferable, irrevocable, worldwide license (with rights to freely assign and sublicense) to make, use, sell, reproduce, distribute, publicly perform, create derivative works form, and otherwise use and exploit the Prior Development in any manner, medium, or format throughout the universe.

7.2. The Executive hereby agrees to assign and does hereby assign to the Company (or any person or entity designated by the Company) all of the Executive's right, title and interest in and to all Developments and all related patents, patent applications, copyrights and copyright applications and agree that these obligations are binding upon his assigns, executors, administrators and other legal representatives. The Executive understands that, to the extent this Agreement shall be construed in accordance with the laws of any state which precludes a requirement in an employee agreement to assign certain classes of inventions made by an employee, this section 7.2 shall be interpreted not to apply to any invention which a court

rules and/or the Company agrees falls within such classes. The Executive also hereby waives all claims to moral rights in any Developments, even after termination or expiration of this Agreement. The Executive understands that the term "moral rights" means any rights of paternity or integrity, including any right to claim authorship of a copyrighted work, to object to a modification of such copyrightable work, and any similar existing right existing under the judicial or statutory authority of any country in the world or under any treaty, regardless of whether such right is denominated or generally referred to as a "moral right," including, without limitation, the rights of attribution and integrity in works of visual art under 17 USC § 106A.

7.3. The Executive agrees to cooperate fully with the Company, both during and after the Executive's employment with the Company, with respect to the procurement, maintenance and enforcement of copyrights, patents and other intellectual property rights (both in the United States and foreign countries) relating to Developments. Without limiting the foregoing, the Executive agrees that to the extent copyrightable, any such original works of authorship shall be deemed to be "works for hire" and that the Company shall be deemed the sole author thereof under the U.S. Copyright Act, provided that in the event and to the extent such works are determined not to constitute "works for hire" as a matter of law, the Executive hereby irrevocably assigns and transfers to the Company all right, title and interest in such works, including but not limited to copyrights and any renewals or extensions thereof. The Executive agree to sign all papers, including, without limitation, copyright applications, patent applications, declarations, oaths, formal assignments, assignments of priority rights, and powers of attorney, which the Company may deem necessary or desirable in order to protect its rights and interests in any Development (at the Company's expense) and agree that these obligations are binding upon the Executive's assigns, executors, administrators and other legal representatives. The Executive further agrees that if the Company is unable, after reasonable effort, to secure his signature on any such papers, any executive officer of the Company shall be entitled to execute any such papers as the Executive's agent and the attorney-in-fact, and the Executive hereby irrevocably designates and appoints each executive officer of the Company as his agent and attorney-in-fact to execute any such papers on his behalf, and to take any and all actions as the Company may deem necessary or desirable in order to protect its rights and interests in any Development, under the conditions described in this sentence.

8. Returning Company Documents. The Executive agrees that, at the time of leaving the employ of Company, the Executive shall deliver to the Company (and will not keep in his possession, recreate or deliver to anyone else) any and all Confidential Information, inventions, devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, equipment, other documents or property, or reproductions of any of the aforementioned items developed by the Executive pursuant to his employment with the Company or otherwise belonging to the Company, its successors or assigns.

9. Restrictive Covenants.

9.1. Non-Competition. The Executive agrees that during his employment with the Company and for a period of six (6) months immediately following the termination of employment with the Company for any reason, the Executive shall not, in the United States of America or Canada, engage, either directly or indirectly, whether as a principal or as agent, officer, director, employee, consultant, shareholder, partner, or otherwise, alone or in

association with any other person, in any Competing Business. For purposes of this Agreement, the term "Competing Business" shall mean any person or entity which develops or sells cannabidiol products and targeted therapies for the treatment of cardiovascular disease.

9.2. Non-Solicitation. The Executive also agrees that during his employment with the Company and for a period of one (1) year immediately following the termination of employment with the Company for any reason, the Executive shall not, directly or indirectly, (i) employ, engage or solicit for employment any individual who is, or was at any time during the past twelve months, an employee of the Company or otherwise seek to alter or adversely affect any such individual's relationship with the Company; or (ii) solicit or contact any client, agent, vendor, partner, contact or customer of the Company (collectively, "Client"), or any potential Client to which the Company has made a presentation or with which Company has had discussions during the term of the Executive's employment with the Company ("Prospective Client") for the purpose of soliciting or contacting such Client or Prospective Client to do business with a Competing Business; or, (iii) persuade or attempt to persuade any Client or Prospective Client to not transact business with the Company or to transact business with the Executive or any other Person as an alternative to the Company.

9.3. In the event that the provisions of Section 9 should be determined by a court or other tribunal of competent jurisdiction to exceed the time, geographic, services or product limitations permitted by the applicable law in a jurisdiction in which enforcement of this Agreement is sought, then such provisions shall be deemed reformed in such jurisdiction to the maximum time, geographic, service or product limitations permitted by such applicable law, and the parties hereby expressly grant any court or competent jurisdiction the authority to effect such reformation.

9.4. Equitable Relief. The Executive agrees that a violation of the provisions of this Agreement, including but not limited to, the restrictions in Sections 6 through 9, will cause the Company immediate and irreparable harm that cannot be remedied adequately by monetary damages. The Executive agrees that, in the event of such a violation, the Company shall be entitled to temporary, preliminary and permanent injunctive relief to restrain any such violation (without posting a bond or proving actual damages) and to an equitable accounting of all earnings, profits and other benefits arising from the breach or violation, which rights shall be cumulative and in addition to any other rights or remedies to which the Company may be entitled.

10. Miscellaneous.

10.1. Cooperation. The Executive agrees that, subject to reimbursement of his reasonable expenses, he will cooperate fully with the Company and its counsel with respect to any matter (including litigation, investigations, or governmental proceedings) in which the Executive was in any way involved during his employment with the Company. The Executive shall render such cooperation in a timely manner on reasonable notice from the Company, so long as the Company exercises commercially reasonable efforts to schedule and limit its need for the Executive's cooperation under this paragraph so as not to interfere with the Executive's other personal and professional commitments.

10.2. Section 409A.

10.2.1. Notwithstanding anything herein to the contrary or otherwise, except to the extent any expense, reimbursement or in-kind benefit provided to the Executive does not constitute a "deferral of compensation" within the meaning of Section 409A of the Code, and its implementing regulations and guidance, (i) the amount of expenses eligible for reimbursement or in-kind benefits provided to the Executive during any calendar year will not affect the amount of expenses eligible for reimbursement or in-kind benefits provided to the Executive in any other calendar year, (ii) the reimbursements for expenses for which the Executive is entitled to be reimbursed shall be made on or before the last day of the calendar year following the calendar year in which the applicable expense is incurred and (iii) the right to payment or reimbursement or in-kind benefits hereunder may not be liquidated or exchanged for any other benefit.

10.2.2. Anything to the contrary herein notwithstanding, all benefits or payments provided by the Company to the Executive that would be deemed to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code are intended to comply with Section 409A of the Code. Notwithstanding anything in this Agreement to the contrary, distributions may only be made under this Agreement upon an event and in a manner permitted by Section 409A of the Code or an applicable exemption.

10.3. Other Agreements. The Executive represents and warrants to the Company that there are no restrictions, agreements, including but not limited to confidentiality, non-compete, invention assignment, or consulting agreements, or understandings whatsoever to which he is a party that would prevent or make unlawful his execution of this Agreement, that would be inconsistent or in conflict with this Agreement or the Executive's obligations hereunder, or that would otherwise prevent, limit or impair the performance by the Executive of his duties under this Agreement.

10.4. Successors and Assigns. The Company may assign this Agreement to any affiliate or to any successor to its assets and business by means of liquidation, dissolution, merger, sale of assets or otherwise. Upon such assignment, the rights and obligations of the Company hereunder shall become the rights and obligations of such affiliate or successor. The rights and duties of the Executive hereunder are personal to Executive and may not be assigned by him.

10.5. Governing Law and Enforcement. This Agreement will be governed by and construed in accordance with the laws of the State of New York, without regard to the principles of conflicts of laws. Any legal proceeding arising out of or relating to this Agreement will be instituted in a state or federal court in the State of New York, and the Executive and the Company hereby consent to the personal and exclusive jurisdiction of such court(s) and hereby waive any objection(s) that they may have to personal jurisdiction, the laying of venue of any such proceeding and any claim or defense of inconvenient forum.

10.6. Waivers. The waiver by either party of any right hereunder or of any breach by the other party will not be deemed a waiver of any other right hereunder or of any other breach by the other party. No waiver will be deemed to have occurred unless set forth in writing. No waiver will constitute a continuing waiver unless specifically stated, and any waiver will operate only as to the specific term or condition waived.

10.7. Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law. However, if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provision, and this Agreement will be reformed, construed and enforced as though the invalid, illegal or unenforceable provision had never been herein contained.

10.8. Survival. This Agreement will survive the cessation of the Executive's employment to the extent necessary to fulfill the purposes and intent of this Agreement.

10.9. Notices. Any notice or communication required or permitted under this Agreement will be made in writing sent by reputable overnight courier. Any notice or communication to the Executive will be sent to the address or email address contained in his personnel file. Any notice or communication to the Company will be sent to the Company's Ontario offices, to the attention of the Board. Notwithstanding the foregoing, either party may change the address for notices or communications hereunder by providing written notice to the other in the manner specified in this paragraph.

10.10. Withholding. All payments (or transfers of property) to the Executive will be subject to tax withholding to the extent required by applicable law.

10.11. Section Headings. The headings of sections and paragraphs of this Agreement are inserted for convenience only and will not in any way affect the meaning or construction of any provision of this Agreement.

10.12. Counterparts. This Agreement may be executed in multiple counterparts (including by electronic or scanned signature), each of which will be deemed to be an original, but all of which together will constitute but one and the same instrument.

10.13. Entire Agreement; Amendments. This Agreement contains the entire agreement and understanding of the Parties hereto relating to the subject matter hereof, and supersedes all prior discussions, agreements and understandings of every nature relating to that subject matter and any prior versions of this Agreement, including the March 10, 2021 Independent Contractor Agreement (with the exception of Articles 6 and 7, under which the Executive has continuing obligations). This Agreement may not be changed or modified, except by an agreement in writing signed by each of the Parties hereto.

[signatures on following page]

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed by its duly authorized officer, and the Executive has executed this Agreement, in each case on the date written below.

By: /s/ David Elsley
David Elsley
President & CEO
Cardiol Therapeutics Inc.

Dated:

By: /s/ Andrew Hamer
Andrew Warwick Hamer

Dated: May 29th 2022

Exhibit 8.1

Subsidiaries of Cardiol Therapeutics Inc.

Legal Name	Jurisdiction of Organization
Cardiol Therapeutics USA Inc.	Delaware, USA

Exhibit 11.1

CARDIOL THERAPEUTICS INC.
(THE "CORPORATION")

CODE OF CONDUCT AND ETHICS

The Corporation is committed to a culture of honesty, integrity and accountability and strives to operate its business in accordance with the highest ethical standards and applicable laws, rules and regulations. This Code of Business Conduct and Ethics (this "**Code**") outlines the principles that should guide all directors, officers and employees of the Corporation in the performance of their duties. For the purpose of this Code, any reference to "employees" includes any director, officer or employee of the Corporation.

Employees of the Corporation must not only comply with applicable laws, rules and regulations but also must engage in and promote honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships, and abide by the policies and procedures that govern the conduct of the business of the Corporation. The responsibilities of each employee include helping to create and maintain a culture of high ethical standards and commitment to compliance and, in the case of directors and officers, maintaining a work environment that encourages employees to raise concerns with management and promptly addressing employee compliance concerns.

Failure to comply with the Code, other policies and procedures of the Corporation or applicable laws, rules and regulations may be grounds for disciplinary action up to and including termination of employment, may require restitution and may lead to civil or criminal action against individual employees and any company involved.

This Code is not meant to be a complete list of all legal and ethical obligations of the employees of the Corporation. The Corporation provides this Code to its employees to offer guidance in properly recognizing and resolving the legal and ethical issues that they may encounter while conducting the business of the Corporation. Should an employee be confronted with a situation where further guidance is required, the matter should be discussed with a member of management or the Audit Committee of the Corporation.

Employees are expected to promptly report situations of non-compliance with respect to this Code to the Corporation in accordance with the procedures set out in the Corporation's Whistleblower Policy. No employee will be subject to retaliation by the Corporation for reporting, in good faith, a violation of this Code.

It is the responsibility of each employee to become familiar with the principles set out in this Code and to integrate them into every aspect of the business of the Corporation. All employees will be required to personally certify that they understand the continuing obligation to comply with this Code and will be required to sign an Annual Declaration of Compliance with the Code.

1. CONFLICTS OF INTEREST

Employees have a duty of loyalty to the Corporation and are expected to always act in the best interests of the Corporation. A conflict arises when the personal interests or activities of an employee influence or have the potential to influence the exercise of his or her judgment in the performance of his or her duties. Conflicts of interest and even the appearance of a conflict of interest may compromise the reputation of the Corporation and must be avoided.

The Corporation respects its employees' right to privacy in their personal activities and financial affairs. It is the responsibility of each employee to ensure that his or her personal conduct complies with the following principles, which are not intended to address every potential conflict situation.

(a) **Employment or Affiliation with a Competitor, Supplier or Customer**: Full-time employees may not act as directors, officers, employees, consultants or agents of entities that compete directly with the business of the Corporation or do business with the Corporation (such as customers, suppliers or business partners of the Corporation) without the approval of the Corporate Governance and Compensation Committee. In addition, employees may not own, directly or indirectly, a beneficial interest in any of these entities, unless an employee is making an investment in securities that are listed on a national or international securities exchange and the total value of the investment is less than five per cent of the aggregate value of the class of securities involved and the amount of the investment is not so significant that it could affect the employee's business judgement on behalf of the Corporation.

(b) **Independent Business Ventures**: Employees may not engage in independent business ventures or agree to perform services for other businesses if the activity will interfere with the employee's devotion of time and effort to the conduct of the business of the Corporation or otherwise affect his or her ability to work effectively.

(c) **Personal Benefits, Gifts, Bribes and Kickbacks**: Employees may not use their position as an employee of the Corporation to derive or secure any personal, financial or other benefit for themselves or their relatives. An employee may not solicit and/or accept any gift or favour from any competitor, supplier or customer, except to the extent customary and reasonable in amount and not in consideration for any improper action by the recipient. The offering or accepting of bribes, payoffs or kickbacks made directly or indirectly to obtain an advantage in a commercial transaction are strictly prohibited. Employees are expected to comply with the principles set out in this Code.

(d) **Reporting Conflict**: Each employee is required to promptly disclose any actual or potential conflict of interest to the Corporation. Any transaction, relationship or interest that reasonably could be expected to give rise to a conflict of interest should be reported. Actual or potential conflicts of interest involving a director or executive officer should be disclosed directly to the chair of the Board.

Although the principles above refer only to employees of the Corporation, employees should also exercise care to avoid actual or potential conflicts of interest that may arise because of the activities of their immediate family members and other members of their household.

2. PROTECTION AND PROPER USE OF CORPORATE ASSETS

All employees of the Corporation are expected to protect the assets of the Corporation and ensure they are used for legitimate business purposes only. Theft, carelessness and waste have a direct impact on the business and profitability of the Corporation. Any suspected incidents of fraud or theft should be immediately reported for investigation.

The assets of the Corporation include information, equipment, office supplies, hardware, software, intellectual property and time. Such assets may not be used for personal benefit, nor may they be sold, borrowed or given away without proper authorization. Occasional personal use of certain corporate resources (e.g., computer, fax or e-mail) is acceptable where the interests of the Corporation are not adversely affected. However, employees are expected to consult a member of management for approval if in doubt.

3. INVENTIONS

The Corporation is legally entitled to all rights in ideas, inventions and works of authorship relating to its business that are made by any employee during the scope of his or her employment with the Corporation or while using the Corporation's resources.

4. USE OF E-MAIL AND INTERNET SERVICES

E-mail systems and Internet services are provided to help employees perform their duties and responsibilities related to the Corporation. Incidental and occasional personal use is permitted, but use for personal gain or any improper purpose is not permitted. Employees may not access, send or download any information that could be insulting or offensive to another person, such as sexually explicit messages, cartoons, jokes, unwelcome propositions, ethnic or racial slurs or any other message that could be viewed as harassment. "Flooding" the systems of the Corporation with junk mail hampers the ability of the systems to handle legitimate corporate business and is prohibited.

Employees' messages (including voice mail) and computer information are considered corporate property. Unless prohibited by law, the Corporation reserves the right to access and disclose this information as necessary for business purposes. Employees should use good judgment, and should not access, send messages or store any information that he or she would not want to be seen or heard by other individuals.

5. DISCLOSURE

It is the policy of the Corporation to make full, fair, accurate, timely and understandable disclosure in compliance with all applicable laws, rules and regulations in all reports and documents that the Corporation files with, or submits to, securities regulators and in all other public communications made by the Corporation. The management of the Corporation has the general responsibility for preparing such filings and such other communications and should ensure that such filings and communications comply in all material respects with all applicable laws, rules and regulations. Employees must provide all necessary information to management when requested and must inform management if they become aware that any information in any such filing or communication was untrue or misleading at the time such filing or communication was made or if they have information that would affect any filings or communications to be made in the future.

The Corporation maintains accounting and internal control systems designed to provide reasonable assurance that the assets of the Corporation are safeguarded against loss and the financial records of the Corporation are reliable for preparing financial statements. No fraudulent or false entries should be made for any reason in the books, records, or accounts of the Corporation.

6. CORPORATE OPPORTUNITIES

Employees owe a duty to the Corporation to advance its legitimate interests when an opportunity to do so arises. In this regard, employees may not appropriate for their own use, or that of another person or organization, the benefit of any business venture or opportunity which they learned about during the course of their employment, unless it is first offered to the Corporation and the Corporation decides not to pursue it.

7. CONFIDENTIALITY OF CORPORATE INFORMATION

During the normal course of business, employees may have access to, among other things, non-public information regarding the customers of the Corporation, suppliers, operations, strategic plans, financial affairs, employees and proprietary technologies and processes. This information is a key corporate asset and every employee has an obligation to protect it and keep it in the strictest confidence, except when disclosure is explicitly authorized pursuant to the Corporation's Confidentiality and Disclosure Policy or when disclosure is legally required. The unauthorized use or disclosure of confidential information of the Corporation could destroy its value and give an unfair advantage to others. Care should be taken in disposing of documents containing confidential information, such as shredding documents, before discarding. Confidential information also includes any information relating to the business and affairs of the Corporation that results in or would reasonably be expected to result in a significant change in the market price or value of any securities of the Corporation or any information a reasonable investor would consider important in making an investment decision. Employees must not use confidential information for their own advantage or profit.

An employee's obligation to protect the confidential information of the Corporation exists whether or not the information is explicitly labelled as being confidential and the obligation continues even after leaving the employ of the Corporation.

Employees must adhere to the guidelines and policies set out in the Corporation's Confidentiality and Disclosure Policy.

8. FAIR DEALING

The Corporation competes vigorously in its business dealings but is committed to practices that are fair and honest. In this regard, employees are expected to respect the rights of, and deal fairly with, the employees, customers, suppliers, shareholders, business partners, regulators and competitors of the Corporation. No employee may take unfair advantage of anyone through manipulation, concealment, abuse of privileged information, misrepresentation of material facts, or any other intentional unfair dealing practice.

9. COMPLIANCE WITH LAWS, RULES AND REGULATIONS

The Corporation is subject to a number of governmental laws, rules and regulations with respect to the conduct of its business. Employees are expected to maintain compliance with the letter and spirit of all laws governing the jurisdictions in which they perform their duties. This Code does not purport to address all areas of law that employees might encounter in the day-to-day business of the Corporation. The following areas, however, should be specifically noted:

(a) **Privacy Laws**: The Corporation is committed to maintaining the accuracy, confidentiality, security and privacy of the personal information of its customers,

suppliers and employees. Employees who have access to personal information are expected to support the efforts of the Corporation to develop, implement and maintain procedures and policies designed to manage personal information.

(b) **Human Rights Laws**: The Corporation values the diversity of its employees, customers and suppliers and is committed to providing equal treatment in all aspects of the business. Abusive, harassing or offensive conduct is unacceptable, whether verbal, physical, visual or otherwise. The Corporation will not tolerate any conduct that is discriminatory or harassing or otherwise compromises an individual's human rights.

(c) **Health and Safety Laws**: The Corporation strives to comply with all applicable health and safety laws and regulations as part of its commitment to providing employees with a safe and healthy work environment. Employees have a responsibility to maintain this work environment. In this regard, employees are expected to work in a safe manner with due regard for their personal safety as well as that of their co-workers and to report accidents, injuries, hazardous equipment and unsafe practices. Employees are prohibited from engaging in the business of the Corporation while under the influence of alcohol or illegal drugs.

(d) **Environmental Laws**: Cognizant of its responsibility to the environment, the Corporation strives to comply with all applicable environmental laws and regulations. Employees are expected to support the efforts of the Corporation to develop, implement and maintain procedures and programs designed to protect and preserve the environment.

(e) **Securities Laws**: The Corporation is committed to protecting security holder investments and expects all employees to comply with the applicable reporting obligations and trading restrictions imposed by the Corporation, any securities commission or stock exchange. Employees who are in possession of material information about the Corporation must not trade in securities of the Corporation until such information is generally publicly available. Providing inside information to others who then trade on such information is also strictly prohibited. Employees should become familiar with, and must adhere to the guidelines and policies set out in, the Insider Trading Policy and Confidentiality and Disclosure Policy.

(f) **Competition Laws**: Competition laws are enacted to limit practices that are seen to impair the function of a free and open marketplace. A complete description of these laws is beyond the scope of this Code; however, they include price fixing, bid rigging, price discrimination, allocation of markets and boycotting of certain suppliers or customers. Employees having regular dealings with customers and suppliers should become familiar with the laws applying to these practices as non- compliance can result in severe penalties being imposed on both the Corporation and the individuals involved.

10. DUTY TO REPORT

Employees who know of, or suspect, a violation of this Code or of any applicable law, rule or regulation have an obligation to immediately report this information to a member of management or the Audit Committee. No one will be subject to retaliation because of a good faith report of suspected misconduct: please refer to the Corporation's Whistleblower Policy. All reported

violations will be promptly investigated and treated confidentially to the extent possible. Employees are expected to cooperate fully in internal investigations of misconduct.

11. ADMINISTRATION OF THIS CODE

The directors of the Corporation are responsible for monitoring compliance with this Code, for regularly assessing its adequacy, for interpreting this Code in any particular situation and for approving any changes to this Code from time to time.

In order to seek a waiver of this Code, full disclosure of the particular circumstance must be made to the Corporation's Chief Executive Officer or the Chief Financial Officer, in the case of employees who are not directors or officers of the Corporation, or the Audit Committee, in the case of directors and officers of the Corporation. Amendments to and waivers of this Code will be publicly disclosed as required by applicable laws, rules and regulations.

This Code is a statement of certain fundamental principles, policies and procedures that govern the directors, officers and employees of the Corporation in the conduct of the business of the Corporation. It is not intended to, and does not, create any rights in any employee, customer, supplier, competitor, shareholder or any other person or entity.

Issue Date: October 22, 2018 **Authorized By:** Board of Directors

Review: Annually

Revised Date: July 28, 2021

Exhibit 12.1

CERTIFICATION

PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, David Elsley, certify that:

1. I have reviewed this annual report on Form 20-F of Cardiol Therapeutics Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f)and 15d-15(f)) for the company and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 1, 2024

/s/ David Elsley
Name: David Elsley
Title: President and Chief Executive Officer
(principal executive officer)

Exhibit 12.2

CERTIFICATION

PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Christopher Waddick, certify that:

1. I have reviewed this annual report on Form 20-F of Cardiol Therapeutics Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f)and 15d-15(f)) for the company and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 1, 2024

/s/ Christopher Waddick
Name: Christopher Waddick
Title: Chief Financial Officer
(principal financial officer)

Exhibit 13.1

CERTIFICATION

PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

The undersigned, as the Chief Executive Officer of Cardiol Therapeutics Inc., certifies that, to the best of his knowledge and belief, the annual report on Form 20-F for the fiscal year ended December 31, 2023, which accompanies this certification, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and the information contained in the annual report on Form 20-F for the fiscal year ended December 31, 2023 fairly presents, in all material respects, the financial condition and results of operations of Cardiol Therapeutics Inc. at the dates and for the periods indicated. The foregoing certification is made pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350) and shall not be relied upon for any other purpose. The undersigned expressly disclaims any obligation to update the foregoing certification except as required by law.

Date: April 1, 2024

/s/ David Elsley
David Elsley
President and Chief Executive Officer
(principal executive officer)

Exhibit 13.2

CERTIFICATION

PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

The undersigned, as the Chief Financial Officer of Cardiol Therapeutics Inc., certifies that, to the best of his knowledge and belief, the annual report on Form 20-F for the fiscal year ended December 31, 2023, which accompanies this certification, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and the information contained in the annual report on Form 20-F for the fiscal year ended December 31, 2023 fairly presents, in all material respects, the financial condition and results of operations of Cardiol Therapeutics Inc. at the dates and for the periods indicated. The foregoing certification is made pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350) and shall not be relied upon for any other purpose. The undersigned expressly disclaims any obligation to update the foregoing certification except as required by law.

Date: April 1, 2024

/s/ Christopher Waddick
Christopher Waddick
Chief Financial Officer
(principal financial officer)

Exhibit 15.1

CARDIOL THERAPEUTICS INC.
MANAGEMENT'S DISCUSSION AND ANALYSIS
YEAR ENDED DECEMBER 31, 2023

MANAGEMENT'S DISCUSSION AND ANALYSIS

Introduction

The following management's discussion and analysis ("MD&A") of the financial condition and results of the operations of Cardiol Therapeutics Inc. and its subsidiary (the "Corporation" or "Cardiol") constitutes management of the Corporation's ("Management") review of the factors that affected the Corporation's financial and operating performance for the year ended December 31, 2023 (the "2023 Fiscal Period"). This discussion should be read in conjunction with the consolidated financial statements for the years ended December 31, 2023, 2022, and 2021 ("Financial Statements"), together with the respective notes thereto. Results are reported in Canadian dollars, unless otherwise noted. The Financial Statements and the financial information contained in this MD&A are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and Interpretations issued by the International Financial Reporting Interpretations Committee ("IFRIC"). In the opinion of Management, all adjustments (which consist only of normal recurring adjustments) considered necessary for a fair presentation have been included.

This MD&A is dated April 1, 2024. All dollar amounts in this MD&A are reported in Canadian dollars, unless otherwise stated. Unless otherwise noted or the context indicates otherwise, the terms "we", "us", "our", "Cardiol", the "Company" or the "Corporation" refer to Cardiol Therapeutics Inc. and its subsidiary.

This MD&A is presented current to April 1, 2024 unless otherwise stated. The financial information presented in this MD&A is derived from the Financial Statements. This MD&A contains forward-looking statements that involve risks, uncertainties, and assumptions, including statements regarding anticipated developments in future financial periods and our plans and objectives. There can be no assurance that such information will prove to be accurate, and readers are cautioned not to place undue reliance on such forward-looking statements. See "Forward-Looking Statements" and "Risk Factors".

Forward-Looking Information

This MD&A contains forward-looking information that relates to the Corporation's current expectations and views of future events. In some cases, this forward-looking information can be identified by words or phrases such as "may", "might", "could", "will", "expect", "anticipate", "estimate", "intend", "plan", "indicate", "seek", "believe", "predict", or "likely", or the negative of these terms, or other similar expressions intended to identify forward-looking information. Statements containing forward-looking information are not historical facts. The Corporation has based this forward-looking information on its current expectations and projections about future events and financial trends that it believes might affect its financial condition, results of operations, business strategy, and financial needs. The forward-looking information includes, among other things, statements relating to:

- our anticipated cash needs, and the need for additional financing;
- our development of our product candidates for use in basic research, clinical studies, and commercialization;
- our ability to develop new routes of administration of our product candidates, including parenteral, for use in basic research, clinical studies, and commercialization;
- our ability to develop new formulations of our product candidates for use in basic research, clinical studies, and commercialization;
- the successful development and commercialization of our current product candidates and the addition of future products and product candidates;
- the ability of our product delivery technologies to deliver our product candidates to inflamed and/or fibrotic tissue;
- our intention to build a pharmaceutical brand and our products focused on addressing inflammation and fibrosis in heart disease, including acute myocarditis, recurrent pericarditis, and heart failure;
- the expected medical benefits, viability, safety, efficacy, effectiveness, and dosing of our product candidates;
- patents and intellectual property, including, but not limited to, our (a) ability to procure, defend, and/or enforce our intellectual property relating to our products, product formulations, routes of administration, product candidates, and associated uses, methods, and/or processes, and (b) freedom to operate;
- our competitive position and the regulatory environment in which we operate;

- the molecular targets and mechanism of action of our product candidates;
- our financial position; our business strategy; our growth strategies; our operations; our financial results; our dividend policy; our plans and objectives; and
- expectations of future results, performance, achievements, prospects, opportunities, or the market in which we operate.

In addition, any statements that refer to expectations, intentions, projections, or other characterizations of future events or circumstances contain forward-looking information. Forward-looking information is based on certain assumptions and analyses made by the Corporation in light of the experience and perception of historical trends, current conditions, and expected future developments and other factors we believe are appropriate and are subject to risks and uncertainties. The preceding list is not intended to be an exhaustive list of all of our forward-looking statements. The forward-looking statements are based on our beliefs, assumptions and expectations of future performance, taking into account the information currently available to us. These statements are only predictions based upon our current expectations and projections about future events. Although we believe that the assumptions underlying these statements are reasonable, they may prove to be incorrect, and we cannot assure that actual results will be consistent with this forward-looking information. Given these risks, uncertainties, and assumptions, prospective investors should not place undue reliance on this forward-looking information. Whether actual results, performance, or achievements will conform to the Corporation's expectations and predictions is subject to a number of known and unknown risks, uncertainties, assumptions, and other factors, including those listed under “Risk Factors”, which include:

- the inherent uncertainty of product development including basic research and clinical trials;
- our requirement for additional financing;
- our negative cash flow from operations;
- our history of losses;
- dependence on the success of our early-stage product candidates which may not generate revenue;
- reliance on Management, loss of members of Management or other key personnel, or an inability to attract new Management team members;
- our ability to successfully design, initiate, execute, and complete clinical trials, including the high cost, uncertainty, and delay of clinical trials and additional costs associated with any failed clinical trials;
- the uncertainty our investigational products will have a therapeutic benefit in the clinical indications we are pursuing;
- potential equivocal or negative results from clinical trials and their adverse impacts on our future commercialization efforts;
- our ability to receive and maintain regulatory exclusivities in multiple jurisdictions, including Orphan Drug Designations/Approvals, for our product candidates;
- delays in achievement of projected development goals;
- management of additional regulatory burdens;
- volatility in the market price for our securities;
- failure to protect and maintain and the consequential loss of intellectual property rights;
- third-party claims relating to misappropriation by the Corporation of their intellectual property;
- reliance on third parties to conduct and monitor our pre-clinical studies and clinical trials;
- our product candidates being subject to controlled substance laws which may vary from jurisdiction to jurisdiction;
- changes in laws, regulations, and guidelines relating to our business, including tax and accounting requirements;
- our reliance on early-stage research regarding the medical benefits, viability, safety, efficacy, and dosing of our product candidates;
- claims for personal injury or death arising from the use of our future products and product candidates;
- uncertainty relating to market acceptance of our product candidates;
- our lack of experience in commercializing any products, including selling, marketing, or distributing pharmaceutical products;
- securing third-party payor reimbursement for our product candidates;
- the level of pricing and reimbursement for our product candidates, if approved;
- our dependence on contract manufacturers;
- unsuccessful collaborations with third parties;
- business disruptions affecting third-party suppliers and manufacturers;
- lack of control in future production and selling prices of our product candidates;
- competition in our industry;
- our inability to develop new technologies and products and the obsolescence of existing technologies and products;

- unfavorable publicity or consumer perception towards our products;
- product liability claims and product recalls;
- expansion of our business to other jurisdictions;
- fraudulent activities of employees, contractors, and consultants;
- our reliance on key inputs and their related costs;
- difficulty associated with forecasting demand for products;
- operating risk and insurance coverage;
- our inability to manage growth;
- conflicts of interest among the officers and directors ("Director") of the Corporation;
- managing damage to our reputation and third-party reputational risks;
- relationships with customers and third-party payors and consequential exposure to applicable anti-kickback, fraud, and abuse and other healthcare laws;
- exposure to information systems security threats;
- no dividends for the foreseeable future;
- future sales of common shares and warrants by existing shareholders causing the market price for the common shares and warrants to fluctuate;
- the issuance of common shares in the future causing dilution;
- events outside of our control could adversely affect our operations;
- our ability to remediate any material weakness in our internal control over financial reporting;
- global geo-political events, and the responses of governments having a significant effect on the world economy; and
- failure to meet regulatory or ethical expectations on environmental impact, including climate change.

If any of these risks or uncertainties materialize, or if assumptions underlying the forward-looking information prove incorrect, actual results may vary materially from those anticipated in the forward-looking information.

Information contained in forward-looking information in this MD&A is provided as of April 1, 2024, and we disclaim any obligation to update any forward-looking information, whether as a result of new information or future events or results, except to the extent required by applicable securities laws. Accordingly, potential investors should not place undue reliance on forward-looking information.

Overview

On December 20, 2018, the Corporation completed its initial public offering on the Toronto Stock Exchange (the "TSX"). As a result, the common shares commenced trading on the TSX under the symbol "CRDL". On May 12, 2021, warrants arising from a "bought deal" short form prospectus offering that closed on the same date, commenced trading on the TSX. These warrants trade under the symbol "CRDL.WT.A". On August 10, 2021, the Corporation's common shares commenced trading on The Nasdaq Capital Market under the symbol "CRDL".

The Corporation 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 Corporation's lead drug candidate, CardiolRx™ (cannabidiol) oral solution, is pharmaceutically manufactured and is currently in clinical development for use in the treatment of two heart diseases. 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 ("IND") authorization from the United States Food and Drug Administration ("FDA") to conduct clinical studies to evaluate the efficacy and safety of CardiolRx in two rare 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.

The FDA has granted Orphan Drug Designation to CardiolRx for the treatment of pericarditis, which includes recurrent pericarditis. The U.S. Orphan Drug Designation program was created to provide the sponsor of a drug or biologic 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 European Commission's European Medicines Agency ("EMA") has a similar orphan medicine product program for rare diseases.

Cardiol is also developing a novel subcutaneously administered drug formulation of its lead small molecule drug candidate ("CRD-38") intended for use in heart failure – a leading cause of death and hospitalization in the developed world, with associated healthcare costs in the U.S. exceeding $30 billion annually.

Operations Highlights

During the 2023 Fiscal Period

(i) In January 2023, the Corporation announced the first patient has been enrolled in the MAvERIC-Pilot study. See "Phase II Open Label Pilot Study – Recurrent Pericarditis (MAvERIC-Pilot)".

(ii) In March 2023, the Corporation announced study results from one of its international collaborating research centers demonstrating that its pharmaceutically manufactured cannabidiol significantly prevents cardiac dysfunction and the development of fibrosis and cardiomyocyte hypertrophy in a pre-clinical model of heart failure and reduces expression of key inflammatory and fibrotic markers.

The studies were presented by researchers from Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico ("TecSalud") at the American College of Cardiology's 72nd Annual Scientific Session together with World Congress of Cardiology ("ACC.23/WCC"). TecSalud is one of the Corporation's international collaborating research centers working towards the common goal of developing therapies to advance the treatment of heart diseases.

The poster entitled "Cannabidiol Therapy for Chronic Heart Failure Prevents Cardiac Pathological Remodeling in a Non- ischemic Cardiomyopathy Murine Model" was presented on March 4th within the "Heart Failure and Cardiomyopathies: Basic and Translational Science 1" session of ACC.2023/WCC. This work builds upon existing knowledge by confirming cannabidiol's cardioprotective properties and, in this model, its ability to reduce inflammation and prevent hypertrophy and fibrosis in heart tissue. This work also furthers the understanding of cannabidiol's ability to improve cardiac function and, in isolated cardiomyocytes, improve calcium handling and mitochondrial health.

A second poster entitled "Abnormal Mitochondrial Calcium Content in Angiotensin-Induced Hypertrophy is Ameliorated by Cannabidiol Mimicking PPAR-y Activation" was presented on March 5th within the "Heart Failure and Cardiomyopathies: Basic and Translational Science 8" session of ACC.2023/WCC. This poster presented data related to the role of cannabidiol in mitochondrial calcium dynamics in hypertrophic cells. Cannabidiol was able to prevent hypertrophy-induced mitochondrial calcium overload and prevent hypertrophy-induced increase of several mitochondrial function markers such as reactive oxygen species and calcium uptake. In addition, this work suggests that cannabidiol's effects may rely on PPAR-y activation, which in turn can inhibit NF-kB, a transcription factor that regulates pro- inflammatory and pro-hypertrophic genes. Together, these findings further clarify cannabidiol's mode of action in combatting cardiac hypertrophy.

(iii) In August 2023, the Corporation announced that it received notice on August 7, 2023 from The Nasdaq Stock Market LLC ("Nasdaq") stating the Corporation had regained compliance with the minimum bid price requirement under Nasdaq Listing Rule 5550(a)(2) for continued listing on The Nasdaq Capital Market.

(iv) In September 2023, the Corporation announced that all collaborating research centers had been initiated and were eligible to enroll patients in ARCHER. See "Phase II Trial – Acute Myocarditis (ARCHER)".

(v) In October 2023, the Corporation announced study results one of its international collaborating research centers demonstrating that subcutaneously administered cannabidiol, the active pharmaceutical ingredient in Cardiol's novel CRD-38 subcutaneous ("SUBQ") formulation, slowed increases in body weight and heart weight, and prevented increases in key cardiac inflammatory and remodeling markers in a model of heart failure with preserved ejection fraction ("HFpEF").

The study was presented by researchers from TecSalud at the Heart Failure Society of America Annual Scientific Meeting 2023 ("HFSA2023"). The poster entitled "Cannabidiol As A Potential Treatment For Heart Failure With Preserved Ejection Fraction" was presented on October 7th within the "ePoster Viewing Session III" of HFSA2023. This work was performed using a model of HFpEF that is induced using a combination of high-fat diet and hypertension that leads to an increase in heart weight to tibia length ratio, and an increase in markers for inflammation and cardiac

remodeling. Cannabidiol administered SUBQ was associated with significantly lower BNP (a cardiac stress marker raised in heart failure patients), IL-10 (a promotor of fibrosis in HFpEF), and visceral adipose tissue ("VAT") to subcutaneous adipose tissue ("SAT") ratio.

The ratio of VAT/SAT holds critical significance in the context of heart failure. Visceral adipose tissue, the fatty tissue stored around internal organs, is metabolically active and releases inflammatory factors contributing to systemic inflammation. In contrast, subcutaneous adipose tissue, found beneath the skin, has a less detrimental impact. An imbalance in this ratio with excessive visceral adipose tissue is associated with a higher risk of cardiovascular disease, including heart failure. Visceral fat accumulation increases cardiac strain, promotes hypertension, and dysregulates lipid metabolism. Additionally, it can lead to obesity-related comorbidities such as diabetes. Managing this ratio could play an important role in preventing and treating heart failure.

Together these new findings expand the understanding of the cardioprotective effects of CRD-38 and suggest new therapeutic potential in HFpEF, which remains a leading cause of death and hospital admissions in the United States and throughout the developed world.

(vi) In October 2023, the Corporation announced that it received a notice (the "Notice") from the Nasdaq, stating that the Corporation was not in compliance with the minimum bid price requirement of USD$1.00 per share under the Nasdaq Listing Rule 5550(a)(2) based upon the closing bid price of the Corporation's common shares for the 30 consecutive business days prior to the date of the Notice. See Operations Highlights - Subsequent to December 31, 2023 - (ii).

(vii) In November 2023, the Corporation announced that it exceeded 50% of the patient enrollment target for MAvERIC- Pilot.

(viii) In November 2023, the Corporation announced study results from one of its international collaborating research centers demonstrating 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. The results were presented by researchers 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").

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.

(ix) During the 2023 Fiscal Period, the Corporation granted 880,000 stock options to certain consultants of the Corporation. Each option allows the holder to acquire one common share of the Corporation at exercise prices between
$0.75 and US$1.80 with expiry dates between April 10, 2025 and November 29, 2028. During the 2023 Fiscal Period, the Corporation granted 2,100,000 restricted share units ("RSUs") to certain consultants of the Corporation. The RSUs have an expiry date of March 31, 2024. During the 2023 Fiscal Period, the Corporation granted 2,000,000 performance share units ("PSUs") to certain consultants of the Corporation. Grants of PSUs require completion of certain performance criteria specific to each grant. These PSUs have an expiry date of December 31, 2024.

Subsequent to December 31, 2023

(i) Subsequent to December 31, 2023, the Corporation announced that it has exceeded 50% patient enrollment for ARCHER.

(ii) Subsequent to December 31, 2023, the Corporation announced that it received notice on January 23, 2024 from Nasdaq stating that the Corporation has regained compliance with the minimum bid price requirement under Nasdaq Listing Rule 5550(a)(2) for continued listing on The Nasdaq Capital Market. Accordingly, the Corporation is now in compliance with all applicable listing standards.

(iii) Subsequent to December 31, 2023, the Corporation announced the FDA has granted Orphan Drug Designation to CardiolRx for the treatment of pericarditis, which includes recurrent pericarditis.

(iv) Subsequent to December 31, 2023, the Corporation announced completion of patient enrollment in MAvERIC-Pilot.

Phase II Open Label Pilot Study – Recurrent Pericarditis (MAvERIC-Pilot)

Pericarditis refers to inflammation of the pericardium (the membrane or sac that surrounds the heart), frequently resulting from a viral infection. Recurrent pericarditis is the reappearance of symptoms after a symptom-free period of at least four to six weeks following the initial acute episode of pericarditis. 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. Causes of pericarditis can include infection (e.g., tuberculosis), systemic disorders such as autoimmune and inflammatory diseases, cancer, and post-cardiac injury syndromes. Pericarditis (and its recurrences) are symptomatic events, the diagnosis of which is based on meeting two of four criteria: chest pain; pericardial friction rub; electrocardiogram changes; and new or worsening pericardial swelling. Elevation of inflammatory markers such as C-reactive protein ("CRP"), and evidence of pericardial inflammation by an imaging technique (computed tomography scan or cardiac magnetic resonance) may help the diagnosis and the monitoring of disease activity. Although generally self-limited and not life threatening, pericarditis is diagnosed in 0.2% of all cardiovascular in-hospital admissions and is responsible for 5% of emergency room admissions for chest pain in North America and Western Europe.

Recurrent pericarditis appears in 15% to 30% of patients following the acute index episode and usually within 18 months. Furthermore, up to 50% of patients with a recurrent episode of pericarditis experience more recurrences. Standard first-line medical therapy consists of non-steroidal anti-inflammatory drugs or aspirin with or without colchicine. Corticosteroids such as prednisone are second-line therapy in patients with continued recurrence and inadequate response to conventional therapy. The only FDA-approved therapy for recurrent pericarditis, launched in 2021, is a costly and potent subcutaneously injected interleukin-1 inhibitor with immunosuppressive effects. It is generally used as a third-line intervention in patients with persistent underlying disease, multiple recurrences, and an inadequate response to conventional therapy.

On an annual basis, the number of patients in the U.S. having experienced at least one recurrence is estimated at 38,000. Approximately 60% of patients with multiple recurrences (>1) still suffer for longer than two years, and one third are still impacted at five years. 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 US$20,000 and US$30,000 in the U.S.

In May 2022, the Corporation announced the FDA has authorized the Corporation's IND to commence a Phase II open- label pilot study designed to evaluate the tolerance, safety, and efficacy of CardiolRx in patients with recurrent pericarditis. MAvERIC-Pilot will also assess the improvement in objective measures of disease, and during an extension period, assess the feasibility of weaning concomitant background therapy including corticosteroids, while taking CardiolRx. Recurrent pericarditis is a rare disease in the U.S., thereby making CardiolRx eligible for orphan drug status under the FDA's Orphan Drug Designation program.

The MAvERIC-Pilot study protocol was designed to enroll 25 patients at major clinical centers in the U.S. specializing in pericarditis. In February 2024, Corporation announced that the MAvERIC-Pilot study had achieved its patient enrollment objective. The primary efficacy endpoint of the study is the change, from baseline to eight weeks, in patient-reported pericarditis pain using an 11-point numeric rating scale ("NRS"). The NRS is a validated clinical tool used 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 high sensitivity CRP. Importantly, the study will also assess freedom from pericarditis recurrence.

The MAvERIC-Pilot study was designed with the support of an independent Advisory Committee and key trial investigators, consisting of international thought leaders in cardiovascular disease, including:

- **Study Chair: Allan Klein, MD, CM –** Director, Center for the Diagnosis and Treatment of Pericardial Diseases, and Professor of Medicine, Heart, Vascular and Thoracic Institute, Cleveland Clinic;
- **Antonio Abbate, MD –** Ruth C. Heede Professor of Cardiology, School of Medicine, and Department of Medicine, Division of Cardiovascular Medicine - Heart and Vascular Center, University of Virginia;
- **Allen Luis, MBBS, PhD –** Co-Director of the Pericardial Diseases Clinic, Associate Professor of Medicine, Department of Cardiovascular Medicine, at Mayo Clinic Rochester Minnesota;
- **Paul Cremer, MD –** Departments of Medicine and Radiology, Northwestern University, and Multimodality Cardiac Imaging and Clinical Trials Unit, Bluhm Cardiovascular Institute;
- **Stephen Nicholls –** Program Director, Victorian Heart Hospital, Director, Monash Victorian Heart Institute, and Professor of Cardiology, Monash University, Melbourne; and

- **Stefano Toldo, PhD –** Associate Professor of Medicine, Department of Medicine, Cardiovascular Medicine at University of Virginia.

The Corporation expects to report topline results from the MAvERIC-Pilot study in Q2 2024 and trial extension data during H2 2024. Cardiol has budgeted additional costs to complete this study to be approximately $1 million. If Cardiol determines that the study has met its objectives, it currently expects to undertake the next steps in its clinical development program, which would consist of a larger clinical study, the details of which will be determined in conjunction with its external clinical advisors and regulatory agencies. The total cost and timeline to complete this clinical development program cannot be determined at this stage as this will depend on a variety of factors. The Corporation may involve a commercial partner from the pharmaceutical industry to fund the late-stage clinical development and commercialization of CardiolRx for the treatment of recurrent pericarditis.

Phase II Trial – Acute Myocarditis (ARCHER)

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.

In a proportion of patients, the inflammation in the heart persists and causes decreased heart function with symptoms and signs of heart failure, and as such pharmacological treatment is based on conventional therapy for heart failure. This includes diuretics, ACE inhibitors, angiotensin receptors blockers, beta blockers, and aldosterone inhibitors. For those with a fulminant presentation, intensive care is often required, with the use of inotropic medications (to increase the force of the heart muscle contraction). Severe cases frequently require ventricular assist devices or extracorporeal oxygenation and may necessitate heart transplantation. There are no FDA-approved therapies for acute myocarditis. Patients hospitalized with acute myocarditis experience an average 7-day length of stay and a 4 - 6% risk of in-hospital mortality, with average hospital charge per stay estimated at US$110,000 in the U.S.

Data from multiple sources, including the 'Global Burden of Disease Study', reports that the number of cases per year of myocarditis range from approximately 10 to 22/100,000 persons (estimated U.S. patient population of 33,000 to 73,000), qualifying the condition as a rare disease in the U.S. and in European Union. Cardiol believes that there is a significant opportunity to develop a therapy for acute myocarditis that may be eligible for designation as an orphan drug under the FDA's Orphan Drug Designation and the European Medicines Agency Orphan Medicine programs.

In August 2021, Cardiol received IND authorization from the FDA to conduct a Phase II clinical trial of CardiolRx in acute myocarditis - the ARCHER trial. ARCHER has also received regulatory clearance in other jurisdictions and is expected to enroll 100 patients at major cardiac centers in North America, Europe, Latin America and Israel. In January 2024, the Corporation announced that the ARCHER trial had exceeded 50% of its patient enrollment objective. ARCHER 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 (global 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.

Members of the Steering Committee include:

- **Chair: Dennis M. McNamara, MD –** Professor of Medicine at the University of Pittsburgh. He is also the Director of the Heart Failure/Transplantation Program at the University of Pittsburgh Medical Center;
- **Co-Chair: Leslie T. Cooper, Jr., MD –** General cardiologist and the Chair of the Mayo Clinic Enterprise Department of Cardiovascular Medicine, as well as chair of the Department of Cardiovascular Medicine at the Mayo Clinic in Florida;
- **Arvind Bhimaraj, MD –** Specialist in Heart Failure and Transplantation Cardiology and Associate Professor of Cardiology, Institute for Academic Medicine at Houston Methodist and at Weill Cornell Medical College, NYC;
- **Wai Hong Wilson Tang, MD –** Advanced Heart Failure and Transplant Cardiology specialist at the Cleveland Clinic in Cleveland, Ohio. Dr. Tang is also the Director of the Cleveland Clinic's Center for Clinical Genomics; Research Director, and staff cardiologist in the Section of Heart Failure and Cardiac Transplantation Medicine in the Sydell and Arnold Miller Family Heart & Vascular Institute at the Cleveland Clinic;

- **Peter Liu, MD –** Chief Scientific Officer and Vice President, Research, of the University of Ottawa Heart Institute, and Professor of Medicine and Physiology at the University of Toronto and University of Ottawa;
- **Carsten Tschöpe, MD –** Professor of Medicine and Cardiology and Vice Director of the Department of Internal Medicine and Cardiology, University Medicine Berlin;
- **Matthias Friedrich, MD –** Full Professor within the Departments of Medicine and Diagnostic Radiology at McGill University in Montreal, and Chief, Cardiovascular Imaging at the McGill University Health Centre;
- **Yaron Arbel, MD –** Cardiologist and Director of the CardioVascular Research Center (CVRC) at the Tel Aviv "Sourasky" Medical Center;
- **Edimar Bocchi, MD –** Serves as the Head of Heart Failure Clinics and Heart Failure Team at Heart Institute (Incor) of Hospital das Clinicas of São Paulo University Medical School, Associate Professor of São University Medical School, São Paulo, Brazil; and
- **Mathieu Kerneis, MD, PhD –** Interventional cardiologist at Pitié Salpêtrière Hospital (Sorbonne University).

It is anticipated that patient recruitment will be completed during Q3 2024. Cardiol has budgeted additional costs to complete this study to be approximately $6 million. If Cardiol determines that the Phase II study meets its objectives, it currently expects to undertake the next steps of its clinical development program, which would consist of a larger clinical study, the details of which will be determined in consultation with its external clinical advisors and regulatory agencies. The total cost and timeline to complete this clinical development program cannot be determined at this stage as this will depend on a variety of factors. The Corporation may involve a commercial partner from the pharmaceutical industry, to fund the late-stage clinical development and commercialization of CardiolRx for the treatment of acute myocarditis.

Scientific Advisory Board

The Corporation has established a Scientific Advisory Board comprised of distinguished thought leaders in cardiovascular medicine. These individuals will lend their expertise in cardiovascular research and provide invaluable guidance to the Corporation's research and clinical programs. The Scientific Advisory Board members include:

Paul M. Ridker, MD, MPH

Dr. Ridker is director of the Center for Cardiovascular Disease Prevention, a translational research unit at Brigham and Women's Hospital (BWH), Boston. A cardiovascular medicine specialist, he is also the Eugene Braunwald Professor of Medicine at Harvard School of Medicine (HMS). Dr. Ridker received his medical degree from HMS and then completed an internal medicine residency and a cardiology fellowship at BWH. Dr. Ridker is board certified in internal medicine. His clinical interests include coronary artery disease and the underlying causes and prevention of atherosclerotic disease. Dr. Ridker is the author of over 900 peer-reviewed publications and reviews, 64 book chapters, and six textbooks related to cardiovascular medicine. His primary research focus has involved inflammatory mediators of heart disease and the molecular and genetic epidemiology of hemostasis and thrombosis, with particular interests in biomarkers for coronary disease, "predictive" medicine, and the underlying causes and prevention of atherosclerotic disease. Notably, Dr. Ridker has been the Principal Investigator or Study Chair of several large international trials that have demonstrated the role of inflammation in the genesis and management of coronary artery disease. He was included in TIME magazine's list of 100 most influential people of 2004, and between the years 2000 and 2010, Dr. Ridker was among the ten most often cited researchers in cardiovascular medicine worldwide. Amongst many other honors, he received the American Heart Association Distinguished Scientist Award in 2013, gave the Braunwald Lecture of the American College of Cardiology in 2019, was awarded the Gotto Prize for Atherosclerosis Research from the International Atherosclerosis Society in 2021, and is an elected Member of the National Academy of Medicine (USA).

Bruce McManus, PhD, MD

Dr. McManus is Professor Emeritus, Department of Pathology and Laboratory Medicine, the University of British Columbia. He has served as CEO, Centre of Excellence for Prevention of Organ Failure (PROOF Centre), Director, UBC Centre for Heart Lung Innovation, and Scientific Director, Institute of Circulatory and Respiratory Health, CIHR. Dr. McManus received BA and MD degrees (University of Saskatchewan), an MSc (Pennsylvania State University), and a PhD (University of Toledo). He pursued post-doctoral fellowships at the University of California, Santa Barbara (Environmental Physiology) and at the National Heart, Lung, and Blood Institute, Bethesda, MD (Cardiovascular & Pulmonary Pathology), and residency training at the Peter Bent Brigham Hospital, Harvard University (Internal Medicine and Pathology). Dr. McManus' investigative passion relates to mechanisms, consequences, detection and prevention of injury and aberrant repair in inflammatory diseases of the heart and blood vessels. He has had a longstanding interest

in the diagnosis and management of acute viral myocarditis. His life's scholarship is reflected in more than 400 original peer-reviewed publications, over 60 chapters, and several books. He is an extraordinary mentor. Dr. McManus has been widely appreciated for his research, mentoring, and leadership contributions to the health sciences. Amongst many awards and honors, Dr. McManus received the prestigious Max Planck Research Award in 1991, was elected a Fellow of the Royal Society of Canada in 2002, was appointed a Member of the Order of Canada in 2018, and to the Order of British Columbia the following year.

Joseph A. Hill, MD, PhD

Dr. Hill is Professor of Internal Medicine and Molecular Biology, Chief of Cardiology at UT Southwestern Medical Center, Dallas, TX, and Director of the Harry S. Moss Heart Center. Dr. Hill holds both the James T. Willerson, MD, Distinguished Chair in Cardiovascular Diseases, and the Frank M. Ryburn Jr. Chair in Heart Research. He graduated from Duke University with MD and PhD degrees in 1987. His PhD dissertation research was in the field of cardiac ion channel biophysics. Dr. Hill then worked for five years as a postdoctoral fellow at the Institut Pasteur in Paris studying central and peripheral nicotinic receptors. He next completed an internal medicine internship and residency, as well as a clinical cardiology fellowship, at the Brigham and Women's Hospital, Harvard Medical School. He served on faculty at the University of Iowa for five years before moving in 2002 to the UT Southwestern. Dr. Hill's research examines molecular mechanisms of structural, functional, metabolic, and electrophysiological remodeling in cardiac hypertrophy and heart failure. He has served on many NIH panels and committees and delivered numerous invited lectures in the U.S. and around the world. Dr. Hill has received many recognitions and awards, including election to the Association of American Professors and the 2018 Research Achievement Award from the International Society for Heart Research. For the past seven years, Dr. Hill has been the Editor-in-Chief of the prestigious American Heart Association journal *Circulation*.

Outlook

During the next 12 months, the Corporation expects to achieve the following corporate milestones:

- Complete Phase II MAvERIC-Pilot study in recurrent pericarditis with CardiolRx, including reporting topline primary endpoint data in Q2 2024 and trial extension data during H2 2024;
- Complete Phase II *ARCHER* trial in acute myocarditis with CardiolRx, including reporting topline data in Q1, 2025;
- Advance the development of CRD-38 into a clinical program;

The Corporation expects that the December 31, 2023, working capital of $27,857,623 will be sufficient to fund operations and capital requirements, associated with achieving these corporate milestones, into 2026.

Use of Offering Proceeds

The Corporation may reallocate the net offering proceeds that it obtained from the November 2021 Offering (as defined below) from time to time depending upon our growth strategy relative to market and other conditions in effect at the time. Until we expend the net offering proceeds, we will hold them in cash and/or invest them in short-term, interest- bearing, and investment-grade securities.

A comparison between the projected use of proceeds for the two-year period subsequent to closing the November 2021 Offering, as disclosed in the Corporation's prospectus dated November 3, 2021 (the "November 2021 Offering"), and spending from November 5, 2021 (offering closing date) to December 31, 2023 is as follows (figures in the below "Amount" column are translated to CAD from USD at a rate of 1.34):

Use of Proceeds	Amount	Spent	Remaining
LANCER Study	5,298,680	5,298,680	—
Phase II Clinical Trials in Acute Myocarditis	4,238,944	3,873,210	365,734
Subcutaneous Development	3,179,208	700,846	2,478,362
Development of Additional Orphan Program	4,238,944	3,464,156	774,788
Discovery Research	10,597,360	1,336,005	9,261,355

Selected Annual Financial Information

	Year ended December 31, 2023	Year ended December 31, 2022	Year ended December 31, 2021
Revenue	$ —	$ —	$ 78,760
Net loss	$ (28,128,292)	$ (30,930,647)	$ (31,638,244)
Net loss per share (basic and fully diluted)	$ (0.44)	$ (0.49)	$ (0.73)

As at December 31, 2023	2023	2022	2021
Total assets	$ 36,700,508	$ 62,028,518	$ 87,876,128
Total long-term financial liabilities	$ 158,532	$ 22,424	$ 72,871

Summary of Quarterly Results

The Corporation's quarterly information in the table below is prepared in accordance with IFRS.

Three Months Ended	Total Revenue ($)	Profit or (Loss) Per Share[9] Total ($)	Profit or (Loss) Per Share[9] ($)	Total Assets ($)
December 31, 2023[1]	nil	(7,637,017)	(0.12)	36,700,508
September 30, 2023[2]	nil	(5,930,185)	(0.11)	43,053,024
June 30, 2023[3]	nil	(7,471,754)	(0.12)	47,169,272
March 31, 2023[4]	nil	(7,089,336)	(0.11)	52,685,268
December 31, 2022[5]	nil	(7,515,018)	(0.12)	62,028,518
September 30, 2022[6]	nil	(7,972,047)	(0.13)	68,358,729
June 30, 2022[7]	nil	(6,489,488)	(0.10)	74,264,968
March 31, 2022[8]	nil	(8,954,095)	(0.14)	79,432,326

Note:

1. Net loss of $7,637,017 included general and administration of $3,988,373, research and development of $4,040,455, and a loss on foreign exchange of $628,148. This is partially offset by interest income of $448,303, and a change in derivative liability of $571,656.

2. Net loss of $5,930,185 included general and administration of $5,079,140, and research and development of $2,576,751. This is partially offset by a gain on foreign exchange of $667,548, interest income of $515,538, a change in derivative liability of $392,881, and other income of $149,739.

3. Net loss of $7,471,754 included research and development of $3,479,385, general and administration of $2,835,264, change in derivative liability of $856,893, and loss on foreign exchange of $828,909. This is partially offset by interest income of $528,697.

4. Net loss of $7,089,336 included research and development of $4,127,696, and general and administration of $3,658,440. This is partially offset by interest income of $545,927.

5. Net loss of $7,515,018 included research and development of $5,617,948, general and administration of $3,477,065, and a loss on foreign exchange of $528,314. These are partially offset by a change in derivative liability of $1,523,662 and interest income of $584,647.

6. Net loss of $7,972,047 included general and administration of $8,130,743, and research and development of $5,089,423. These are partially offset by the gain on foreign exchange of $2,970,896, and change in derivative liability of $1,723,442.

7. Net loss of $6,489,488 included general and administration of $4,825,039, and research and development of $4,407,182. These are partially offset by the gain on foreign exchange of $1,689,797, and change in derivative liability of $861,600.

8. Net loss of $8,954,095 included general and administration of $5,940,952, research and development of $3,847,527, and a loss on foreign exchange of $1,370,444. These are partially offset by the gain on the change in derivative liability of $2,132,517.

9. Basic and fully diluted.

Discussion of Operations

Year ended December 31, 2023, compared to the year ended December 31, 2022

For the year ended December 31, 2023, the Corporation's net loss was $28,128,292, compared to a net loss of $30,930,647 for the year ended December 31, 2022. The decrease in net loss of $2,802,355 is a result of the following:

- Research and development decreased to $14,224,287 for the year ended December 31, 2023, compared to $18,962,080 for the year ended December 31, 2022. During the year ended December 31, 2023, the Corporation incurred research and development costs related to basic science, pre-clinical studies, and clinical studies, specifically relating to the Phase II acute myocarditis trial and Phase II Open-Label Pilot Study of recurrent pericarditis. During the year ended December 31, 2022, the Corporation also incurred costs related to an additional Phase II/III trial, which was discontinued in 2022.

- General and administration expenses decreased to $15,561,217 for the year ended December 31, 2023, compared to $22,373,798 for the year ended December 31, 2022. The decrease was a result of a reduction in corporate communications spending and share-based compensation, as well as a general re-allocation of resources to focus on research and development activities.
- The net loss for the year ended December 31, 2023, is partially offset by the gain on the change in derivative liability, based on the revaluation as at December 31, 2023, of $181,725, compared to the gain on the change in derivative liability for the year ended December 31, 2022 of $6,241,221.
- The net loss included a loss on foreign exchange during the year ended December 31, 2023 of $712,717, compared to a gain on foreign exchange during the year ended December 31, 2022 of $2,761,935. This is mainly the result of the revaluation of funds held in USD.
- The net loss is partially offset by interest income during the year ended December 31, 2023 of $2,038,465, compared to interest income during the year ended December 31, 2022 of $1,237,632. The increase is the result of an increase in interest rates.

Year ended December 31, 2022, compared to the year ended December 31, 2021

For the year ended December 31, 2022, the Corporation's net loss was $30,930,647, compared to a net loss of $31,638,244 for the year ended December 31, 2021. The decrease in net loss of $707,597 is a result of the following:

- General and administration expenses decreased to $22,373,798 for the year ended December 31, 2022, compared to $27,873,140 for the year ended December 31, 2021. The decrease was a result of a reduction in corporate communications spending and share-based compensation, as well as a general re-allocation of resources to focus on research and development activities.
- Research and development increased to $18,962,080 for the year ended December 31, 2022, compared to $10,870,421 for the year ended December 31, 2021. During the year ended December 31, 2022, the Corporation incurred increased research and development costs related to basic science, pre-clinical studies, and clinical studies, specifically relating to the discontinued Phase II/III trial, Phase II acute myocarditis trial, and Phase II Open- Label Pilot Study of recurrent pericarditis.
- The net loss is partially offset by the gain on the change in derivative liability, based on the revaluation as at December 31, 2022 of $6,241,221, compared to the gain on the change in derivative liability on December 31, 2021 of $4,916,304.

- The net loss is partially offset by a gain on foreign exchange during the year ended December 31, 2022 of $2,761,935, compared to a gain on foreign exchange during the year ended December 31, 2021 of $1,892,023. The increase is mainly based on the revaluation of funds held in USD.

Three months ended December 31, 2023, compared to the three months ended December 31, 2022

For the three months ended December 31, 2023, the Corporation's net loss was $7,637,017, compared to a net loss of $7,515,018 for the three months ended December 31, 2022. The increase in net loss of $121,999 is a result of the following:

- Research and development decreased to $4,040,455 for the three months ended December 31, 2023, compared to $5,617,948 for the three months ended December 31, 2022. During the three months ended December 31, 2023, the Corporation incurred research and development costs related to basic science, pre-clinical studies, and clinical studies, specifically relating to the Phase II acute myocarditis trial and Phase II Open-Label Pilot Study of recurrent pericarditis. During the three months ended December 31, 2022, the Corporation also incurred costs related to an additional Phase II/III trial, which was discontinued in 2022.

- General and administration expense increased to $3,988,373 for the three months ended December 31, 2023, compared to $3,477,065 for the three months ended December 31, 2022. The increase was a result of an increase in corporate communications spending and share-based compensation.
- The net loss for the three months ended December 31, 2023, is partially offset by the gain on the change in derivative liability, based on the revaluation as at December 31, 2023, of $571,656, compared to the gain on the change in derivative liability for the three months ended December 31, 2022 of $1,523,662.
- The net loss included a loss on foreign exchange during the three months ended December 31, 2023 of $628,148. compared to a loss on foreign exchange during the three months ended December 31, 2022 of $528,314. This is mainly the result of the revaluation of funds held in USD.

Capital Management

The Corporation manages its capital to ensure sufficient financial flexibility to achieve the ongoing business objectives including research activities, funding of future growth opportunities, and pursuit of acquisitions.

The Corporation monitors its capital structure and makes adjustments according to market conditions in an effort to meet its objectives given the current outlook of the business and industry in general. The Corporation may manage its capital structure by issuing new shares, repurchasing outstanding shares, adjusting capital spending, or disposing of assets. The capital structure is reviewed by Management and the Board of Directors on an ongoing basis.

The Corporation considers its capital to be total equity, comprising share capital, warrants, and contributed surplus, less accumulated deficit, which at December 31, 2023 totaled $28,246,507 (December 31, 2022 – $52,201,588).

The Corporation manages capital through its financial and operational forecasting processes. The Corporation reviews its working capital and forecasts its future cash flows based on operating expenditures, and other investing and financing activities. The forecast is updated based on activities related to its research programs and reviewed with the Board of Directors of the Corporation.

The Corporation is not currently subject to any capital requirements imposed by a lending institution or regulatory body. The Corporation expects that its capital resources will be sufficient to discharge its liabilities as of the current statement of financial position date.

Off-Balance Sheet Arrangements

As of the date of this MD&A, the Corporation does not have any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on the results of operations or financial condition of the Corporation, including, and without limitation, such considerations as liquidity and capital resources.

Liquidity and Capital Resources

At December 31, 2023, Cardiol had $34,931,778 in cash and cash equivalents (December 31, 2022 – $59,469,868).

At December 31, 2023, accounts payable and accrued liabilities were $8,041,485 (December 31, 2022 – $9,334,158). The Corporation's cash and cash equivalents balances as at December 31, 2023 and December 31, 2022 are sufficient to pay these liabilities.

The Corporation currently has no operating revenues and therefore must utilize its funds from financing transactions to maintain its capacity to meet ongoing operating activities. Future financing may come from product sales, licensing arrangements, research and commercial development partnerships, government grants, and/or corporate finance arrangements.

We expect to continue to incur substantial losses as we continue our research and development efforts. We continue to manage our research and development plan to ensure optimal use of our existing resources as we expect to fund our operations and capital requirements, associated with achieving our corporate milestones, with existing working capital (See "Outlook"). We expect to continue to incur additional costs associated with operating as a public company. Factors that may affect our anticipated cash usage, but are not limited to, expansion of our clinical trial programs, the timing of patient enrollment in our clinical trials, the actual costs incurred to support each clinical trial, the number of treatments each patient will receive, the timing of research and development activity with our clinical trial research collaborations, and other factors described in the "Risk Factors" section.

As of December 31, 2023, December 31, 2022, and to the date of this MD&A, the cash resources of Cardiol are held with one Canadian chartered bank. The Corporation has no variable interest rate debt and its credit and interest rate risk are minimal. Accounts payable and accrued liabilities are short-term and non-interest bearing.

For the 2023 Fiscal Period

Cash and cash equivalents used in operating activities were $25,180,441 for the year ended December 31, 2023. Operating activities were affected by a net loss of $28,128,292 and the net change in non-cash working capital balances of $(545,877), and partially offset by other non-cash adjustments of $3,493,728. Non-cash adjustments mainly consisted of $4,156,762 for share-based compensation and $(762,039) for unrealized foreign exchange gain on cash. Non-cash working capital was mainly the result of a decrease in accounts payable and accrued liabilities of $1,292,673, partially offset by a decrease in prepaid expenses of $546,471.

Cash and cash equivalents used in investing activities were $64,312 for the year ended December 31, 2023 as a result of the purchase of property and equipment.

Cash and cash equivalents used in financing activities were $55,376 for the year ended December 31, 2023, as a result of the payment of lease liability.

Use of Working Capital

As of December 31, 2023, Cardiol's working capital was $27,857,623. Based on current projections, Cardiol believes that this amount is sufficient to fund operations and capital requirements, associated with achieving corporate milestones, into 2026, as described in the "Outlook" section above.

The Corporation has material commitments and obligations for cash resources set out below. The Corporation has no commitments for capital expenditures.

Contractual Obligations	Total ($)	Up to 1 year ($)	1 – 3 years ($)	4 – 5 years ($)	After 5 years ($)
Amounts payable and other liabilities	8,041,485	8,041,485	Nil	Nil	Nil
Office lease (1)	491,433	80,416	214,444	196,573	Nil
Consulting agreements	494,503	494,503	Nil	Nil	Nil
Contract research	441,032	441,032	Nil	Nil	Nil
Total	**9,468,453**	**9,057,436**	**214,444**	**196,573**	**—**

Note:
(1) The Corporation has leased premises from third parties.

Related Party Transactions

a) The Corporation entered into the following transactions with related parties:

i. Included in research and development expense is $1,233,301 for the year ended December 31, 2023 (year ended December 31, 2022 - $2,182,869) paid to a company, Dalton Chemical Laboratories, Inc. operating as Dalton ("Dalton"), that was related to a Director (Peter Pekos). Mr. Pekos was the CEO of Dalton. As at December 31, 2023, $416,792 (December 31, 2022 - $985,022) was owed to this company and this amount was included in accounts payable and accrued liabilities and $nil (December 31, 2022 - $9,413) was paid to this company and was included in prepaid expenses. Cardiol entered into an exclusive master services agreement with Dalton for the manufacturing of its pharmaceutical cannabidiol.

b) Key Management personnel are those persons having authority and responsibility for planning, directing, and controlling the activities of the Corporation directly or indirectly, including any Directors (executive and non- executive) of the Corporation. Remuneration of Directors and key Management personnel, except as noted in (a) above, was as follows:

		Year ended December 31, 2023 ($)	Year ended December 31, 2022 ($)	Year ended December 31, 2021 ($)
Salaries and benefits		2,779,707	2,459,109	2,503,893
Share-based payments	$	985,174	2,680,442	1,188,462
	$	**3,764,881**	**5,139,551**	**3,692,355**

As at December 31, 2023, $nil (December 31, 2022 - $nil) was owed to key Management personnel and this amount was included in accounts payable and accrued liabilities.

Critical Accounting Judgments, Estimates, and Assumptions

The preparation of the Financial Statements requires Management to make certain estimates, judgments, and assumptions that affect the reported amounts of assets and liabilities at the date of the Financial Statements and reported amounts of expenses during the reporting period. Actual outcomes could differ from these estimates. The Financial Statements include estimates that, by their nature, are uncertain. The impacts of such estimates are pervasive throughout the Financial Statements and may require accounting adjustments based on future occurrences. Revisions to accounting estimates are recognized in the period in which the estimate is revised and future periods if the revision affects both current and future periods. These estimates are based on historical experience, current and future economic conditions, and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Critical accounting estimates

Significant assumptions about the future that Management has made that could result in a material adjustment to the carrying amounts of assets and liabilities, in the event that actual results differ from assumptions made, relate to, but are not limited to, the following:

- The inputs used in the Black-Scholes valuation model that were based on unobservable assumptions when the Corporation was private at the time of issuance of the equity instruments (share price and volatility) in accounting for share-based payment transactions;
- The valuation of performance share units;
- The valuation of the derivative liability;
- The estimate of the percentage of completion of certain research and development agreements;
- The valuation of the income tax non-current asset would increase if there was virtual certainty that the tax benefit of net operating losses could be applied to future periods' taxable income; and
- Intangible assets are comprised of the exclusive global license. Intangible assets are initially stated at cost, less accumulated amortization and accumulated impairment losses. Intangible assets with finite useful lives are amortized over their estimated useful lives. The exclusive global license's useful life is nine years.

Critical accounting judgments

- Management applied judgment in determining the functional currency of the Corporation as Canadian dollars;
- Management applied judgment in determining whether performance conditions on share-based awards were market or non-market, and whether the fair value of the goods or services provided by certain non-employees could be reliably measured;
- Management applied judgment in determining the Corporation's ability to continue as a going concern. The Corporation has incurred significant losses since its inception. Management determined that a material going concern uncertainty does not exist due

to the sufficient working capital to support their planned expenditure levels. Future financing may come from product sales, licensing arrangements, research and commercial development partnerships, government grants, and/or corporate finance arrangements; and

- Management's assessment that no impairment exists for intangible assets, based on the facts and circumstances that existed during the period.

Change in accounting policies

(i) Amendment IAS 8 - Definition of accounting estimates

The Corporation adopted this amendment on January 1, 2023. The amendment introduces a definition of accounting estimates, clarifying the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. The amendment is effective for annual periods beginning on or after January 1, 2023. The adoption of this amendment had no impact on the consolidated financial statements of the Corporation.

(ii) Amendments to IAS 1 - Presentation of financial statements

The Corporation adopted these amendments on January 1, 2023. The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their significant accounting policies with a requirement to disclose their material accounting policies. The amendments provide guidance on how entities may apply the concept of materiality in making decisions about accounting policy disclosures. The adoption of these amendments had no significant impact on the consolidated financial statements of the Corporation.

Share Capital

Other than as described below, as of the date of this MD&A, there are no equity or voting securities of the Corporation outstanding, and no securities convertible into, or exercisable or exchangeable for, voting or equity securities of the Corporation.

As of the date of this MD&A, the outstanding capital of the Corporation includes 68,268,708 issued and outstanding common shares; 1,020,000 Meros Special Warrants convertible automatically into common shares (upon the Corporation achieving the Meros Milestone) for no additional consideration pursuant to the Meros License Agreement; 400,000 common shares issuable to Dalton if Dalton meets certain performance objectives, and stock options, warrants, performance share units, and restricted share units as shown below:

Stock Options

Expiry date	Exercise price ($)	Options outstanding	Options exercisable
February 23, 2025	3.54	20,000	20,000
April 10, 2025	0.75	25,000	—
August 19, 2025	2.12	100,000	100,000
August 30, 2025	5.00	80,000	80,000
April 1, 2026	5.77	60,000	60,000
September 10, 2026	1.32(1)	75,000	25,000
November 29, 2026	2.38	250,000	—
December 8, 2026	3.59	325,000	216,667
January 11, 2027	2.18	220,000	146,667
March 1, 2027	2.56	425,000	—
March 14, 2027	2.07	60,000	40,000
May 12, 2027	1.46	70,000	23,334
September 12, 2027	1.61	207,500	69,168
October 23, 2028	1.20	30,000	—
January 29, 2029	2.56	30,000	—
Total		**1,977,500**	**780,836**

(1) Exercise price denoted in USD.

Warrants

Expiry date	Exercise price ($)	Warrants outstanding
May 12, 2024	4.60	3,453,178
November 5, 2024	4.97 (1)	8,175,000
Total		**11,628,178**

(1) Exercise price denoted in USD.

Performance Share Units

The Corporation has 700,000 outstanding performance share units ("PSUs") subject to vesting conditions specific to each grant.

Restricted Share Units

The Corporation has 2,028,458 outstanding restricted share units ("RSUs") subject to vesting conditions specific to each grant. Of the outstanding RSUs, 1,566,546 have fully vested as of the date of this MD&A.

Financial Instruments Recognition

The Corporation recognizes a financial asset or financial liability on the statement of financial position when it becomes party to the contractual provisions of the financial instrument. Financial assets are initially measured at fair value and are derecognized either when the Corporation has transferred substantially all the risks and rewards of ownership of the financial asset, or when cash flows expire. Financial liabilities are initially measured at fair value and are derecognized when the obligation specified in the contract is discharged, cancelled, or has expired.

A write-off of a financial asset (or a portion thereof) constitutes a derecognition event. A write-off occurs when the Corporation has no reasonable expectations of recovering the contractual cash flows on a financial asset.

Classification and Measurement

The Corporation determines the classification of its financial instruments at initial recognition. Financial assets and financial liabilities are classified according to the following measurement categories:

- those to be measured subsequently at fair value, either through profit or loss ("FVTPL") or through other comprehensive income ("FVTOCI"); and,
- those to be measured subsequently at amortized cost.

The classification and measurement of financial assets after initial recognition at fair value depends on the business model for managing the financial asset and the contractual terms of the cash flows. Financial assets that are held within a business model whose objective is to collect the contractual cash flows, and that have contractual cash flows that are solely payments of principal and interest on the principal outstanding, are generally measured at amortized cost at each subsequent reporting period. All other financial assets are measured at their fair values at each subsequent reporting period, with any changes recorded through profit or loss or through other comprehensive income (which designation is made as an irrevocable election at the time of recognition).

After initial recognition at fair value, financial liabilities are classified and measured at either:

- amortized cost;
- FVTPL, if the Corporation has made an irrevocable election at the time of recognition, or when required (for items such as instruments held for trading or derivatives); or,
- FVTOCI, when the change in fair value is attributable to changes in the Corporation's credit risk.

The Corporation reclassifies financial assets when and only when its business model for managing those assets changes. Financial liabilities are not reclassified.

Transaction costs that are directly attributable to the acquisition or issuance of a financial asset or financial liability classified as subsequently measured at amortized cost are included in the fair value of the instrument on initial recognition. Transaction costs for financial assets and financial liabilities classified at fair value through profit or loss are expensed in profit or loss.

The Corporation's financial assets consist of cash and cash equivalents and accounts receivable, which are classified and measured at amortized cost. The Corporation's financial liabilities consist of accounts payable and accrued liabilities, and lease liability, which are classified and measured at amortized cost, and derivative liabilities which are classified and measured at FVTPL.

Fair Value

The Corporation provides information about its financial instruments measured at fair value at one of three levels according to the relative reliability of the inputs used to estimate the fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The three levels of the fair value hierarchy are as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than quotes prices included in Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices); and
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The Corporation's derivative liabilities are measured at fair value Level 3. No other financial instruments are measured at fair value.

Financial Instrument Risks

The Corporation's activities expose it to a variety of financial risks: credit risk, liquidity risk, and market risk (including interest rate and foreign currency risk). These financial risks are in addition to the risks set out under "Risk Factors".

Risk management is carried out by the Corporation's Management team under policies approved by the Board of Directors. The Board of Directors also provides regular guidance for overall risk management.

There were no changes to credit risk, liquidity risk, or market risk for the 2023 Fiscal Period.

Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The Corporation's financial instruments that are exposed to concentrations of credit risk relate primarily to cash and cash equivalents and accounts receivable.

The Corporation mitigates its risk by maintaining its funds with large reputable financial institutions, from which Management believes the risk of loss to be minimal. Interest receivable relates to guaranteed investment certificates and cash balances held with large reputable financial institutions as well as receivables. The Corporation's Management considers that all the above financial assets are of good credit quality.

Liquidity risk

Liquidity risk is the risk that the Corporation encounters difficulty in meeting its obligations associated with financial liabilities. Liquidity risk includes the risk that, as a result of operational liquidity requirements, the Corporation will not have sufficient funds to settle a transaction on the due date; will be forced to sell financial assets at a value which is less than what they are worth; or may be unable to settle or recover a financial asset. Liquidity risk arises from accounts payable and accrued liabilities and commitments. The Corporation limits its exposure to this risk by closely monitoring its cash flow.

Market risk

Market risk is the risk of loss that may arise from changes in market factors, such as interest rates and foreign exchange rates.

(a) Interest rate risk

The Corporation currently does not have any short-term or long-term debt that is variable interest bearing and, as such, the Corporation's current exposure to interest rate risk is minimal.

(b) Foreign currency risk

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in the foreign exchange rates. The Corporation enters into foreign currency purchase transactions and has assets that are denominated in foreign currencies and thus is exposed to the financial risk of earnings fluctuations arising from changes in foreign exchange rates and the degree of volatility of these rates. The Corporation does not currently use derivative instruments to reduce its exposure to foreign currency risk.

The Corporation holds balances in U.S. dollars which could give rise to exposure to foreign exchange risk. Sensitivity to a plus or minus 10% change in the foreign exchange rate of the U.S. dollar against the Canadian dollar would affect the reported loss and comprehensive loss by approximately $2,770,000 (December 31, 2022 - $4,414,000, December 31, 2021 - $5,875,000).

Commitments and Contingency

(i) The Corporation has leased premises from third parties. The minimum committed lease payments as at December 31, 2023, which include the lease liability payments, are as follows:

Fiscal year	
2024	80,416
2025	107,222
2026	107,222
2027	107,222
2028	89,351
Total	**$ 491,433**

(ii) The Corporation has signed various agreements with consultants to provide services. Under the agreements, the Corporation has the following remaining commitments.

Fiscal year	
2024	**$ 494,503**

(iii) Pursuant to the terms of agreements with various other contract research organizations, the Corporation is committed for contract research services for 2024 at a cost of approximately $441,032.

Breakdown of Expensed Research and Development

	Year ended December 31, 2023 ($)	Year ended December 31, 2022 ($)	Year ended December 31, 2021 ($)
Contract research	11,066,232	16,641,242	8,968,230
Wages	1,689,123	1,159,733	714,351
Supplies	534,552	26,662	110,304
Regulatory	584,530	502,954	478,391
Share-based compensation	349,850	631,489	599,145
	14,224,287	18,962,080	10,870,421

Breakdown of Intangible Assets

	As at December 31, 2023 ($)	As at December 31, 2022 ($)
Exclusive global license agreement	767,228	767,228
Accumulated amortization	(556,870)	(472,426)
Carrying value	**210,358**	**294,802**

Internal Controls Over Financial Reporting

In accordance with National Instrument 52-109 – Certification of Disclosure in Issuers' Annual and Interim Filings, Management is responsible for establishing and maintaining adequate Disclosure Controls and Procedures ("DCP") and Internal Control Over Financial Reporting ("ICFR"). Management has designed DCP and ICFR based on the 2013 Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), with the objective of providing reasonable assurance that the Corporation's financial reports and information, including the Corporation's Financial Statements and MD&A were prepared in accordance with IFRS. The CEO and CFO have concluded that the DCP and ICFR were adequately designed and operating effectively to provide such assurance as at December 31, 2023. Additionally, based on its assessment, Management determined that there were no material weaknesses in the Corporation's ICFR as at December 31, 2023. The material weakness that was most recently disclosed as of September 30, 2023 has been remediated and is discussed further below.

During fiscal 2023, the Corporation determined a material weakness existed in the Corporation's ICFR with respect to certain share-based compensation paid to consultants. As a result, the Corporation has implemented certain additional controls related to accounting for complex transactions and has determined that the weakness has been remediated. When applicable, the Corporation will engage external advisors with appropriate technical accounting knowledge and experience in the application of IFRS to assist with the evaluation and documentation of accounting for complex transactions.

Limitations of Controls and Procedures

The Corporation's Management, including the CEO and CFO, believes that any DCP or ICFR, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, within the Corporation have been prevented or detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of the control. The design of any control system is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Accordingly, because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Except as otherwise described above, there have been no changes in internal controls over financial reporting for the quarter and year ended December 31, 2023, that have materially affected, or are reasonably likely to materially affect, the Corporation's ICFR.

The Corporation's prospects depend on the success of our subcutaneous product candidate which is in early stages of development, and the success of our Phase II trial in acute myocarditis and Phase II open-label pilot study in recurrent pericarditis. We do not expect to generate revenue for several years, if at all, from the acute myocarditis, recurrent pericarditis and subcutaneous product candidates.

Given the early stage of development of our subcutaneous product candidate, and the uncertainty inherent in clinical trials, we can make no assurance that our research and development programs will result in regulatory approval or commercially viable products. To achieve profitable operations, we, alone or with others, must successfully develop, gain regulatory approval, and market our product candidates, if approved. We currently have no products that have been approved by the FDA, Health Canada, or any similar regulatory authority. To obtain regulatory approvals for our product candidates being developed and to achieve commercial success, if approved, clinical trials must demonstrate that the product candidates are safe for human use and that they demonstrate efficacy, as determined by the appropriate regulatory agency.

Many product candidates never reach the stage of clinical testing and even those that do have only a small chance of successfully completing clinical development and gaining regulatory approval. Product candidates may fail for a number of reasons, including, but not limited to, being unsafe for human use or due to the failure to provide therapeutic benefits equal to or better than the standard of treatment at the time of testing. Positive results of early pre-clinical research may not be indicative of the results that will be obtained in later stages of pre-clinical or clinical research. Interim results of a clinical trial do not necessarily predict final results. Similarly, positive results from early-stage clinical trials may not be indicative of favorable outcomes in later-stage clinical trials. We can make no assurance that any future studies, if undertaken, will yield favorable results. The early stage of our subcutaneous product development makes it particularly uncertain whether any of these product development efforts will prove to be successful and meet applicable regulatory requirements, and whether any of our product candidates will receive the requisite regulatory approvals, be capable of being manufactured at a reasonable cost, or be successfully marketed, if approved. If we are successful in developing our current and future product candidates into approved products, we will still experience many potential obstacles such as the need to develop or obtain manufacturing, marketing, and distribution capabilities. If we are unable to successfully commercialize any of our product candidates, our financial condition and results of operations may be materially and adversely affected.

The continued development of the Corporation will require additional financing. If we fail to raise such capital, it could result in the delay or indefinite postponement of our current business strategy, or we could cease to carry on business.

There is no guarantee that the Corporation will be able to execute on its strategy. The continued development of the Corporation will require additional financing. The failure to raise needed capital could result in the delay or indefinite postponement of current business strategy or the Corporation ceasing to carry on business. There can be no assurance that additional capital or other types of financing will be available if needed or that, if available, the terms of such financing will be favourable to the Corporation. If additional funds are raised through issuances of equity or convertible debt securities, existing shareholders could suffer significant dilution, and any new equity securities issued could have rights, preferences, and privileges superior to those of holders of common shares. In addition, from time to time, the Corporation may enter into transactions to acquire assets or the shares of other companies. These transactions may be financed wholly or partially with debt, which may temporarily increase the Corporation's debt levels above industry standards. Any debt financing secured in the future could involve restrictive covenants relating to capital raising activities and other financial and operational matters, which may make it more difficult for the Corporation to obtain additional capital and to pursue business opportunities, including potential acquisitions. Debt financings may contain provisions, which, if breached, may entitle lenders to accelerate repayment of loans and there is no assurance that the Corporation would be able to repay such loans in such an event or prevent the enforcement of security granted pursuant to such debt financing. The Corporation may require additional financing to fund its operations to the point where it is generating positive cash flows. Negative cash flow may restrict the Corporation's ability to pursue its business objectives.

In the event of bankruptcy, liquidation, or reorganization of Cardiol, holders of its debt and its trade creditors will generally be entitled to payment of their claims from the assets of Cardiol before any assets are made available for distribution to Cardiol or its shareholders. The common shares are effectively subordinated to the debt and other obligations of Cardiol.

We intend to expend our limited resources to pursue our current product candidates, and may fail to capitalize on other product candidates that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we are focusing on research programs relating to our current product candidates, which concentrates the risk of product failure in the event that our current product candidates prove to be unsafe or ineffective or inadequate for clinical development or commercialization. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on proprietary research and development programs relating to our current product candidates may not yield any commercially viable products.

We have a history of operating losses and may never achieve or maintain profitability in the future.

It is possible that we will never have sufficient product sales revenue to achieve profitability. We expect to continue to incur losses for at least the next several years as we or our collaborators and licensees pursue clinical trials and research and development efforts. To become profitable, we, either alone or with our collaborators and licensees, must successfully market our pharmaceutical cannabidiol and develop, manufacture, and market our current product candidates, as well as continue to identify, develop, manufacture, and market new product candidates. It is possible that we will never have significant product sales revenue or receive royalties on our licensed product candidates. If funding is insufficient at any time in the future, we may not be able to develop or commercialize our products, take advantage of business opportunities, or respond to competitive pressures.

We currently do not earn any revenues from our product candidates and are therefore considered to be in the development stage. The continuation of our research and development activities and the commercialization of the targeted therapeutic products are dependent upon our ability to successfully finance and complete our research and development programs through a combination of equity financing and payments from strategic partners. We have no current sources of significant payments from strategic partners.

We rely on Management and need additional key personnel to grow our business, and the loss of key employees or inability to hire key personnel could harm our business.

The loss of David Elsley, our President and CEO, or other key members of our staff, could harm us. We also depend on our scientific and clinical collaborators and advisors, all of whom have outside commitments that may limit their availability to us. In addition, we believe that our future success will depend in large part upon our ability to attract and retain highly skilled scientific, managerial, medical, clinical, and regulatory personnel, particularly as we expand our activities and seek regulatory approvals for clinical trials. We routinely enter into consulting agreements with our scientific and clinical collaborators and advisors, key opinion leaders, and academic partners in the ordinary course of our business. We also enter into contractual agreements with physicians and institutions who will recruit patients into our clinical trials on our behalf in the ordinary course of our business. Notwithstanding these arrangements, we face significant competition for these types of personnel from other companies, research and academic institutions, government entities, and other organizations. We cannot predict our success in hiring or retaining the personnel we require for continued growth. The loss of the services of any of our executive officers or other key personnel could potentially harm our business operating results, or financial condition.

Clinical trials for our product candidates are expensive, time consuming, uncertain, and susceptible to change, delay, or termination.

Clinical trials are expensive, time consuming, and difficult to design and implement. Even if the results of our clinical trials are favorable, the clinical trials for a number of our product candidates are expected to continue for several years and may take significantly longer to complete. In addition, we, the FDA, Health Canada or other regulatory authorities, including state and local authorities may suspend, delay, or terminate our clinical trials at any time, require us to conduct additional clinical trials, require a particular clinical trial to continue for a longer duration than originally planned, or require a change to our development plans such that we conduct clinical trials for a product candidate in a different order, e.g., in a step-wise fashion rather than running two trials of the same product candidate in parallel. Any of the foregoing could have a material adverse effect on our business, results of operations, and financial condition.

If clinical trials of our product candidates fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, we would incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct pre-clinical studies in animals and extensive clinical trials in humans to demonstrate the safety and efficacy of the product candidates. Clinical testing is expensive and difficult to design and implement, can take many years to complete, and has uncertain outcomes. The outcome of pre-clinical studies and early clinical trials may not predict the success of later clinical trials and interim results of a clinical trial do not necessarily predict final results.

A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety profiles, notwithstanding promising results in earlier trials. We do not know whether the clinical trials we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market any of our product candidates in any jurisdiction. A product candidate may fail for safety or efficacy reasons at any stage of the testing process. A major risk we face is the possibility that none of our product candidates under development will successfully gain market approval from the FDA, Health Canada, or other regulatory authorities, resulting in us being unable to derive any commercial revenue from them after investing significant amounts of capital in multiple stages of pre-clinical and clinical testing.

If we experience delays in clinical testing, we will be delayed in commercializing our product candidates, if approved, and our business may be substantially harmed.

We cannot predict whether any clinical trials will begin as planned, will need to be restructured, or will be completed on schedule, or at all. Our product development costs will increase if we experience delays in clinical testing. Significant clinical trial delays could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before us, which would impair our ability to successfully commercialize our product candidates, if approved, and may harm our financial condition, results of operations, and prospects. The commencement and completion of clinical trials for our product candidates may be delayed for a number of reasons, including delays related, but not limited, to:

- failure by regulatory authorities to grant permission to proceed or placing the clinical trial on hold;
- difficulties obtaining institutional review board ("IRB") or ethics committee approval to conduct a clinical trial at a prospective site;
- import/export and research restrictions for cannabinoid-based pharmaceuticals delaying or preventing clinical trials in various geographical jurisdictions;
- patients failing to enroll or remain in our trials at the rate we expect;
- suspension or termination of clinical trials by regulators for many reasons, including concerns about patient safety or failure of our contract manufacturers to comply with cGMP requirements;
- delays or failure to obtain clinical supply from contract manufacturers of our product candidates necessary to conduct clinical trials;
- product candidates demonstrating a lack of safety or efficacy during clinical trials;
- patients choosing an alternative treatment for the indications for which we are developing any of our product candidates or participating in competing clinical trials and/or scheduling conflicts with participating clinicians;
- patients failing to complete clinical trials due to dissatisfaction with the treatment, side effects or other reasons;
- reports of clinical testing on similar technologies and products raising safety and/or efficacy concerns;
- clinical investigators not performing our clinical trials on their anticipated schedule, dropping out of a trial, or employing methods not consistent with the clinical trial protocol, and regulatory requirements, or other third parties not performing data collection and analysis in a timely or accurate manner;
- failure of our Contract Research Organizations ("CROs") to satisfy their contractual duties or meet expected

deadlines;

- inspections of clinical trial sites by regulatory authorities or IRBs, or ethics committees finding regulatory violations that require us to undertake corrective action, resulting in suspension or termination of one or more sites or the imposition of a clinical hold on the entire study;
- one or more IRBs or ethics committees rejecting, suspending, or terminating the study at an investigational site,

precluding enrollment of additional subjects, or withdrawing its approval of the trial; or

- failure to reach agreement on acceptable terms with prospective clinical trial sites.

In addition, a clinical trial may be suspended or terminated by us, the FDA, IRBs, ethics committees, data safety monitoring boards, or other foreign regulatory authorities overseeing the clinical trial at issue or other regulatory authorities due to a number of factors, including, among others:

- failure to conduct the clinical trial in accordance with regulatory requirements or our clinical trial protocols;
- inspection of the clinical trial operations or clinical trial sites by the FDA, the European Medicines Agency, or other foreign regulatory authorities that reveals deficiencies or violations that require us to undertake corrective action, including the imposition of a clinical hold;
- unforeseen safety issues, including any safety issues that could be identified in our ongoing pre-clinical studies;
- adverse side effects or lack of effectiveness; and
- changes in government regulations or administrative actions.

Our product development costs will increase if we experience delays in testing or approval or if we need to perform more or larger clinical trials than planned. Additionally, changes in regulatory requirements and policies may occur, and we may need to amend study protocols to reflect these changes. Amendments may require us to resubmit our study protocols to regulatory authorities, IRBs, or ethics committees for re-examination, which may impact the cost, timing, or successful completion of that trial. Delays or increased product development costs may have a material adverse effect on our business, financial condition, and prospects.

Negative results from clinical trials or studies of others and adverse safety events involving the targets of our product candidates may have an adverse impact on our future commercialization efforts.

From time to time, studies or clinical trials on various aspects of biopharmaceutical products are conducted by academic researchers, competitors, or others. The results of these studies or trials, when published, may have a significant effect on the market for the biopharmaceutical product that is the subject of the study. The publication of negative results of studies or clinical trials or adverse safety events related to our product candidates, or the therapeutic areas in which our product candidates compete, could adversely affect the price of our securities and our ability to finance future development of our product candidates, and our business and financial results could be materially and adversely affected.

Our activities are subject to comprehensive regulation, including under healthcare laws and compliance requirements.

In the United States, our activities are potentially subject to additional regulation by various federal, state, and local authorities in addition to the FDA, including, among others, the Centers for Medicare and Medicaid Services, other divisions of Health and Human Services, or HHS, (for example, the Office of Inspector General), the Department of Justice, and individual United States Attorney offices within the Department of Justice, and state and local governments.

In Canada, our activities are potentially subject to additional regulation by various federal and provincial authorities in addition to Health Canada, including among others, and publicly mandated organizations given a provincial sales license under the *Cannabis Act*.

Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If our operations are found to be in violation of any of the federal and state laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including criminal and significant civil monetary penalties, damages, fines, imprisonment, exclusion from participation in government programs, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, private "qui tam" actions brought by individual whistleblowers in the name of the government, or refusal to allow us to enter into supply contracts, including government contracts, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our products are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

We may not achieve our projected development goals in the time frames and cost estimates we announce and expect.

We set goals for, and make public statements regarding, the expected timing and costs of the accomplishment of objectives material to our success, the commencement and completion of clinical trials and the expected costs to develop our product candidates. The actual timing and costs of these events can vary dramatically due to factors within and beyond our control, such as delays or failures in our clinical trials, issues related to the manufacturing of drug supply, uncertainties inherent in the regulatory approval process, market conditions, and interest by partners in our product candidates among other things. We may not make regulatory submissions or receive regulatory approvals as planned; our clinical trials may not be completed; or we may not secure partnerships for any of our product candidates. Any failure to achieve one or more of these milestones as planned would have a material adverse effect on our business, financial condition, and results of operations.

Unpredictable and volatile market price for common shares.

The market price for common shares may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond our control, including the following:

- actual or anticipated fluctuations in our quarterly results of operations;
- recommendations by securities research analysts;
- changes in the economic performance or market valuations of companies in the industry in which we operate;
- addition or departure of our executive officers and other key personnel;
- sales or perceived sales of additional common shares;
- significant acquisitions or business combinations, strategic partnerships, joint ventures, or capital commitments by or involving us or our competitors;
- operating and share price performance of other companies that investors deem comparable to us;
- fluctuations to the costs of vital production materials and services;
- changes in global financial markets and global economies and general market conditions, such as interest rates and pharmaceutical product price volatility;
- operating and share price performance of other companies that investors deem comparable to the Corporation or from a lack of market comparable companies; and
- news reports relating to trends, concerns, technological or competitive developments, regulatory changes, and other related issues in our industry or target markets.

Financial markets have recently experienced significant price and volume fluctuations that have particularly affected the market prices of equity securities of companies and that have often been unrelated to the operating performance, underlying asset values, or prospects of such companies. Accordingly, the market price of the common shares may decline even if our operating results, underlying asset values or prospects have not changed. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which might result in impairment losses. There can be no assurance that continuing fluctuations in price and volume will not occur. If such increased levels of volatility and market turmoil continue, our operations could be adversely affected, and the trading price of the common shares might be materially adversely affected.

Securities or industry analysts may publish inaccurate or unfavorable research reports, stock price, and trading volume could decline.

The trading market for our common shares will depend in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrade our common shares or publish inaccurate or unfavorable research about our business, our share price would likely decline. If one or more of these analysts cease coverage of our Corporation or fail to publish reports on us regularly, demand for our stock could decrease, which might cause our share price and trading volume to decline.

If we fail to adequately protect or enforce our intellectual property rights or secure rights to patents of others, the value of our intellectual property rights would diminish.

Our success, competitive position, and future revenues will depend in part on our ability and the abilities of our licensors to obtain and maintain patent protection for our products, methods, processes, and other technologies, to preserve our trade secrets, to prevent third parties from infringing on our proprietary rights, and to operate without infringing the proprietary rights of third parties.

To date, we have exclusive rights to certain Canadian, United States, and other foreign intellectual property. We anticipate filing additional patent applications in Canada, the United States, and in other countries, as appropriate. However, we cannot predict:

- the degree and range of protection any patents will afford us against competitors, including whether third parties will find ways to invalidate or otherwise circumvent our patents;
- if and when patents will issue;
- whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings which may be costly whether we win or lose.

Our success also depends upon the skills, knowledge, and experience of our scientific and technical personnel, our consultants and advisors, as well as our licensors and contractors. To help protect our proprietary know-how and our inventions for which patents may be unobtainable or difficult to obtain, we rely on trade-secret protection and confidentiality agreements. To this end, it is our policy generally to require our employees, consultants, advisors, and contractors to enter into agreements which prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries, and inventions important to our business. These agreements may not provide adequate protection for our trade secrets, know-how, or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information. If any of our trade secrets, know-how, or other proprietary information is disclosed, the value of our trade secrets, know- how, and other proprietary rights would be significantly impaired and our business and competitive position would suffer.

Owning a patent does not *per se* prevent competition. To stop third-party infringement, a patent owner and/or licensee must take steps to enforce the patent through court proceedings. This can be a very lengthy and costly process and the outcome may be uncertain.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The Canadian Intellectual Property Office ("CIPO") and various foreign national or international patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. Periodic maintenance fees on any issued patent are due to be paid to CIPO and various foreign national or international patent agencies in several stages over the lifetime of the patent. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of patent rights include, but are not limited to, failure to timely file national and regional stage patent applications based on our international patent application, failure to respond to official actions within prescribed time limits, non-payment of fees, and failure to properly legalize and submit formal documents.

If we fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market, which would have a material adverse effect on our business.

While a patent may be granted by a national patent office, there is no guarantee that the granted patent is valid. Options exist to challenge the validity of the patent which, depending upon the jurisdiction, may include re-examination, opposition proceedings before the patent office, and/or invalidation proceedings before the relevant court. Patent validity may also be the subject of a counterclaim to an allegation of patent infringement.

Pending patent applications may be challenged by third parties in protest or similar proceedings. Third parties can typically submit prior art material to patentability for review by the patent examiner. Regarding Patent Cooperation Treaty applications, a positive opinion regarding patentability issued by the International Searching Authority does not guarantee allowance of a national application derived from the Patent Cooperation Treaty application. The coverage claimed in a patent application can be significantly reduced before the patent is issued, and the patent's scope can be modified after issuance. It is also possible that the scope of claims granted may vary from jurisdiction to jurisdiction.

The grant of a patent does not have any bearing on whether the invention described in the patent application would infringe the rights of earlier filed patents. It is possible to both obtain patent protection for an invention and yet still infringe the rights of an earlier granted patent.

We may become subject to claims by third parties asserting that we or our employees have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Our commercial success depends upon our ability to develop, manufacture, market, and sell our product candidates, and to use our related proprietary technologies without violating the intellectual property rights of others. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our product candidates, including interference or derivation proceedings before CIPO, United States Patent and Trademark Office, and other applicable patents offices in foreign jurisdictions. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future. If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue commercializing our product candidates. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Under certain circumstances, we could be forced, including by court order, to cease commercializing the applicable product candidate. In addition, in any such proceeding or litigation, we could be found liable for monetary damages. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business. Any claims by third parties that we have misappropriated their confidential information or trade secrets could have a similar negative impact on our business.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting, and defending patents on all of our product candidates throughout the world would be prohibitively expensive. Therefore, we have filed applications and/or obtained patents only in key markets, such as the United States, Canada, and certain countries internationally. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and their products may compete with ours.

We rely and will continue to rely on third parties to conduct and monitor many of our pre-clinical studies and our clinical trials, and their failure to perform as required could cause substantial harm to our business.

We rely and will continue to rely, on third parties to conduct a significant portion of our pre-clinical and clinical development activities. Pre-clinical activities include *in vivo* studies providing access to specific disease models, pharmacology and toxicology studies, and assay development. Clinical development activities include trial design, regulatory submissions, clinical patient recruitment, clinical trial monitoring, clinical data management and analysis, safety monitoring and project management, contract manufacturing, and quality assurance. If there is any dispute or disruption in our relationship with third parties, or if they are unable to provide quality services in a timely manner and at a feasible cost, our active development programs will face delays. Further, if any of these third parties fails to perform as we expect or if their work fails to meet regulatory requirements, our testing could be delayed, cancelled, or rendered ineffective.

Our product candidates contain compounds that may be classified as "controlled substances" in jurisdictions outside of Canada and are classified as cannabis in Canada. Outside of Canada they may be subject to controlled substance laws and regulations; within Canada they will be subject to the *Cannabis Act* and the Cannabis Regulations. In all jurisdictions, failure to receive necessary approvals may delay the launch of our products and failure to comply with these laws and regulations may adversely affect the results of our business operations.

Our product candidates contain substances related to the cannabis plant and are subject to the *Cannabis Act* and the Cannabis Regulations in Canada. As a pharmaceutical product, cannabidiol will be subject to both the *Food and Drugs Act* and regulations issued thereunder and the *Cannabis Act* and the Cannabis Regulations. This will include the need for an establishment license, import and export permits, and extensive record keeping.

In addition, since our product candidates contain a cannabinoid, their regulatory approval may generate public controversy. Political and social pressures and adverse publicity could lead to delays in approval of, and increased expenses for our product candidates. These pressures could also limit or restrict the introduction and marketing of our product candidates. Adverse publicity from cannabis misuse or adverse side effects from cannabis or other cannabinoid products may adversely affect the commercial success or market penetration achievable for our product candidates. The nature of our business attracts a high level of public and media interest, and in the event of any resultant adverse publicity, our reputation may be harmed. Furthermore, if our product candidates are classified as "controlled substances", they may be subject to import/export and research restrictions that could delay or prevent the development of Cardiol's product candidates in various geographical jurisdictions.

Our ability to successfully produce our product candidates is dependent on extensive ongoing regulatory compliance and reporting requirements by the FDA, Health Canada and other foreign regulatory authorities. Failure to comply with such requirements could have a material adverse impact on our business, financial condition and operating results. There is no assurance that regulatory approval will be granted or continued for our product candidates. Should regulatory approval not be granted or continued, our business, financial condition and operating results would be materially adversely affected. Even if we receive regulatory approval for our product candidates, this approval may carry conditions that limit the market for the products or put the products at a competitive disadvantage relative to alternative therapies. For instance, regulatory approval may limit the indicated uses for which we can market a product (if approved) or the patient population that may utilize the product or the product may be required to carry a warning on its packaging. Once a product candidate is approved, we remain subject to continuing regulatory obligations, such as safety reporting requirements and additional post-marketing obligations, including regulatory oversight of promotion and marketing.

If our operations are found to be in violation of any of the federal and state laws or any other governmental regulations that apply to us, we may be subject to penalties, including criminal and significant civil monetary penalties, damages, fines, imprisonment, exclusion from participation in government programs, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, private "qui tam" actions brought by individual whistleblowers in the name of the government, or refusal to allow us to enter into supply contracts, including government contracts, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our product candidates (if approved) are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

In both domestic and foreign markets, the development, formulation, manufacturing, packaging, labelling, handling, distribution, import, export, licensing, sale, and storage of pharmaceuticals are affected by a body of laws, governmental regulations, administrative determinations, including those by the Canadian Food Inspection Agency and the FDA, court decisions, and similar constraints. Such laws, regulations and other constraints can exist at the federal, provincial or local levels in Canada and at all levels of government in foreign jurisdictions. We and our partners may be required to incur significant costs to comply with such laws and regulations in the future, and such laws and regulations may have an adverse effect on the business. The failure of us or our partners to comply with current or future regulatory requirements could lead to the imposition of significant penalties or claims and may have a material adverse effect on our business. In addition, the adoption of new laws, regulations or other constraints or changes in the interpretations of such requirements might result in significant compliance costs or lead us and our partners to discontinue product development and could have an adverse effect on our business.

Our ability to research, develop, and commercialize product candidates, if approved, is dependent on our ability to obtain and maintain licenses relating to possession and supply of controlled substances.

Our research and manufacturing facilities are located in Canada. In Canada, various licenses are required to produce pharmaceutical cannabinoids. Our continued ability to research, develop, and commercialize our product candidates is dependent on our ability to obtain, and subsequently maintain, licenses relating to possession and supply of controlled substances. Loss of such licenses or inability to obtain such licenses could have an adverse effect on our business.

Controlled substance legislation differs between countries and legislation in certain countries may restrict or limit ability to sell products.

Most countries are parties to the Single Convention on Narcotic Drugs 1961, which governs international trade and domestic control of narcotic substances, including cannabis. Countries may interpret/implement their treaty obligations in a way that creates a legal obstacle to our obtaining marketing approval for our product candidates in those countries even though our cannabinoids are pharmaceutically manufactured and not botanically derived. These countries may not be willing or able to amend or otherwise modify their laws and regulations to permit our product candidates to be marketed, if approved, or achieving such amendments to the laws and regulations may take a prolonged period of time.

Changes in laws and regulations may make compliance challenging, costly and time consuming for us.

Our operations are subject to a variety of laws, regulations and guidelines relating to pharmacology, cannabinoids, and drug delivery, as well as laws and regulations relating to health and safety, the conduct of operations, and the protection of the environment. While, to our knowledge, we are currently in material compliance with all such laws, changes to such laws, regulations and guidelines due to matters beyond our control may cause adverse effects to our operations and financial condition. These changes may require us to incur substantial costs associated with legal and compliance fees and ultimately require us to alter our business plan.

In addition, if the governments of Canada or the U.S. were to enact or amend laws relating to our industry, it may decrease the size of, or eliminate entirely, the market for our product candidates, and if approved, may introduce significant new competition into the market and may otherwise potentially materially and adversely affect our business, results of operations, and financial condition.

Tax and accounting requirements may change in ways that are unforeseen to the Corporation and the Corporation may face difficulty or be unable to implement and/or comply with any such changes.

The Corporation is subject to numerous tax and accounting requirements, and changes in existing accounting or taxation rules or practices, or varying interpretations of current rules or practices, could have a significant adverse effect on the Corporation's financial results, the manner in which it conducts its business, or the marketability of any of its products (if approved). In the future, the geographic scope of the Corporation's business may expand, and such expansion will require the Corporation to comply with the tax laws and regulations of multiple jurisdictions. Requirements as to taxation vary substantially among jurisdictions. Complying with the tax laws of these jurisdictions can be time consuming and expensive and could potentially subject the Corporation to penalties and fees in the future if the Corporation were to inadvertently fail to comply. In the event the Corporation was to inadvertently fail to comply with applicable tax laws, this could have a material adverse effect on the business, results of operations, and financial condition of the Corporation.

Management may not be able to successfully implement adequate internal controls over financial reporting ("ICFR").

Proper systems of internal controls over financial accounting and disclosure are critical to the operation of a public company. However, the Corporation does not expect that its Disclosure, Controls, and Procedures or ICFR will prevent all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Due to the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be detected in a timely manner or at all. If the Corporation cannot provide reliable financial reports or prevent fraud, its reputation and operating results could be materially adversely affected, which could cause investors to lose confidence in the Corporation's reported financial information, which in turn could result in a reduction in the value of the common shares.

Medical research on cannabidiol remains limited.

Research regarding the medical benefits, viability, safety, efficacy, and dosing of cannabidiol remains limited. There have been relatively few well-designed clinical trials conducted on the benefits of cannabidiol, and the Corporation is not aware of any randomized placebo-controlled studies of cannabidiol in heart diseases such as recurrent pericarditis, acute myocarditis and heart failure. The statements made in this MD&A concerning the potential medical benefits of cannabidiol are based on the published articles and reports from research studies. As a result, the statements made in this MD&A are subject to the experimental parameters, qualifications, and limitations in the studies that have been completed.

Although the Corporation believes that the articles and reports with details of research studies referenced in this MD&A reasonably support its beliefs regarding the medical benefits, viability, safety, efficacy, and dosing of cannabidiol as set out in this MD&A, future research and clinical trials in pursuit of our development efforts may prove such statements to be incorrect, or could raise concerns regarding and perceptions relating to, cannabidiol. Given these risks, uncertainties and assumptions, undue reliance should not be placed on such articles and reports. Future research studies may draw opposing conclusions to those stated in this MD&A or reach negative conclusions regarding the viability, safety, efficacy, dosing, social acceptance or other facts and perceptions related to cannabidiol, which could have a material adverse effect on the demand for the Corporation's product candidates, if approved, and therefore materially impact the business, financial condition, and operating results of the Corporation.

Product candidates, if approved, may be unable to achieve the expected market acceptance and, consequently, limit our ability to generate revenue from new products.

Even if product development is successful and regulatory approval is obtained, our ability to generate significant revenue depends on the acceptance of our products by physicians and patients. We cannot assure you that our product candidates will achieve the expected market acceptance and revenue if and when they obtain the requisite regulatory approvals. The market acceptance of any product depends on a number of factors, including the indication statement and warnings approved by regulatory authorities on the product label, continued demonstration of efficacy and safety in commercial use, physicians' willingness to prescribe the product, reimbursement from third-party payers such as government health care systems and insurance companies, the price of the product, the nature of any post-approval risk management plans mandated by regulatory authorities, competition, and marketing and distribution support. Any factors preventing or limiting the market acceptance of our products could have a material adverse effect on our business, results of operations, and financial condition.

We currently have no commercialized products.

Even if we obtain regulatory approval for a product candidate, our future success will still depend on our ability to successfully commercialize our products, which depends on a number of factors beyond our control, including the willingness of physicians to prescribe our products to patients, payers' willingness and ability to pay for the product, the level of pricing achieved, patients' response to our products, the ability of our marketing partners to generate sales, and our ability to manufacture products on a cost-effective and efficient basis. If we are not successful in the commercialization of our products, our business, results of operations, and financial condition may be harmed.

We rely on contract manufacturers over whom we have limited control. If we are subject to quality, cost, or delivery issues with the pre-clinical and clinical grade materials supplied by contract manufacturers, our business operations could suffer significant harm.

We currently have no manufacturing experience and rely on Dalton and other contract manufacturing organizations (“CMOs”) to manufacture our product candidates for pre-clinical studies and clinical trials. We rely on CMOs for manufacturing, filling, packaging, storing, and shipping of product candidates in compliance with current good manufacturing practice, or cGMP, regulations applicable to our product candidates. The FDA ensures the quality of drug products by carefully monitoring drug manufacturers' compliance with cGMP regulations. The cGMP regulations for drugs contain minimum requirements for the methods, facilities, and controls used in manufacturing, processing, and packaging of a drug product. If our CMOs increase their prices or fail to meet our quality standards, or those of regulatory agencies such as the FDA, and cannot be replaced by other acceptable CMOs, our ability to obtain regulatory approval for and commercialize our product candidates may be materially adversely affected.

Business disruptions affecting our third-party suppliers, manufacturers, and CROs could harm our future revenues and financial condition and increase our costs and expenses.

We rely on third parties to supply the materials for and manufacture our APIs for our pre-clinical and clinical trials. There are only a limited number of suppliers and manufacturers of our APIs and our ability to obtain these materials could be disrupted if the operations of these manufacturers are affected by earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, regulatory enforcement activity, medical epidemics, and other natural or man-made disasters or business interruptions. We also rely on CROs, clinical data management organizations, and consultants to design, conduct, supervise, and monitor pre-clinical studies of our product candidates and will do the same for our planned clinical trials. If their facilities are unable to operate because of an accident or incident, even for a short period of time, some or all of our research and development programs may be harmed or delayed, and our operations and financial condition could suffer.

Our existing collaboration agreements and any such agreements entered into in the future may not be successful, which would have adverse consequences.

We are a party to, and may seek additional, collaboration arrangements with pharmaceutical or biotechnology companies for the development or commercialization of our current and potential product candidates. We may enter into new arrangements on a selective basis depending on the merits of retaining commercialization rights for ourselves as compared to entering into selective collaboration arrangements with leading pharmaceutical or biotechnology companies for each product candidate, both in Canada and internationally. To the extent that we decide to enter into collaboration agreements, we will face significant competition in seeking appropriate collaborators. Moreover, collaboration arrangements are complex and time consuming to negotiate, document, and implement. We may not be successful in our efforts to establish, implement, and maintain collaborations or other alternative arrangements if we choose to enter into such arrangements. In addition, the terms of any collaboration or other arrangements that we may establish may not be favorable to us.

Any existing or future collaboration that we enter into may not be successful. The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborators generally have significant discretion in determining the efforts and resources that they will apply to these collaborations.

Disagreements between parties to a collaboration arrangement regarding development, intellectual property, regulatory or commercialization matters, can lead to delays in the development process or commercialization of the applicable product candidate, if approved, and, in some cases, termination of the collaboration arrangement. These disagreements can be difficult to resolve if neither of the parties has final decision-making authority.

Collaborations with pharmaceutical or biotechnology companies and other third parties often are terminated or allowed to expire by the other party. Any such termination or expiration would adversely affect us financially and could harm our business reputation.

Product candidate shipment delays would have an adverse effect on the business.

The shipment, import, and export of our product candidates may require import and export licenses. In the United States, the FDA, United States Customs and Border Protection, and in other countries, similar regulatory authorities, regulate the import and export of pharmaceutical products that contain controlled substances. Specifically, the import and export process may require the issuance of import and export licenses by the relevant controlled substance authority in both the importing and exporting country. Once we are in the production phase, we may not be granted, or if granted, maintain, such licenses from the authorities in certain countries. Even if we obtain the relevant licenses, shipments of our product candidates may be held up in transit, which could cause significant delays and may lead to product batches being stored outside required temperature ranges. Inappropriate storage may damage the product shipment resulting in a partial or total loss of revenue from one or more shipments of our other product candidates. A partial or total loss of revenue from one or more shipments of our product candidates could have a material adverse effect on our business, results of operations and financial condition.

Our ability to generate product revenues will be diminished if our product candidates (if approved) sell for inadequate prices or patients are unable to obtain adequate levels of reimbursement.

Our ability to commercialize our product candidates, if approved, alone or with collaborators, will depend in part on the extent to which reimbursement will be available from:

- government and health administration authorities;
- private health maintenance organizations and health insurers; and
- other healthcare payers.

Significant uncertainty exists as to the reimbursement status of newly approved healthcare products. Healthcare payers are challenging the prices charged for medical products and services. Government and other healthcare payers increasingly attempt to contain healthcare costs by limiting both coverage and the level of reimbursement for drugs. Even if our product candidates are approved by the FDA, Health Canada, or any similar regulatory authority, insurance coverage may not be available, and reimbursement levels may be inadequate, to cover our product candidates (if approved). If government and other healthcare payers do not provide adequate coverage and reimbursement levels for our product candidates, once approved, market acceptance of such product candidates could be reduced.

We do not have a history of selling, marketing, or distributing products.

We may not be able to market, sell, and distribute our product candidates, if approved, successfully. Our future success may depend, in part, on our ability to enter into and maintain collaborative relationships for such capabilities, the collaborator's strategic interest in the product candidates under development, and such collaborator's ability to successfully market and sell any such product candidates, if approved. Although we intend to pursue collaborative arrangements regarding the sale and marketing of our product candidates, if approved, there can be no assurance that we will be able to establish or maintain our own sales operations or effect collaborative arrangements, or that if we are able to do so, our collaborators will have effective sales forces. There can also be no assurance that we will be able to establish or maintain effective relationships with third party collaborators or develop in-house sales and distribution capabilities. To the extent that we will in the future depend on third parties for marketing and distribution, any revenues we receive will depend upon the efforts of such third parties, and there can be no assurance that such efforts will be successful. In addition, there can also be no assurance that we will be able to market and sell our product candidates, if approved, internationally.

We may face intense competition from other companies which may be larger and better financed.

Competition from pharmaceutical companies, biotechnology companies, and universities is intense and is expected to increase. Increased competition by larger and better financed competitors could materially and adversely affect the business, financial condition, and results of operations of the Corporation. The Corporation's future success depends in part on its ability to maintain a competitive position, including the ability to further progress its product candidates through the necessary pre-clinical and clinical trials towards regulatory approval for sale and commercialization. Other companies may succeed in commercializing products earlier than the Corporation is able to commercialize its product candidates, if approved, or they may succeed in developing products that are more effective. While the Corporation will seek to expand its capabilities in order to remain competitive, there can be no assurance that developments by others will not render its product candidates, if approved, non-competitive or that the Corporation or its licensors will be able to keep pace with technological developments. Competitors have developed or could develop technologies that could be the basis for competitive products. Some of those products may have an entirely different approach or means of accomplishing the desired therapeutic effect than the Corporation's product candidates and may be more effective or less costly than the Corporation's product candidates, if approved. In addition, other forms of medical treatment may offer competition to the Corporation's product candidates, if approved. The success of the Corporation's competitors and their products relative to the Corporation's capabilities and competitiveness could have a material adverse effect on the future of pre-clinical and clinical trials of the Corporation's product candidates, including its ability to obtain the necessary regulatory approvals for the conduct of such trials.

Research and development, and evolving technology and products, may render our product candidates (if approved) obsolete, if we are unable to continue to improve our product offerings in the future.

Rapidly changing markets, technology, emerging industry standards and frequent introduction of new products characterize the Corporation's business. The introduction of new products embodying new technologies, including new manufacturing processes, and the emergence of new industry standards may render the Corporation's product candidates, if approved, obsolete, less competitive, or less marketable. The process of developing the Corporation's product candidates is complex and requires significant continuing costs, development efforts, and third-party commitments. The Corporation's failure to develop new technologies and product candidates and the obsolescence of existing technologies could adversely affect the business, financial condition, and operating results of the Corporation. The Corporation may be unable to anticipate changes in its potential customer requirements that could make the Corporation's existing technology obsolete. The Corporation's success will depend, in part, on its ability to continue to enhance its existing technologies, develop new technology that addresses the increasing sophistication and varied

needs of the market, and respond to technological advances and emerging industry standards and practices on a timely and cost-effective basis. The development of the Corporation's proprietary technology entails significant technical and business risks. The Corporation may not be successful in using its new technologies or exploiting its niche markets effectively or adapting its businesses to evolving customer or medical requirements or preferences or emerging industry standards.

Negative public or consumer perception around cannabinoids may negatively affect the development and commercialization of our product candidates.

The Corporation believes the cannabinoid industry is highly dependent upon consumer perception regarding the safety, efficacy, and quality of the cannabinoid produced. Consumer perception of the Corporation's pharmaceutical cannabinoid product candidates can be significantly influenced by scientific research or findings, regulatory investigations, litigation, media attention, and other publicity regarding the consumption of cannabinoids. There can be no assurance that future scientific research, findings, regulatory proceedings, litigation, media attention, or other research findings or publicity will be favourable to the cannabinoid market or any particular product, or consistent with earlier publicity. Future research reports, findings, regulatory proceedings, litigation, media attention, or other publicity that are perceived as less favourable than, or that question, earlier research reports, findings, or publicity could have a material adverse effect on the demand for the Corporation's pharmaceutical cannabinoids, if approved, and the business, results of operations, financial condition, and cash flows of the Corporation. The Corporation's dependence upon consumer perceptions means that adverse scientific research reports, findings, regulatory proceedings, litigation, media attention, or other publicity, whether or not accurate or with merit, could have a material adverse effect on the Corporation, the demand for the Corporation's pharmaceutical cannabinoids, if approved, and the business, results of operations, financial condition, and cash flows of the Corporation. Further, adverse publicity reports or other media attention regarding the safety, efficacy, and quality of cannabinoids in general, or the Corporation's pharmaceutical cannabinoids, if approved, specifically, or associating the consumption of cannabinoids with illness or other negative effects or events, could have such a material adverse effect. Such adverse publicity reports or other media attention could arise even if the adverse effects associated with such products resulted from consumers' failure to consume such products legally, appropriately, or as directed.

We may face risks from product liability claims if our product candidates are approved.

If we become a manufacturer and distributor of products designed to be ingested by humans, the Corporation faces an inherent risk of exposure to product liability claims, regulatory action, and litigation if its product candidates (once approved) are alleged to have caused significant loss or injury. In addition, the manufacture and sale of products involve the risk of injury to consumers due to tampering by unauthorized third parties or product contamination. Previously unknown adverse reactions resulting from human consumption of our product candidates alone or in combination with other medications or substances could occur. The Corporation may be subject to various product liability claims, including, among others, that the products produced by the Corporation caused injury or illness, include inadequate instructions for use or include inadequate warnings concerning possible side effects or interactions with other substances. A product liability claim or regulatory action against the Corporation could result in increased costs, could adversely affect the Corporation's reputation with its clients and consumers generally, and could have a material adverse effect on the business, financial condition, and operating results of the Corporation. There can be no assurances that the Corporation will be able to obtain or maintain product liability insurance on acceptable terms or with adequate coverage against potential liabilities. Such insurance is expensive and may not be available in the future on acceptable terms, or at all. The inability to obtain sufficient insurance coverage on reasonable terms or to otherwise protect against potential product liability claims could prevent or inhibit the commercialization of product candidates (if approved).

The Corporation's product candidates, if approved, may be subject to product recalls.

Manufacturers and distributors of products are sometimes subject to the recall or return of their products for a variety of reasons, including product defects, such as contamination, unintended harmful side effects or interactions with other substances, packaging safety and inadequate or inaccurate labeling disclosure. If any of the product candidates (if approved) that the Corporation produces or intends to produce are recalled due to an alleged product defect or for any other reason, the Corporation could be required to incur the unexpected expense of the recall and any legal proceedings that might arise in connection with the recall. The Corporation may lose a significant number of sales and may not be able to replace those sales at an acceptable margin or at all. In addition, a product recall may require significant Management attention. Although the Corporation has detailed procedures in place for testing finished products (if our product candidates are approved), there can be no assurance that any quality, potency, or contamination problems will be detected in time to avoid unforeseen product recalls, regulatory action, or lawsuits.

Additionally, if one of Corporation's product candidates, if approved, were subject to recall, the image of that product and the Corporation could be harmed. A recall for any of the foregoing reasons could lead to decreased demand for products produced by the Corporation and could have a material adverse effect on the results of operations and financial condition of the Corporation. Additionally, product recalls may lead to increased scrutiny of the operations of the Corporation by Health Canada or other regulatory agencies, requiring further Management attention and potential legal fees and other expenses.

The Corporation may seek to expand its business and operations into jurisdictions outside of Canada, and there are risks associated with doing so.

The Corporation may in the future expand its operations and business into jurisdictions outside of Canada. There can be no assurance that any market for the Corporation's product candidates (if approved) will develop in any such foreign jurisdiction. The Corporation may face new or unexpected risks or significantly increase its exposure to one or more existing risk factors, including economic instability, changes in laws and regulations, and the effects of competition. These factors may limit the Corporation's capability to successfully expand its operations and may have a material adverse effect on the Corporation's business, financial condition, and results of operations.

The Corporation may become subject to liability arising from any fraudulent or illegal activity by its employees, contractors, and consultants.

The Corporation is exposed to the risk that its employees, independent contractors, and consultants may engage in fraudulent or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to the Corporation that violates: (i) government regulations;
(ii) manufacturing standards; (iii) federal and provincial healthcare fraud and abuse laws and regulations; or (iv) laws that require the true, complete, and accurate reporting of financial information or data. It is not always possible for the Corporation to identify and deter misconduct by its employees and other third parties, and the precautions taken by the Corporation to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting the Corporation from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against the Corporation, and it is not successful in defending itself or asserting its rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of the Corporation's operations, any of which could have a material adverse effect on the Corporation's business, financial condition and results of operations.

The Corporation's business is dependent on key inputs, and the inability to secure such inputs may negatively affect our business.

The Corporation's business is dependent on a number of key inputs and their related costs including raw materials and supplies related to its growing operations, as well as electricity, water, and other local utilities. Any significant interruption or negative change in the availability or economics of the supply chain for key inputs could materially impact the business, financial condition, and operating results of the Corporation. Any inability to secure required supplies and services or to do so on appropriate terms could have a materially adverse impact on the business, financial condition, and operating results of the Corporation.

The Corporation's development plans may be impacted by global supply chain challenges including extended delivery times, increases in pricing and constraints on the availability of materials and components required by the Corporation and the development and manufacturing firms it has engaged. Prices of numerous materials and components have increased and they may continue to increase due to increased demand and supply constraints.

Our insurance coverage may be insufficient to protect us from our operating risk.

The Corporation has insurance to protect its assets, operations, and employees. While the Corporation believes its insurance coverage addresses all material risks to which it is exposed and is adequate and customary in its current state of operations, such insurance is subject to coverage limits and exclusions and may not be available for all risks and hazards to which the Corporation is exposed. In addition, no assurance can be given that such insurance will be adequate to cover the Corporation's liabilities or will be generally available in the future or, if available, that premiums will be commercially justifiable. If the Corporation were to incur substantial liability and such damages were not covered by insurance or were in excess of policy limits, or if the Corporation were to incur such liability at a time when it is not able to obtain liability insurance, its business, results of operations, and financial condition could be materially adversely affected.

We may be unable to manage our growth effectively.

The Corporation may be subject to growth-related risks, including capacity constraints and pressure on its internal systems and controls. The ability of the Corporation to manage growth effectively will require it to continue to implement and improve its operational and financial systems and to expand, train, and manage its employee base. The inability of the Corporation to deal with this growth may have a material adverse effect on the Corporation's business, financial condition, results of operations, and prospects.

Some of our Directors and/or officers may have conflicts of interest from other business activities.

The Corporation may be subject to various potential conflicts of interest because of the fact that some of its officers and Directors may be engaged in a range of business activities. In addition, the Corporation's executive officers and Directors may devote time to their outside business interests, so long as such activities do not materially or adversely interfere with their duties to the Corporation. In some cases, the Corporation's executive officers and Directors may have fiduciary obligations associated with these business interests that interfere with their ability to devote time to the Corporation's business and affairs and that could adversely affect the Corporation's operations. These business interests could require significant time and attention from the Corporation's executive officers and Directors. In addition, the Corporation's executive officers and Directors control a percentage of common shares and may have the ability to control matters affecting the Corporation.

The Corporation may also become involved in other transactions which conflict with the interests of its Directors and the officers who may from time-to-time deal with persons, firms, institutions, or companies with which the Corporation may be dealing, or which may be seeking investments similar to those desired by it. The interests of these persons could conflict with those of the Corporation. In addition, from time to time, these persons may be competing with the Corporation for available investment opportunities. Conflicts of interest, if any, will be subject to the procedures and remedies provided under applicable laws. In particular, in the event that such a conflict of interest arises at a meeting of the Corporation's Directors, a director who has such a conflict will abstain from voting for or against the approval of such participation or such terms. In accordance with applicable laws, the Directors of the Corporation are required to act honestly, in good faith, and in the best interests of the Corporation.

Certain publicity may cause damage to our reputation.

Damage to the Corporation's reputation could be the result of the actual or perceived occurrence of any number of events, and could include any negative publicity, whether true or not. The increased usage of social media and other web-based tools used to generate, publish, and discuss user generated content and to connect with other users has made it increasingly easier for individuals and groups to communicate and share opinions and views in respect to the Corporation and its activities, whether true or not. Although the Corporation believes that it operates in a manner that is respectful to all stakeholders and that it takes care in protecting its image and reputation, the Corporation ultimately does not have direct control over how it is perceived by others. Reputation loss may result in decreased investor confidence, increased challenges in developing and maintaining community relations, and an impediment to the Corporation's overall ability to advance its product candidates, thereby having a material adverse impact on financial performance, financial condition, cash flows, and growth prospects.

Third parties may perceive reputational risk for doing business with us as a company involved in the development and marketing of cannabinoid-based treatments.

The parties with which the Corporation does business may perceive that they are exposed to reputational risk as a result of the Corporation's cannabinoid-related activities. This may impact the Corporation's ability to retain current partners, such as its banking relationship, or source future partners as required for growth or future expansion in Canada or internationally. Failure to establish or maintain business relationships could have a material adverse effect on the Corporation.

Our relationships with healthcare providers, patients, and third-party payors will be subject to applicable anti- kickback, fraud, and abuse, and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, and diminished profits and future earnings

Healthcare providers, customers, and third-party payors play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with healthcare providers, third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell, and distribute our products for which we obtain marketing approval. As a pharmaceutical company, even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid, or other third-party payors, certain federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to our business.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations, or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal, and administrative penalties, damages, fines, imprisonment, exclusion from government funded healthcare programs, and the curtailment or restructuring of our operations. If any physicians or other healthcare providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil, or administrative sanctions, including exclusions from government funded healthcare programs.

We and our third-party providers may face security threats to information systems.

The Corporation has entered into agreements with third parties for hardware, software, telecommunications, and other information technology ("IT") services in connection with its operations. The Corporation's operations depend, in part, on how well it and its suppliers protect networks, equipment, IT systems, and software against damage from a number of threats, including, but not limited to, cable cuts, damage to physical plants, natural disasters, terrorism, fire, power loss, hacking, computer viruses, vandalism, and theft. The Corporation's operations also depend on the timely maintenance, upgrade, and replacement of networks, equipment, IT systems and software, as well as pre-emptive expenses to mitigate the risks of failures. Any of these and other events could result in information system failures, delays and/or an increase in capital expenses. The failure of information systems or a component of information systems could, depending on the nature of any such failure, adversely impact the Corporation's reputation and results of operations.

The Corporation has not experienced any material losses to date relating to cyber-attacks or other information security breaches, but there can be no assurance that the Corporation will not incur such losses in the future. The Corporation's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cybersecurity and the continued development and enhancement of controls, processes, and practices designed to protect systems, computers, software, data, and networks from attack, damage, or unauthorized access is a priority. As cyber threats continue to evolve, the Corporation may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

We do not currently, and have no plans to, pay dividends on our common shares.

Our current policy is to retain earnings to finance the development and enhancement of our product candidates and to otherwise reinvest in the Corporation. Therefore, we do not anticipate paying cash dividends on the common shares in the foreseeable future. Our dividend policy will be reviewed from time to time by our Board of Directors in the context of our earnings, financial condition, and other relevant factors. Until the time that we do determine to pay dividends, which we might never do, our shareholders will not be able to receive a return on their common shares unless they sell them.

Future sales of common shares by existing shareholders.

Holders of options, PSUs, RSUs, DSUs and other share-based awards to purchase common shares may have an immediate income inclusion for tax purposes when they exercise these awards (that is, tax is not deferred until they sell the underlying common shares). As a result, these holders may need to sell common shares purchased on the exercise of these awards in the same year that they exercise. This might result in a greater number of common shares being sold in the public market, and fewer long-term holds of common shares by Management and our employees.

The Corporation may be subject to securities litigation which is expensive and could divert Management's attention.

The market price of the common shares may be volatile, and in the past companies that have experienced volatility in the market price of their shares have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our Management's attention from other business concerns, which could seriously harm our business.

Our common shares are subject to market price volatility.

The market price of common shares may be adversely affected by a variety of factors relating to the Corporation's business, including fluctuations in the Corporation's operating and financial results, the results of any public announcements made by the Corporation and its failure to meet analysts' expectations. In addition, from time to time, the stock market experiences significant price and volume volatility that may affect the market price of common shares for reasons unrelated to the Corporation's performance. Additionally, the value of common shares is subject to market value fluctuations based upon factors that influence the Corporation's operations, such as legislative or regulatory developments, competition, technological change, global capital market activity and changes in interest and currency rates. There can be no assurance that the market price of common shares will not experience significant fluctuations in the future, including fluctuations that are unrelated to the Corporation's performance.

The market value of common shares may also be affected by the Corporation's financial results and political, economic, financial, and other factors that can affect the capital markets generally, the stock exchanges on which common shares are traded and the market segments in which the Corporation is a part.

Issuances of our equity securities in the future may result in dilution to current shareholders.

Our articles of incorporation and by-laws allow us to issue an unlimited number of common shares for such consideration and on such terms and conditions as established by the Corporation's board of directors, in many cases, without shareholder approval. The Corporation may issue additional common shares in future offerings (including through the sale of securities convertible into or exchangeable for common shares) and on the exercise of stock options or other securities exercisable for common shares. The Corporation cannot predict the size of future issuances of common shares or the effect that future issuances and sales of common shares will have on the market price of common shares. Issuances of a substantial number of additional common shares, or the perception that such issuances could occur, may adversely affect prevailing market prices for common shares. With any additional issuance of common shares, investors will suffer dilution to their voting power and may experience dilution in their earnings per share.

The Corporation may use the proceeds from prior equity offerings for purposes other than those previously set out

The Corporation currently intends on allocating the net proceeds received from any Offerings as described under the heading "Use of Proceeds". However, the Corporation's Management will have discretion in the actual application of the proceeds and may elect to allocate proceeds differently from that described under the heading "Use of Proceeds" if it believes that it would be in the best interests of the Corporation to do so if circumstances change. The failure by Management to apply these funds effectively could have a material adverse effect on the Corporation's business.

Failure to comply with the U.S. Foreign Corrupt Practices Act ("FCPA"), the Canadian Corruption of Foreign Public Officials Act ("CFPOA"), and other global anti-corruption and anti-bribery laws could subject the Corporation to penalties and other adverse consequences.

The FCPA and the CFPOA, as well as any other applicable domestic or foreign anti-corruption or anti-bribery laws to which the Corporation is or may become subject generally prohibit corporations and individuals from engaging in certain activities to obtain or retain business or to influence a person working in an official capacity and requires companies to maintain accurate books and records and internal controls, including at foreign-controlled subsidiaries.

Compliance with these anti-corruption laws and anti-bribery laws may be expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, these laws present particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and physicians and other hospital employees are considered to be foreign officials. Certain payments by other companies to hospitals in connection with

clinical trials and other work have been deemed to be improper payments to governmental officials and have led to FCPA enforcement actions.

The Corporation's internal control policies and procedures may not protect it from reckless or negligent acts committed by the Corporation's employees, distributors, licensees, or agents. The Corporation can make no assurance that they will not engage in prohibited conduct, and the Corporation may be held liable for their acts under applicable anti- corruption and anti-bribery laws. Noncompliance with these laws could subject the Corporation to investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension or debarment from contracting with certain persons, the loss of export privileges, whistleblower complaints, reputational harm, adverse media coverage, and other collateral consequences. Any investigations, actions or sanctions or other previously mentioned harm could have a material adverse effect on the Corporation's business, operating results, and financial condition.

The Corporation may be classified as a "passive foreign investment company" for U.S. federal income tax purposes, which would subject U.S. investors that hold the Corporation's common shares to potentially significant adverse U.S. federal income tax consequences.

If the Corporation is classified as a passive foreign investment company ("PFIC") for U.S. federal income tax purposes in any taxable year, U.S. investors holding the Corporation's common shares generally will be subject, in that taxable year and all subsequent taxable years (whether or not the Corporation continued to be a PFIC), to certain adverse U.S. federal income tax consequences. The Corporation will be classified as a PFIC in respect of any taxable year in which, after taking into account its income and gross assets (including the income and assets of 25% or more owned subsidiaries), either (i) 75% or more of its gross income consists of certain types of "passive income" or (ii) 50% or more of the average quarterly value of its assets is attributable to "passive assets" (assets that produce or are held for the production of passive income). Based upon the current and expected composition of the Corporation's income and assets, the Corporation believes that it was a PFIC for the taxable year ended December 31, 2023 and expects that it may be a PFIC for the current taxable year. Because the Corporation's PFIC status must be determined annually with respect to each taxable year and will depend on the composition and character of the Corporation's assets and income, including the Corporation's use of proceeds from offerings, and the value of the Corporation's assets (which may be determined, in part, by reference to the market value of common shares, which may be volatile) over the course of such taxable year, the Corporation may be a PFIC in any taxable year. Because there are uncertainties in the application of the relevant rules and PFIC status is a factual determination made annually after the close of each taxable year, there can be no assurance that the Corporation will not be a PFIC for any future taxable year. In addition, it is possible that the U.S. Internal Revenue Service may challenge the Corporation's classification of certain income and assets as non- passive, which may result in the Corporation being or becoming a PFIC in the current or subsequent years.

If the Corporation is a PFIC for any year during a U.S. Holder's (as defined below) holding period, then such U.S. Holder generally will be required to treat any gain realized upon a disposition of common shares, or any "excess distribution" received on its common shares, as ordinary income, and to pay an interest charge on a portion of such gain or distribution, unless the U.S. Holder makes a timely and effective "qualified electing fund" election ("QEF Election") or a "mark-to-market" election with respect to its common shares. A U.S. Holder who makes a QEF Election generally must report on a current basis its share of the Corporation's net capital gain and ordinary earnings for any year in which the Corporation is a PFIC, whether or not the Corporation distributes any amounts to its shareholders. However, U.S. Holders should be aware that there can be no assurance that the Corporation will satisfy the record keeping requirements that apply to a QEF, or that the Corporation will supply U.S. Holders with information that such
U.S. Holders require to report under the QEF Election rules, in the event that the Corporation is a PFIC and a U.S. Holder wishes to make a QEF Election. Thus, U.S. Holders may not be able to make a QEF Election with respect to their common shares. A U.S. Holder who makes a mark-to-market election generally must include as ordinary income each year the excess of the fair market value of the common shares over the taxpayer's basis therein. Each U.S. Holder should consult its own tax advisors regarding the PFIC rules and the U.S. federal income tax consequences of the acquisition, ownership, and disposition of common shares.

As used in this discussion, the term "U.S. Holder" means a beneficial owner of common shares that is, for U.S. federal income tax purposes, (1) an individual who is a citizen or resident of the United States, (2) a corporation (or entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia, (3) an estate the income of which is subject to U.S. federal income tax regardless of its source or (4) a trust (x) with respect to which a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all of its substantial decisions or (y) that has elected under applicable U.S. Treasury regulations to be treated as a domestic trust for U.S. federal income tax purposes.

It may be difficult for United States investors to obtain and enforce judgments against the Corporation because of the Corporation's Canadian incorporation and presence.

The Corporation is a corporation existing under the laws of Ontario, Canada. A substantial portion of the Corporation's Directors and officers are resident outside of the United States, and all or a substantial portion of their assets, and a substantial portion of the Corporation's assets, are located outside the United States. Consequently, it may be difficult for holders of the Corporation's securities who reside in the United States to effect service of process within the United States upon those directors, officers, and experts who are not residents of the United States. It may also be difficult for holders of the Corporation's securities who reside in the United States to realize in the United States upon judgments of courts of the United States predicated upon the Corporation's civil liability and the civil liability of the Corporation's directors, officers and experts under United States federal securities laws. Investors should not assume that Canadian courts would (i) enforce judgments of United States courts obtained in actions against the Corporation or such Directors or officers predicated upon the civil liability provisions of the United States federal securities laws or the securities or "blue sky" laws of any state or jurisdiction of the United States or (ii) would enforce, in original actions, liabilities against the Corporation or such directors, officers or experts predicated upon the United States federal securities laws or any securities or "blue sky" laws of any state or jurisdiction of the United States. In addition, the protections afforded by Canadian securities laws may not be available to investors in the United States.

As a foreign private issuer, the Corporation is subject to different U.S. securities laws and rules than a U.S. domestic issuer, which may limit the information publicly available to U.S. investors.

The Corporation is a "foreign private issuer", under applicable U.S. federal securities laws, and is, therefore, not subject to the same requirements that are imposed upon U.S. domestic issuers by the Securities and Exchange Commission ("SEC"). Under the U.S. Securities Exchange Act of 1934, as amended, the Corporation is subject to reporting obligations that, in certain respects, are less detailed and less frequent than those of U.S. domestic reporting companies. As a result, the Corporation does not file the same reports that a U.S. domestic issuer would file with the SEC, although the Corporation is required to file with or furnish to the SEC the continuous disclosure documents that it is required to file in Canada under Canadian securities laws. In addition, the Corporation's officers, Directors, and principal shareholders are exempt from the reporting and short-swing profit recovery provisions of Section 16 of the
U.S. Exchange Act. Therefore, the Corporation's shareholders may not know on as timely a basis as with U.S. domestic issuers when the Corporation's officers, Directors and principal shareholders purchase or sell common shares, as the reporting periods under the corresponding Canadian insider reporting requirements are longer. As a foreign private issuer, the Corporation is exempt from the rules and regulations under the U.S. Exchange Act related to the furnishing and content of proxy statements. The Corporation is also exempt from Regulation FD, which prohibits issuers from making selective disclosures of material non-public information. While the Corporation complies with the corresponding requirements relating to proxy statements and disclosure of material non-public information under Canadian securities laws, these requirements differ from those under the U.S. Exchange Act and Regulation FD and shareholders should not expect to receive the same information at the same time as such information is provided by U.S. domestic companies. In addition, the Corporation may not be required under the U.S. Exchange Act to file annual and quarterly reports with the SEC as promptly as U.S. domestic companies whose securities are registered under the U.S. Exchange Act. In addition, as a foreign private issuer, the Corporation has the option to follow certain Canadian corporate governance practices, except to the extent that such laws would be contrary to U.S. securities laws, and provided that the Corporation disclose the requirements it is not following and describe the Canadian practices it follows instead. The Corporation has elected to follow home country practices in Canada with regard to certain corporate governance matters. As a result, the Corporation's shareholders may not have the same protections afforded to shareholders of U.S. domestic companies that are subject to all corporate governance requirements.

The Corporation may lose its foreign private issuer status in the future, which could result in significant additional costs and expenses to the Corporation.

In order to maintain its status as a foreign private issuer, a majority of the Corporation's common shares must be either directly or indirectly owned by non-residents of the U.S. unless the Corporation also satisfies one of the additional requirements necessary to preserve this status. The Corporation may in the future lose its foreign private issuer status if a majority of its common shares are held in the U.S. and if the Corporation fails to meet the additional requirements necessary to avoid loss of its foreign private issuer status. The regulatory and compliance costs under U.S. federal securities laws as a U.S. domestic issuer may be significantly more than the costs incurred as a Canadian foreign private issuer. If the Corporation is not a foreign private issuer, it would not be eligible to use the MJDS or other foreign issuer forms and would be required to file periodic and current reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer,

and would be required to file financial statements prepared in accordance with United States generally accepted accounting principles. In addition, the Corporation may lose the ability to rely upon exemptions from Nasdaq corporate governance requirements that are available to foreign private issuers.

The Corporation relies upon certain accommodations available to it as an "emerging growth company."

The Corporation is an "emerging growth company" as defined in section 3(a) of the U.S. Exchange Act (as amended by the JOBS Act, enacted on April 5, 2012), and the Corporation will continue to qualify as an emerging growth company until the earliest to occur of: (a) the last day of the fiscal year during which the Corporation has total annual gross revenues of US$1,235,000,000 (as such amount is indexed for inflation every five years by the SEC) or more; (b) the last day of the fiscal year of the Corporation following the fifth anniversary of the date of the first sale of common equity securities of the Corporation pursuant to an effective registration statement under the U.S. Securities Act; (c) the date on which the Corporation has, during the previous three year period, issued more than US$1,000,000,000 in non- convertible debt; and (d) the date on which the Corporation is deemed to be a "large accelerated filer", as defined in Rule 12b-2 under the U.S. Exchange Act. The Corporation will qualify as a large accelerated filer (and would cease to be an emerging growth company) at such time when on the last business day of its second fiscal quarter of such year the aggregate worldwide market value of its common equity held by non-affiliates will be US$700,000,000 or more. For so long as the Corporation remains an emerging growth company, it is permitted to and intends to rely upon exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act. The Corporation cannot predict whether investors will find the common shares less attractive because the Corporation relies upon certain of these exemptions. If some investors find the common shares less attractive as a result, there may be a less active trading market for the common shares and the Common Share price may be more volatile. On the other hand, if the Corporation no longer qualifies as an emerging growth company, the Corporation would be required to divert additional management time and attention from the Corporation's development and other business activities and incur increased legal and financial costs to comply with the additional associated reporting requirements, which could negatively impact the Corporation's business, financial condition, and results of operations.

Our operations could be adversely affected by events outside of our control, such as natural disasters, wars or health epidemics.

We may be impacted by business interruptions resulting from pandemics and public health emergencies, including those related to geopolitical actions, including war and terrorism or natural disasters including earthquakes, typhoons, floods, and fires. An outbreak of infectious disease, a pandemic or a similar public health threat or a fear of any of the foregoing, could adversely impact us by causing operating, manufacturing supply chain, clinical trial and project development delays and disruptions, labour shortages, travel and shipping disruption and shutdowns (including as a result of government regulation and prevention measures). It is unknown whether and how we may be affected if such an epidemic persists for an extended period of time. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results, and financial condition.

Adverse developments affecting the financial services industry, such as actual events or concerns involving liquidity, defaults, or non-performance by financial institutions or transactional counterparties, could adversely affect the Corporation's current and projected business operations and its financial condition and results of operations. Actual events involving limited liquidity, defaults, non-performance or other adverse developments that affect financial institutions, transactional counterparties or other companies in the financial services industry or the financial services industry generally, or concerns or rumors about any events of these kinds or other similar risks, have in the past and may in the future lead to market-wide liquidity problems.

Failure to meet regulatory or ethical expectations on environmental impact, including climate change.

Environmental issues will become more material in the marketplace as the wider healthcare system embraces net-zero climate targets. The environmental targets and performance of our business will come under increased scrutiny by investors, governments, and non-governmental organizations. Environmental considerations are starting to become embedded in the public procurement of goods and services, including medicinal products and devices. Specific intermediates used to manufacture medicines, or those used in excipients or propellants, are coming under increased regulation and some may be subject to time-limited exemptions or potential phase-out. The physical impacts of climate change could impact the resilience of our business operations and supply chain.

Our operations could be adversely affected by macroeconomic risks

In recent years, economies and markets have faced the phenomenon of inflation, the control of which is the focus of all regulatory institutions around the world. Towards the end of the year 2023 the inflation rate fell and increases in the benchmark interest rate have been halted, but the lag effect impact is still of concern. Inflation represents a significant risk to macroeconomic stability; it results in rising energy and commodity costs, and global equity and capital markets may experience significant volatility and weakness. These factors could have a material adverse effect on our business, operating results, and financial condition.

Exhibit 15.2

CARDIOL THERAPEUTICS INC.
(THE "CORPORATION")

AUDIT COMMITTEE CHARTER

1. POLICY STATEMENT

It is the policy of the Corporation to establish and maintain an Audit Committee (the "Committee") to assist the directors (individually a "Director" and collectively the "Board") of the Corporation in carrying out the Board's oversight responsibility for the accounting, internal controls, financial reporting, audits of financial statements, and risk management processes of the Corporation.

The Committee shall be provided with resources commensurate with the duties and responsibilities assigned to it by the Board including appropriate administrative support. Without limiting the generality of the foregoing, the Corporation shall provide for appropriate funding, as determined by the Committee in its capacity as a committee of the Board, for payment of: (a) compensation to any registered public accounting firm engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Corporation; (b) compensation to any advisors engaged by the Committee under Section 4(c)(iii) of this charter; and (c) ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

If determined appropriate by the Committee, it shall have the discretion to institute investigations of improprieties, or suspected improprieties, within the scope of its responsibilities, including the standing authority to retain special counsel or other experts. The Committee shall have unrestricted access to the Corporation's External Auditors, is authorized to seek any information that it requires from any employee and all employees are directed to co-operate with any request made by the Committee.

2. COMPOSITION OF COMMITTEE

(a) The Committee shall be established by a resolution of the Board. The Committee shall consist of a minimum of three Directors. The Board shall appoint the members of the Committee and may seek the advice and assistance of the Corporate Governance Committee in identifying qualified candidates. The Board shall appoint one member of the Committee to be the chair of the Committee (the "Chair").

(b) All of the members of the Committee shall be Directors who are independent within the meaning of National Instrument 52-110 – Audit Committees ("NI 52-110"), and the rules of any stock exchange or market on which the Corporation's shares are listed or posted for trading (collectively, "Applicable Governance Rules"). In this charter, the term "independent" includes the meanings given to similar terms by Applicable Governance Rules, including the terms "non-executive", "outside" and "unrelated" to the extent such terms are applicable under Applicable Governance Rules. No member of the Committee shall have participated in the preparation of the financial statements of the Corporation or any current subsidiary of the Corporation at any time during the past three years. In addition, in order to be considered to be independent, a member of the Committee may not, other than in his or her capacity as a member of the Committee, the Board or any other Board committee: (i) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the Corporation or any subsidiary thereof, provided that, unless the rules of any stock exchange or market on which the Corporation's shares are listed or posted for trading provide otherwise, compensatory fees do not include the receipt of fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the Corporation (provided that such compensation is not contingent in any way on continued service); or (ii) be an affiliated person of the Corporation or any subsidiary thereof.

(c) All members of the Committee must be able to read and understand fundamental financial statements (including a balance sheet, income statement and cash flow statement) and read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and level of

complexity of the issues that can reasonably be expected to be raised by the Corporation's financial statements.

(d) The Committee must have at least one member who has past employment in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in that individual's financial sophistication, including being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities.

(e) A Director appointed by the Board to the Committee shall be a member of the Committee until replaced by the Board or until his or her resignation.

3. MEETINGS OF THE COMMITTEE

(a) The Committee shall convene a minimum of four times each year at such times and places as may be determined by the Chair of the Committee and whenever a meeting is requested by the Board, a member of the Committee, the auditors or senior management of the Corporation. Scheduled meetings of the Committee shall correspond with the review of the quarterly and year-end financial statements and management discussion and analysis.

(b) Notice of each meeting of the Committee shall be given to each member of the Committee.

(c) Notice of a meeting of the Committee shall:

(i) be in writing, which includes electronic communication facilities;

(ii) state the nature of the business to be transacted at the meeting in reasonable detail;

(iii) to the extent practicable, be accompanied by a copy of any documentation to be considered at the meeting; and

(iv) be given at least two business days prior to the time stipulated for the meeting or such shorter period as the members of the Committee may permit.

(d) A quorum for the transaction of business at a meeting of the Committee shall consist of a majority of the members of the Committee. However, it shall be the practice of the Committee to require review, and, if necessary, approval of important matters by all members of the Committee.

(e) A member or members of the Committee may participate in a meeting of the Committee by means of such telephonic, electronic, or other communication facilities as permits all persons participating in the meeting to communicate with each other. A member participating in such a meeting by any such means is deemed to be present at the meeting.

(f) In the absence of the Chair of the Committee, the members of the Committee shall choose one of the members present to chair the meeting. In addition, the members of the Committee shall choose one of the persons present to be the secretary of the meeting.

(g) The Committee may invite such persons to attend meetings of the Committee as the Committee considers appropriate, except to the extent exclusion of certain persons is required pursuant to this charter or by applicable laws.

(h) The Committee may invite the External Auditors to be present at any meeting of the Committee and to comment on any financial statements, or on any of the financial aspects, of the Corporation.

(i) The Committee (A) shall meet with the External Auditors separately from individuals other than the Committee, and (B) may meet separately with management of the Corporation.

(j) Minutes shall be kept of all meetings of the Committee and shall be signed by the chair and the secretary of the meeting. The Chair of the Committee shall circulate the minutes of the meetings of the Committee to all members of the Board.

4. DUTIES AND RESPONSIBILITIES OF THE COMMITTEE

(a) The Committee, in its capacity as a committee of the Board, is directly responsible for selecting the public accounting firm to be nominated for the purpose of preparing or issuing an audit report or performing other audit, review or attest services forthe Corporation (the "External Auditor") as well as the compensation of the External Auditor. The Committee shall also be directly responsible for the oversight of the work of the External Auditor (including resolution of disagreements between management and the auditor regarding financial reporting) and each such External Auditor must report directly to the Committee.

(b) The other primary duties and responsibilities of the Committee are to:

(i) identify and monitor the management of the principal risks that could impact the financial reporting of the Corporation;

(ii) monitor the integrity of the Corporation's financial reporting process and system of internal controls regarding financial reporting and accounting compliance;

(iii) monitor the independence, objectivity, and performance of the External Auditors, including, without limitation: (A) ensuring the Committee's receipt from the External Auditors at least annually of a formal written statement delineating all relationships between the External Auditors and the Corporation; (B) actively engaging in dialogue with the External Auditors with respect to any disclosed relationships or services that may impact the objectivity and independence of the External Auditor; and (C) taking, or recommending that the Board take, appropriate action to oversee the independence of the External Auditors;

(iv) evaluate the performance of the External Auditors at least annually; deal directly with the External Auditors to approve external audit plans, other services (if any), and fees;

(v) directly oversee the external audit process and results (in addition to items described in Section 4(e) below);

(vi) provide an avenue of communication between the External Auditors, management, and the Board;

(vii) review annually with management of the Corporation the anti-fraud, anti-bribery, anti-corruption, and risk assessment programs of the Corporation;

(viii) carry out a review designed to ensure that an effective "whistle blowing" procedure exists to permit stakeholders to express any concerns regarding accounting or financial matters to an appropriately independent individual; and

(c) The Committee shall have the authority to:

(i) inspect any and all of the books and records of the Corporation and its subsidiaries;

(ii) discuss with the management of the Corporation and its subsidiaries, any affected party and the External Auditors, such accounts, records, and other matters as any member of the Committee considers appropriate;

(iii) engage independent counsel and other advisors as it determines necessary to

carry out its duties; and

(iv) set and pay the compensation for any advisors engaged by the Committee.

Relationship with the Board

(d) The Committee shall, at the earliest opportunity after each meeting, report to the Board the results of its activities and any reviews undertaken and make recommendations to the Board as considered appropriate.

Relationship with External Auditors

(e) The Committee shall:

(i) review the audit plan with the External Auditors and with management;

(ii) review with the External Auditors the critical accounting policies and practices used by the Corporation, all alternative treatments of financial information within IFRS that the External Auditors have discussed with management, the ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the External Auditors;

(iii) discuss with management and the External Auditors any proposed changes in major accounting policies or principles, the presentation and impact of material risks and uncertainties and key estimates and judgments of management that may be material to financial reporting;

(iv) review with management and with the External Auditors material financial reporting issues arising during the most recent financial period and the resolution or proposed resolution of such issues;

(v) review any problems experienced or concerns expressed by the External Auditors in performing any audit, including any restrictions imposed by management or any material accounting issues on which there was a disagreement with management;

(vi) review with the External Auditors any accounting adjustments that were noted or proposed by the independent auditor but that were "passed" (as immaterial or otherwise), any communications between the audit team and the External Auditor's national office respecting auditing or accounting issues presented by the engagement, any "management" or "internal control" letter or schedule of unadjusted differences issued, or proposed to be issued, by the External Auditors to the Corporation, or any other material written communication provided by the External Auditors to the Corporation's management;

(vii) review with senior management the process of identifying, monitoring, and reporting the principal risks affecting financial reporting;

(viii) review and discuss with management and the External Auditors any off-balance sheet transactions or structures and their effect on the Corporation's financial results and operations, as well as the disclosure regarding such transactions and structures in the Corporation's public filings;

(ix) review the audited annual financial statements (including management discussion and analysis) and related documents in conjunction with the report of the External Auditors and obtain an explanation from management of all material variances between comparative reporting periods;

(x) consider and review with management the internal control memorandum or management letter containing the recommendations of the External Auditors and management's response, if any, including an evaluation of the adequacy and effectiveness of the internal financial controls and procedures for financial reporting of the Corporation and subsequent follow-up to any identified weaknesses;

(xi) review with financial management and the External Auditors the quarterly unaudited financial statements and management discussion and analysis before release to the public;

(xii) periodically meet separately with management and the External Auditors;

(xiii) oversee the financial affairs of the Corporation and its subsidiaries and, if deemed appropriate, make recommendations to the Board, External Auditors, or management;

(xiv) discuss with management and the External Auditors any correspondence with regulatory or governmental agencies that raise material issues regarding the Corporation's financial statements or accounting policies;

(xv) consider the recommendations of management in respect of the appointment and terms of engagement of the External Auditor;

(xvi) pre-approve all audit and non-audit services to be provided to the Corporation or its subsidiaries by its External Auditors, or the External Auditors of subsidiaries of the Corporation, subject to the overriding principle that the External Auditors not be permitted to be retained by the Corporation to perform internal audit outsourcing services or financial information systems services; provided that notwithstanding the above, the foregoing pre-approval of non-audit services may be delegated to a member of the Committee, with any decisions of the member with the delegated authority reporting to the Committee at the next scheduled meeting;

(xvii) approve the engagement letter for non-audit services to be provided by the External Auditors or affiliates of External Auditors, together with estimated fees, and consider the potential impact of such services on the independence of the External Auditors;

(xviii) when there is to be a change of External Auditors, review all issues and provide documentation related to the change, including the information to be included in the notice of change of auditors and documentation required pursuant to the then current legislation, rules, policies and instruments of applicable regulatory authorities and the planned steps for an orderly transition period; and

(xix) review all reportable events, including disagreements, unresolved issues and consultations, as defined by applicable laws, on a routine basis, whether or not there is to be a change of the External Auditors.

(f) In connection with the public disclosure of financial information and other public disclosure, the Committee shall:

(i) review the Corporation's financial statements, management discussion and analysis, and annual and interim profit or loss press releases before the Corporation publicly discloses this information;

(ii) review with management its evaluation of the Corporation's procedures and controls designed to assure that information required to be disclosed in the Corporation's periodic public reports is recorded, processed, summarized, and reported in such reports within the time periods specified by applicable securities

laws for the filing of such reports ("Disclosure Controls") and consider whether any changes are appropriate in light of management's evaluation of the effectiveness of such Disclosure Controls;

(iii) establish a policy, which may include delegation to an appropriate member or members of management, for release of earnings press releases, as well as for the release of financial information and earnings guidance provided to analysts and rating agencies;

(iv) satisfy itself that adequate procedures are in place for the review of the Corporation's public information extracted from the Corporation's financial statements, other than the public information reviewed in accordance with Section 4(f)(i), and periodically assess the adequacy of those procedures;

(v) to the extent deemed appropriate, review and supervise the preparation by management of:

(A) the annual information forms, management information circulars, and annual and interim financial statements of the Corporation and any other information of the Corporation filed by the Corporation with applicable securities regulators;

(B) press releases of the Corporation containing financial information, earnings guidance, forward-looking statements, information about operations, or any other material information;

(C) correspondence broadly disseminated to shareholders of the Corporation; and

(D) other relevant written and oral communications or presentations;

(vi) before release, review and if appropriate, recommend for approval by the Board, all public disclosure documents containing audited or unaudited financial information, including any prospectuses, annual reports, annual information forms, management discussion and analysis, and press releases, focusing particularly on:

(A) any changes in accounting policies and practices;

(B) any important areas where judgment must be exercised;

(C) significant adjustments resulting from the audit;

(D) the going concern assumption, if any;

(E) compliance with accounting standards; and

(F) compliance with stock exchange and legal requirements.

(g) The Committee shall enquire into and determine the appropriate resolution of any conflict of interest in respect of audit or financial matters which are directed to the Committee by any member of the Board, a shareholder of the Corporation, the External Auditors, or senior management.

(h) The Committee shall periodically review with management the need for an internal audit function.

(i) The Committee shall review the accounting and reporting of costs, liabilities, and contingencies of the Corporation.

(j) The Committee shall periodically discuss with management the Corporation's major financial risk exposures and the steps management has taken to monitor and control such exposures.

(k) The Committee shall establish, monitor, and review policies and procedures for internal accounting, financial control, and management information.

(l) The Committee shall periodically discuss with management the Corporation's process for performing its quarterly certifications pursuant to Multilateral Instrument 52-109 – Certification of Disclosure in Issuers' Annual and Interim Filings and the U.S. Sarbanes- Oxley Act.

(m) The Committee shall review with the Chief Executive Officer and Chief Financial Officer of the Corporation any report on significant deficiencies in the design or operation of the internal controls that could adversely affect the Corporation's ability to record, process, summarize, or report financial data, any material weaknesses in internal controls identified to the auditors, and any fraud, whether or not material, that involves management or other employees who have a significant role in the Corporation's internal controls.

(n) The Committee shall establish and maintain procedures for:

(i) the receipt, retention, and treatment of complaints received by the Corporation regarding accounting, internal accounting controls, or auditing matters;

(ii) the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters; and

(iii) reviewing arrangements by which staff of the Corporation may, in confidence, raise concerns about possible improprieties in matters of financial reporting and ensuring that arrangements are in place for proportionate and independent investigation and follow-up action.

(o) At each meeting of the Committee, the Committee shall review any complaints or concerns of employees of the Corporation regarding accounting, internal accounting controls, or auditing matters relating to the Corporation and violations of any applicable law, rule, or regulation and shall follow the procedures established under the Corporation's Whistleblower Policy regarding such concerns and complaints.

(p) The Committee shall review all related-party transactions and discuss the business rationale for these transactions and determine whether appropriate disclosures have been made. For this purpose, the term "related-party transactions" includes any "material transaction" required to be disclosed under Item 13 of Form 51-102F2 under National Instrument 51-102 – Continuous Disclosure Obligations.

(q) The Committee shall review the Corporation's compliance and ethics programs, including consideration of legal and regulatory requirements, and shall review with management its periodic evaluation of the effectiveness of such programs.

(r) The Committee shall review and approve the Corporation's hiring policies regarding partners, employees, and former partners and employees of the present and former External Auditors.

(s) The Committee shall receive any reports from legal counsel of evidence of a material violation of securities laws or breaches of fiduciary duty by the Corporation.

(t) The Committee shall review with the Corporation's legal counsel, on no less than an annual basis, any legal matter that could have a material impact on the Corporation's financial statements and any enquiries received from regulators or government agencies.

(u) The Committee shall assess, on an annual basis, the adequacy of this charter and the performance of the Committee.

Approved September 7, 2018
Revised July 28, 2021

Exhibit 15.3

CARDIOL THERAPEUTICS INC.
(THE "CORPORATION")

CORPORATE GOVERNANCE AND COMPENSATION
COMMITTEE CHARTER

A. PURPOSE

The overall purpose of the Corporate Governance and Compensation Committee (the "**Committee**") is two-fold: (a) to advise and make recommendations to the Board of Directors of the Corporation (the "**Board**") on the Corporation's strategy, policies and programs relating to the compensation and development of senior management and directors with a view to recruiting and retaining individuals of the highest calibre; and (b) to provide a focus on corporate governance that will enhance corporate performance, and to ensure on behalf of the Board and shareholders that the corporate governance system is effective in the discharge of its obligations to the Corporation's stakeholders.

B. COMPOSITION, PROCEDURES AND ORGANIZATION

1. The Board, at its organizational meeting held in conjunction with each annual meeting of the shareholders, shall appoint the members of the Committee and the Chair of the Committee for the ensuing year. The Board may at any time remove or replace any member of the Committee and may fill any vacancy in the Committee.

2. The Committee shall consist of at least three members of the Board, a majority of whom shall be independent as defined under National Instrument 52-110 – *Audit Committees* and applicable stock exchange rules and who shall have relevant skills and/or experience in the Committee's areas of responsibility. In determining the independence of any member of the Committee, the Board must consider all factors specifically relevant to determining whether a director has a relationship to the Corporation which is material to that director's ability to be independent from management in connection with the duties of a Committee member, including, but not limited to: (i) the source of compensation of such director, including any consulting, advisory or other compensatory fee paid by the Corporation to such director; and (ii) whether such director is affiliated with the Corporation, a subsidiary of the Corporation or an affiliate of a subsidiary of the Corporation.

3. If the Chair is not present at any meeting of the Committee, one of the other members of the Committee present at the meeting shall be chosen by the Committee to preside at the meeting.

5. The Committee shall meet regularly each year on such dates and at such locations as the Chair of the Committee shall determine and may also meet at any other time or times on the call of the Chair of the Committee or any two of the other members.

6. The quorum for meetings shall be a majority of the members of the Corporation, present in person or by telephone or other telecommunication device that permits all persons participating in the meeting to speak and to hear eachother.

7. The Chief Executive Officer (the "**CEO**") of the Corporation shall be available to advise the Committee, shall receive notice of all meetings of the Committee and may attend meetings at the invitation of the Chair of the Committee.

8. Notice of the time and place of every meeting shall be given in writing or by e-mail or facsimile communication to each member of the Committee at least 24 hours prior to the time fixed for such meeting; provided, however, that a member may in any manner waive a notice of a meeting and attendance of a member at a meeting is a waiver of notice of the meeting, except where a member attends a meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

9. The Chair shall develop and set the Committee's agenda, in consultation with other members of the Committee, the Board and senior management. The agenda and information concerning the business to be conducted at each Committee meeting shall, to the extent practical, be communicated to the members of the Committee sufficiently in advance of each meeting to permit meaningful review.

10. The Committee shall have the power to delegate its authority and duties to subcommittees or individual members of the Committee as it considers appropriate.

11. In discharging its responsibilities, the Committee shall have full access to all books, records, facilities and personnel of the Corporation.

12. At the invitation of the Chair, one or more officers or employees of the Corporation may, and if required by the Committee shall, attend a meeting, or portion of a meeting, of the Committee.

13. The Committee shall fix its own procedure at meetings and keep records of its proceedings. The Committee is accountable to the Board and shall report to the Board when the Committee may deem appropriate (but not later than the next meeting of the Board).

14. The Committee, when it considers it necessary or advisable in its sole discretion, may retain compensation consultants, legal counsel or other advisors to assist or advise the Committee independently on any matter within its mandate; PROVIDED THAT prior to formally engaging each such advisor, the Chair shall notify management of its intention, in order to confirm that there would be no conflicts or other reasonable grounds for not engaging such advisor.

15. The Committee shall be directly responsible for the appointment, compensation and oversight of the work of any compensation consultant, legal counsel and other advisor retained by the Committee.

16. The Corporation must provide for appropriate funding, as determined by the Committee, for payment of reasonable compensation to a compensation consultant, legal counsel or any other advisor retained by the Committee.

17. The Committee may select, or receive advice from, a compensation consultant, legal counsel or other advisor to the Committee, other than in-house legal counsel, only after taking into consideration the following factors:

    a. The provision of other services to the Corporation by the person that employs the compensation consultant, legal counsel or other advisor;

b. The amount of fees received from the Corporation by the person that employs the compensation consultant, legal counsel or other advisor, as a percentage of the total revenue of the person that employs the compensation consultant, legal counsel or other advisor;

c. The policies and procedures of the person that employs the compensation consultant, legal counsel or other advisor that are designed to prevent conflicts of interest;

d. Any business or personal relationship of the compensation consultant, legal counsel or other advisor with a member of the Committee;

e. Any securities of the Corporation owned by the compensation consultant, legal advisor or other advisor; and

f. Any business or personal relationship of the compensation consultant, legal advisor or other advisor or the person employing the advisor with an executive officer of the Corporation.

18. The CEO may not be present during voting or deliberations on his or her compensation.

C. DUTIES AND RESPONSIBILITIES

Within the scope of its overall purpose, the duties and responsibilities of the Committee shall be as follows:

1. to review the adequacy and form of compensation for senior management and ensure that the compensation realistically reflects the risks and responsibilities of such positions;

2. to review and recommend to the Board for approval policies relating to compensation of the Corporation's senior management and directors;

3. to establish a process for the Board to review and approve on an annual basis, the strategic plan for the following year which takes into account the key risks and opportunities of the business and overall corporate priorities.

4. In conjunction with the Audit Committee, ensure principal risks to the business are identified and appropriate systems are in place to manage these risks.

5. to review and approve the corporate goals and objectives relevant to the CEO's compensation, evaluate, on an annual basis, the CEO's performance in light of those goals and objectives and recommend to the Board the CEO's compensation based on this evaluation and in the context of the Corporation's strategic objectives;

6. review the performance of the members of senior management and approve the amount and composition of compensation to be paid to the members of senior management;

7. to review and approve senior management succession and development plans;

8. to establish a process to recognize the skills and experiences of current board members as well as a process to nominate new board members, reflecting the existing board

competencies and the skills a new nominee will bring to the boardroom.

9. to establish a process to review and assess individual board and senior management members regarding his/her effectiveness and contribution.

10. to provide continuing education for all directors to ensure their knowledge and understanding of the business remains current

11. to review and make recommendations to the Board with respect to benefits, stock option and other incentive plans for senior management;

12. to review the adequacy and form of compensation for the directors and ensure that the compensation realistically reflects the responsibilities and risks of such positions and fix the amount and composition of such compensation;

13. to review and assess the design and competitiveness of the Corporation's employment agreements, including the severance and change of control provisions;

14. to review and approve the executive compensation disclosure in the Corporation's management proxy circular;

15. to develop and monitor the overall approach to corporate governance issues and, subject to approval by the Board, to implement and administer a system of corporate governance which reflects superior standards of corporate governance practices;

16. to report annually to the shareholders, through the annual management proxy circular or annual report to shareholders, on the Corporation's system of corporate governance and the operation of its system of governance, having reference to National Policy 58-201 - *Corporate Governance Guidelines*; and

17. to report regularly to the Board on the Committee's activities andfindings.

D. Committee and Charter Review

The Committee will conduct an annual review and assessment of this charter and its calendar of activities, taking into account all legislative and regulatory requirements applicable to the Committee, as well as any best practice guidelines recommended by regulators or the exchange on which the securities of the Corporation are then listed, as well as the effectiveness of the Committee on an annual basis and recommend such changes as may be considered necessary for approval by the Board.

Approved October 22, 2018
Revised December 3, 2019
Revised September 16, 2020
Revised July 28, 2021

APPENDIX A
COMPENSATION AND CORPORATE GOVERNANCE COMMITTEE
CALENDAR OF ACTIVITIES 2021

	Matter	Feb	June	Nov
1	Approve Minutes of Previous Meetings	X	X	X
2	Review of Performance and Compensation for CEO	X		
3	Review of Compensation for Senior Management	X		
4	Review of Directors' Compensation		X	
5	Review and Approve Corporate Goals and Objectives for 2021	X		
6	Review Approve Compensation Framework, Policies, Guidelines and Programs, Stock Option Plan etc		X	
7	Review of Employment Agreements			X
8	Report on Succession Planning		X	
9	Approve Disclosure of Executive Compensation in Management Information Circular	X		X
10	Discussion of Human Resource and Compensation Issues, Needs and Trends		X	
11	Review Calendar of Activities	X		
12	Review Charter			X
13	Recommend annual stock option grant	X		
14	Review process for Annual Strategic Plan creation & approval	X	X	
15	Review and Update Director Nomination Process			X
16	Review and Update Board Skills Matrix			X
17	Document Continuing Education topics for Board Members			X
18	Document Risk Management Process and Protocol		X	
19	Develop Process and template for individual Board and Management Assessments		X	
20	Review Code of Business Conduct, Whistle Blower Policies		X	
21	Matrix to checklist all 58-201 polices to ensure compliance	X	X	X

Exhibit 15.4

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BDO Canada LLP
360 Oakville Place Drive, Suite 500
Oakville, Ontario
L6H 6K8

Consent of Independent Registered Public Accounting Firm

Cardiol Therapeutics Inc
Oakville, Canada

We hereby consent to the incorporation by reference in Registration Statements on Form F-10 (File No.333-262342) and Forms S-8 (File No. 333-258940 and No.333-262216) of Cardiol Therapeutics Inc. of our report dated April 1, 2024, relating to the consolidated financial statements which appear in this Annual Report on Form 20-F.

/s/ BDO Canada LLP

BDO Canada LLP
Chartered Professional Accountants, Licensed Public Accountants
Oakville, Canada
April 1, 2024

Exhibit 97.1

CARDIOL THERAPEUTICS INC.

The Board of Directors (the "Board") of Cardiol Therapeutics Inc. (the "Company") has adopted the following Dodd-Frank Clawback Policy (this "Policy"), effective as of October 2, 2023 (the "Effective Date").

1. Purpose. The purpose of this Policy is to provide for the recoupment of certain incentive compensation pursuant to Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, in the manner required by Section 10D of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), Rule 10D-1 promulgated thereunder, and the Applicable Listing Standards (as defined below) (collectively, the "Dodd-Frank Rules").

2. Administration. This Policy shall be administered by the Corporate Governance and Compensation Committee (the "CG&CC"). Any determinations made by the CG&CC shall be final and binding on all affected individuals.

3. Definitions. For purposes of this Policy, the following capitalized terms shall have the meanings set forth below.

(a) "***Accounting Restatement***" shall mean an accounting restatement of the Company's financial statements due to the material noncompliance of the Company with any financial reporting requirement under the securities laws, including any required accounting restatement (i) to correct an error in previously issued financial statements that is material to the previously issued financial statements (*i.e.,* a "Big R" restatement), or (ii) that corrects an error that is not material to previously issued financial statements, but that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period (*i.e.,* a "little r" restatement).

(b) "***Affiliate***" shall mean each entity that directly or indirectly controls, is controlled by, or is under common control with the Company.

(c) "***Applicable Listing Standards***" shall mean Nasdaq Listing Rule 5608.

(d) "***Clawback Eligible Incentive Compensation***" shall mean Incentive-Based Compensation Received by a Covered Executive (i) on or after the Effective Date, (ii) after beginning service as a Covered Executive, (iii) if such individual served as a Covered Executive at any time during the performance period for such Incentive-Based Compensation (irrespective of whether such individual continued to serve as a Covered Executive upon or following the Restatement Trigger Date), (iv) while the Company has a class of securities listed on a national securities exchange or a national securities association, and (v) during the applicable Clawback Period. For the avoidance of doubt, Incentive-Based Compensation Received by a Covered Executive on or after the Effective Date could, by the terms of this Policy, include amounts approved, awarded, or granted prior to such Effective Date.

(e) "***Clawback Period***" shall mean, with respect to any Accounting Restatement, the three completed fiscal years of the Company immediately preceding the Restatement Trigger Date and any transition period (that results from a change in the Company's fiscal year) within or immediately following those three completed fiscal years (except that a transition period between the last day of the Company's previous fiscal year end and the first day of its new fiscal year that comprises a period of at least nine months shall count as a completed fiscal year).

(f) "***Company Group***" shall mean the Company and its Affiliates.

(g) "***Covered Executive***" shall mean any "executive officer" of the Company as defined under Applicable Listing Standards.

(h) "***Erroneously Awarded Compensation***" shall mean the amount of Clawback Eligible Incentive Compensation that exceeds the amount of Incentive-Based Compensation that otherwise would have been Received had it been determined based on the restated amounts, computed without regard to any taxes paid. With respect to any compensation plan or program that takes into account Incentive-Based Compensation, the amount contributed to a notional account that exceeds the amount that otherwise would have been contributed had it been determined based on the restated amount, computed without regard to any taxes paid, shall be considered Erroneously Awarded Compensation, along with earnings accrued on that notional amount.

(i) "***Exchange****"* shall mean The Nasdaq Stock Market.

(j) "***Financial Reporting Measures***" shall mean measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and all other measures that are derived wholly or in part from such measures. Share price and total shareholder return (and any measures that are derived wholly or in part from share price or total shareholder return) shall for purposes of this Policy be considered Financial Reporting Measures. For the avoidance of doubt, a measure need not be presented in the Company's financial statements or included in a filing with the U.S. Securities and Exchange Commission (the "SEC") in order to be considered a Financial Reporting Measure.

(k) "***Incentive-Based Compensation***" shall mean any compensation that is granted, earned or vested based wholly or in part upon the attainment of a Financial Reporting Measure.

(l) "***Received***" shall mean the deemed receipt of Incentive-Based Compensation. Incentive-Based Compensation shall be deemed received for this purpose in the Company's fiscal period during which the Financial Reporting Measure specified in the applicable Incentive-Based Compensation award is attained, even if payment or grant of the Incentive-Based Compensation occurs after the end of that period.

(m) "***Restatement Trigger Date***" shall mean the earlier to occur of (i) the date the Board, a committee of the Board, or the officer(s) of the Company authorized to take such action if Board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare an Accounting Restatement, or (ii) the date a court, regulator or other legally authorized body directs the Company to prepare an Accounting Restatement.

4. Recoupment of Erroneously Awarded Compensation. Upon the occurrence of a Restatement Trigger Date, the Company shall recoup Erroneously Awarded Compensation reasonably promptly, in the manner described below. For the avoidance of doubt, the Company's obligation to recover Erroneously Awarded Compensation under this Policy is not dependent on if or when restated financial statements are filed following the Restatement Trigger Date.

(a) ***Process.*** The CG&CC shall use the following process for recoupment:

(i) First, the CG&CC will determine the amount of any Erroneously Awarded Compensation for each Covered Executive in connection with an Accounting Restatement. For

Incentive-Based Compensation based on (or derived from) share price or total shareholder return where the amount of Erroneously Awarded Compensation is not subject to mathematical recalculation directly from the information in the applicable Accounting Restatement, the amount shall be determined by the CG&CC based on a reasonable estimate of the effect of the Accounting Restatement on the share price or total shareholder return upon which the Incentive-Based Compensation was Received (in which case, the Company shall maintain documentation of such determination of that reasonable estimate and provide such documentation to the Exchange).

(ii) Second, the CG&CC will provide each affected Covered Executive with a written notice stating the amount of the Erroneously Awarded Compensation, a demand for recoupment, and the means of recoupment that the Company will accept.

(b) ***Means of Recoupment.*** The CG&CC shall have discretion to determine the appropriate means of recoupment of Erroneously Awarded Compensation, which may include without limitation: (i) recoupment of cash or Company shares, (ii) forfeiture of unvested cash or equity awards (including those subject to service-based and/or performance-based vesting conditions), (iii) cancellation of outstanding vested cash or equity awards (including those for which service-based and/or performance-based vesting conditions have been satisfied), (iv) to the extent consistent with Section 409A of the Internal Revenue Code of 1986, as amended ("Section 409A"), offset of other amounts owed to the Covered Executive or forfeiture of deferred compensation, (v) reduction of future compensation, and (vi) any other remedial or recovery action permitted by law. Notwithstanding the foregoing, the Company Group makes no guarantee as to the treatment of such amounts under Section 409A, and shall have no liability with respect thereto. For the avoidance of doubt, appropriate means of recoupment may include amounts approved, awarded, or granted prior to the Effective Date. Except as set forth in Section 4(d) below, in no event may the Company Group accept an amount that is less than the amount of Erroneously Awarded Compensation in satisfaction of a Covered Executive's obligations hereunder.

(c) ***Failure to Repay.*** To the extent that a Covered Executive fails to repay all Erroneously Awarded Compensation to the Company Group when due (as determined in accordance with Section 4(a) above), the Company shall, or shall cause one or more other members of the Company Group to, take all actions reasonable and appropriate to recoup such Erroneously Awarded Compensation from the applicable Covered Executive. The applicable Covered Executive shall be required to reimburse the Company Group for any and all expenses reasonably incurred (including legal fees) by the Company Group in recouping such Erroneously Awarded Compensation.

(d) ***Exceptions.*** Notwithstanding anything herein to the contrary, the Company shall not be required to recoup Erroneously Awarded Compensation if one of the following conditions is met and the CG&CC determines that recoupment would be impracticable:

(i) The direct expense paid to a third party to assist in enforcing this Policy against a Covered Executive would exceed the amount to be recouped, after the Company has made a reasonable attempt to recoup the applicable Erroneously Awarded Compensation, documented such attempts, and provided such documentation to the Exchange;

(ii) Recoupment would violate home country law where that law was adopted prior to November 28, 2022, provided that, before determining that it would be impracticable to recoup any amount of Erroneously Awarded Compensation based on violation of home country law, the

Company has obtained an opinion of home country counsel, acceptable to the Exchange, that recoupment would result in such a violation and a copy of the opinion is provided to the Exchange; or

(iii) Recoupment would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees, to fail to meet the requirements of 26 U.S.C. 401(a)(13) or 26 U.S.C. 411(a) and regulations thereunder.

5. Reporting and Disclosure. The Company shall file all disclosures with respect to this Policy in accordance with the requirements of the Dodd-Frank Rules.

6. Indemnification Prohibition. No member of the Company Group shall be permitted to indemnify any current or former Covered Executive against (i) the loss of any Erroneously Awarded Compensation that is recouped pursuant to the terms of this Policy, or (ii) any claims relating to the Company Group's enforcement of its rights under this Policy. The Company may not pay or reimburse any Covered Executive for the cost of third-party insurance purchased by a Covered Executive to fund potential recoupment obligations under this Policy.

7. Acknowledgment. To the extent required by the CG&CC, each Covered Executive shall be required to sign and return to the Company the acknowledgement form attached hereto as Exhibit A pursuant to which such Covered Executive will agree to be bound by the terms of, and comply with, this Policy. For the avoidance of doubt, each Covered Executive will be fully bound by, and must comply with, the Policy, whether or not such Covered Executive has executed and returned such acknowledgment form to the Company.

8. Interpretation. The CG&CC is authorized to interpret and construe this Policy and to make all determinations necessary, appropriate, or advisable for the administration of this Policy. The Board intends that this Policy be interpreted consistent with the Dodd-Frank Rules.

9. Amendment; **Termination**. The Board may amend or terminate this Policy from time to time in its discretion, including as and when it determines that it is legally required to do so by any federal securities laws, SEC rule or the rules of any national securities exchange or national securities association on which the Company's securities are listed.

10. Other Recoupment Rights. The Board intends that this Policy be applied to the fullest extent of the law. The Board and/or CG&CC may require that any employment agreement, equity award, cash incentive award, or any other agreement entered into be conditioned upon the Covered Executive's agreement to abide by the terms of this Policy. Any right of recoupment under this Policy is in addition to, and not in lieu of, any other remedies or rights of recoupment that may be available to the Company Group, whether arising under applicable law, regulation or rule, pursuant to the terms of any other policy of the Company Group, pursuant to any employment agreement, equity award, cash incentive award, or other agreement applicable to a Covered Executive, or otherwise (the "Separate Clawback Rights"). Notwithstanding the foregoing, there shall be no duplication of recovery of the same Erroneously Awarded Compensation under this Policy and the Separate Clawback Rights, unless required by applicable law.

11. Successors. This Policy shall be binding and enforceable against all Covered Executives and their beneficiaries, heirs, executors, administrators or other legal representatives.

Exhibit A

CARDIOL THERAPEUTICS INC. DODD-FRANK CLAWBACK POLICY

ACKNOWLEDGEMENT FORM

By signing below, the undersigned acknowledges and confirms that the undersigned has received and reviewed a copy of the Cardiol Therapeutics Inc. Dodd-Frank Clawback Policy (the "***Policy***"). Capitalized terms used but not otherwise defined in this Acknowledgement Form (this "***Acknowledgement Form***") shall have the meanings ascribed to such terms in the Policy.

By signing this Acknowledgement Form, the undersigned acknowledges and agrees that the undersigned is and will continue to be subject to the Policy and that the Policy will apply both during and after the undersigned's employment with the Company Group. Further, by signing below, the undersigned agrees to abide by the terms of the Policy, including, without limitation, by returning any Erroneously Awarded Compensation to the Company Group reasonably promptly to the extent required by, and in a manner permitted by, the Policy, as determined by the CG&CC of the Company's Board of Directors in its sole discretion.

Sign: _____

Name: [Employee]

Date: _____