

Hemostemix Inc.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF THE RESULTS OF OPERATIONS AND FINANCIAL CONDITION

For the year ended December 31, 2023 and 2022 as at April 29, 2024

BASIS OF PRESENTATION

The following Management's Discussion and Analysis ("MD&A") covers the operations, financial position and operating results of Hemostemix Inc. (the "Company", "Hemostemix", "we", "us" or "our") for the year ended December 31, 2023 and 2022. It is intended to help readers better understand the operations and key financial results, as they are, in our opinion, at the date of this report and should be read in conjunction with the consolidated financial statements of the Company for the year ended December 31, 2023 and 2022 and the accompanying notes which have been prepared under International Financial Reporting Standards ("IFRS"). The audited annual consolidated financial statements have been reviewed by the Audit Committee of the Company and have been approved by its Board of Directors on April 29, 2024. Additional information relating to the Company is available on SEDAR+ at www.sedarplus.ca as well as the Company's website at www.hemostemix.com.

CAUTIONARY STATEMENT REGARDING FORWARD LOOKING INFORMATION

This MD&A contains certain forward-looking information and forward-looking statements, as defined in applicable securities laws (collectively referred to herein as "forward-looking statements"). These statements relate to future events or the Company's future performance. All statements other than statements of historical fact are forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "continues", "forecasts", "projects", "predicts", "intends", "anticipates" or "believes", or variations of, or the negatives of, such words and phrases, or state that certain actions, events or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those anticipated in such forward-looking statements. The forward-looking statements in this MD&A speak only as of the date of this MD&A or as of the date specified in such statement. Specifically, this MD&A includes, but is not limited to, forward-looking statements regarding:

- belief that the Company will be successful in raising additional capital to continue as a going concern;
- belief that its products and research and development efforts are targeting diseases and conditions with significant unmet medical treatment needs;
- the Company's goal of creating shareholder value;
- its ability to meet its operating costs for the twelve months ended December 31, 2024;
- belief that the results of ACP-01 research, trials and studies being equivalent to or better than previous research, trials, or studies, as well as management's expectations of positive anticipated results regarding future clinical trials for ACP-01 for other indications;
- the Company's belief that the ACP-01 technology process can be commercialized as effectively or more effectively than other technologies;
- our expectations regarding our ability to arrange for and scale up manufacturing of our products and technologies;
- the plans, costs, and timing for future research and development of the Company's stem cell technologies, including the costs and potential impact of complying with existing and proposed laws and regulations and clinical trials;

- belief that the Company's prior ACP-01 trial data will be sufficient to support regulatory submissions and approvals for additional indications such as ischemic and dilated cardiomyopathy;
- management's outlook regarding future trends;
- expectations regarding the performance of critical suppliers and service providers, including its clinical research organization ("CRO");
- expectations for additional commercialization partners;
- expectations for our ability to secure commercialization partners to develop our other technologies (NCP-01);
- expectations with respect to existing and future corporate alliances and licensing transactions with third parties, and the receipt and timing of any payments to be made by us or to us pursuant to such arrangements;
- expectations regarding the outcome of litigation;
- plans and objectives of management for future operations;
- our strategy with respect to the protection of our intellectual property ;
- final financial performance; and
- general business and economic conditions and outlook.

Various assumptions or factors are typically applied in drawing conclusions or making the forecasts or projections set out in forward-looking information. Those assumptions and factors are based on information currently available to the Company, including information obtained from third-party industry analysts and other third-party sources. In some instances, material assumptions and factors are presented or discussed elsewhere in this MD&A in connection with the statements or disclosure containing the forward-looking information. You are cautioned that the following list of material factors and assumptions is not exhaustive. The factors and assumptions include, but are not limited to, assumptions that there may be no:

- unforeseen changes in the legislative and operating framework for the business of the Company;
- unstable competitive environment; and
- significant events occurring outside the ordinary course of business such as a natural disaster or other calamity.

These statements are only predictions and involve known and unknown risks, uncertainties and other factors including the risks set out in the section entitled "Risks and Uncertainties" below, which may cause the Company's or its industry's actual results, levels of activity, performance and achievements to be materially different from any future results, levels of activity or performance expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to the following risks:

- the successful and timely completion of research and development initiatives;
- negative results from the Company's animal studies and clinical trial;
- negative results of current litigation and potential litigation that the Company may face;
- risks associated with general business, economic, competitive, political, and social uncertainties;
- general capital market conditions and market prices for securities;
- delay or failure to receive board or regulatory approvals;
- risks associated with future developments in the Company's markets and the markets in which it expects to compete;
- lack of qualified, skilled labour or loss of key individuals;
- the viability and marketability of the Company's technologies;
- the effects of government regulation on the Company's business;
- the development of superior technology by the Company's competitors;

- the failure of consumers and the medical community to accept the Company's technology as safe and effective;
- risks associated with the performance of commercial partners and critical suppliers and service providers;
- risks associated with the Company's ability to obtain and protect rights to its intellectual property;
- risks associated with the Company's ability to raise additional capital to support operations;
- reliance on third parties to plan, conduct and monitor our clinical trials;
- the potential impact that the COVID-19 pandemic may have on the Company may include a decreased demand for the services it offers and a deterioration of financial markets that could limit the Company's ability to obtain external financing; and
- other factors beyond the Company's control.

Although the Company believes that the expectations reflected in the forward-looking statements are reasonable, the Company cannot guarantee future results, levels of activity or performance. Further, any forward-looking statement speaks only as of the date on which such statement is made, and except as required by applicable law, the Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for management to predict all of such factors and to assess in advance the impact of such factors on the Company's business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement.

THE COMPANY

Hemostemix is a biotechnology Company whose principal business is to develop, manufacture and commercialize blood-derived stem cell therapies for medical conditions not adequately addressed by current treatments. Hemostemix, an entity under the Business Corporations Act (Alberta) was formed in November 2014. On November 27, 2014, shares of the Company began trading on the TSX Venture Exchange (the "Exchange") under the symbol "HEM". In October 2018, the Company was approved for listing its common shares for trading on the OTCQB Venture Market, a US trading platform that is operated by the OTC Markets Group in New York. Our shares now trade on the OTC under the symbol "HMTXF". In April 2021, the Company was approved for listing its common shares for trade on the Frankfurt Stock Exchange under the symbol "2VFO". The Company's head office is located at suite 1150, 707-7th Avenue SW, Calgary, AB T2P 3H6.

The consolidated financial statements of the Company comprise the accounts of Hemostemix, Hemostemix Quebec Inc., PreCerv Inc., Hemostemix Ltd., and Kwalata Trading Limited, the Company's wholly-owned subsidiaries. Kwalata Trading Limited ("Kwalata"), incorporated under the laws of Cyprus, was established to own our intellectual property ("IP"). On October 1, 2018 previous management structured an arrangement to sell the IP from Kwalata to Hemostemix Inc. and planned the process to wind up Kwalata. However, this transaction was not completed (see "Wholly-Owned Subsidiary"). Hemostemix Ltd., another wholly-owned subsidiary, was incorporated under the laws of Israel to conduct manufacturing and perform research and development. Effective October 1, 2017, Hemostemix Ltd. ceased operations (see "Wholly-Owned Subsidiary"). On June 14, 2022, the Company incorporated PreCerv as a wholly-owned subsidiary. PreCerv obtained a global field of use license to NCP-01 and ACP-01 to treat conditions of the central and peripheral nervous system, including but not limited to Neuropathic pain syndromes, Traumatic spinal cord injury, chronic brainstem injury, traumatic brain injury, peripheral nerve injury. On August 29, 2023, the Company incorporated Hemostemix Quebec Inc. as a wholly-owned subsidiary. Hemostemix Quebec Inc. has applied for grant funding of \$6 million, to locate production of ACP-01 in Montreal.

BUSINESS OVERVIEW

We are a clinical stage biotechnology Company with a patented stem cell technology platform whose principal business is to develop, manufacture and commercialize blood-derived stem cell therapies to treat various diseases not adequately addressed by current therapeutics. The intellectual property of the Company broadly covers synergetic cell populations that can be differentiated into angiogenic cell precursors ("ACPs", including the lead cell product ACP-01), neural cell precursors ("NCPs") and cardiomyocyte cell precursors.

CORPORATE, PRODUCT, CLINICAL TRIAL AND FINANCING UPDATE

The following items highlight the Company's activities during the years ended December 31, 2023 and any subsequent development up until the date hereof.

Corporate Update

On January 24, 2023, the Company announced the Arbitrator has dismissed Dr. Burchardt's claims for compensation and damages against the Company, set aside the Change of Control Agreement on the grounds that it was entered into in violation of Dr. Burchardt's duties as a director under sections 120 and 122 of the Business Corporations Act (Alberta), and determined that he lacked jurisdiction to consider the Burchardt stock option claims, and tort claims for defamation and interference with economic relations.

On January 26, 2023, the Company announced that Japan Patent Office issued Kwalta Trading Limited, a wholly owned subsidiary of Hemostemix Inc., a trademark registration certificate for "Your Fountain of Youth".

On January 30, 2023, the Company announced that Kwalata Trading Limited, a wholly owned subsidiary of Hemostemix Inc., had received a Statement of Grant of Protection from the Swiss Trademark Office and notice of the grant from the World Intellectual Property Organization.

On March 21, 2023, the Company closed a non-brokered private placement consisting of an aggregate of 3,812,000 units at a price of \$0.20 per Unit for gross proceeds of \$762,400. Each unit ("Unit") consisted of one common share, and one common share purchase warrant. Purchase warrants were valued at \$145,939 which entitles the holder to acquire one common share at a price of \$0.65 per common share, for a period of 24 months. In connection with the private placement, the Company paid eligible finders fees of aggregate cash finder's fees of approximately \$27,224 as well as granted 136,120 agent warrants with a fair value of \$6,709 which are exercisable for a period of 12 months from closing to acquire shares at a price of \$0.20 per share.

On March 29, 2023, the Company engaged Montreal's RobooDesign to revise and search engine optimize its website and engage with CLI and Peripheral arterial disease ("PAD") patients globally.

On June 28, 2023, the Company closed a non-brokered private placement consisting of an aggregate of 3,362,833 units at a price of \$0.12 per Unit for gross proceeds of \$403,540. Each Unit consisted of one common share, and one half of one common share purchase warrant, with each full warrant entitling the holder to acquire one common share at a price of \$0.25 per common share, for a period of 24 months. In connection with the private placement, the Company paid eligible finders fees of aggregate cash finder's fees of approximately \$19,803 as well as granted 165,027 agent warrants with a fair value of \$11,037 which are exercisable for a period of 12 months from closing to acquire common shares at a price of \$0.12 per common shares. The financing is still ongoing.

On August 8, 2023, the Company announced that they submitted for publication its retrospective cardiomyopathy study to a leading stem cell journal. The study, Safety and Outcomes Analysis: Transcatheter Implantation of Autologous Angiogenic Cell Precursors for Treatment of Cardiomyopathy, was co-authored by Jane R. Schubart PhD, Amirhossein Zare MD, Roberto M. Fernandez-de-Castro MD, MSc, Hector Rosario Figueroa MD, Ina Sarel PhD, Kelly Tuchman RN, Kaitlyn Esposito MPH, Fraser C. Henderson Sr MD, Ernst von Schwarz MD, PhD.

The Company is also pleased to announce it has prepared its CLI phase II clinical trial manuscript for publication and peer review. The CLI manuscript, **REPORT FROM A PHASE 2 PROSPECTIVE RANDOMIZED PLACEBO CONTROLLED TRIAL OF AUTOLOGOUS STEM CELLS TO TREAT PATIENTS WITH NO OPTION CRITICAL LIMB ISCHEMIA: THE ACP-CLI TRIAL** is co-authored by Ishmam Bhuiyan MD Student, Sally Choi MD, Jon Misskey MD, MHSE, Ina Sarel PhD, Fraser Henderson, Sr MD, Yi Wang PhD, Kelly Tuchman RN, Mary Argent-Katwala PhD, Thomas Smeenk BA, York Hsiang MB, ChB, MHSc.

On August 10, 2023, the Company received a final cost award from the International Center for Dispute Resolution ("ICDR"), International Arbitration Tribunal, in the matter of Arbitration between Elmar Burchardt vs Hemostemix Inc. The award stipulates Dr. Burchardt is to pay Hemostemix Inc. CAD \$315,684 of its costs. Certified, for the purposes of Article I of the New York Convention of 1958 on the Recognition and Enforcement of Foreign Arbitral awards, the Final Award was made in Calgary, Alberta, Canada.

On August 29, 2023, the Company incorporated Hemostemix Quebec Inc. and has applied for grant funding of \$6 million, to locate production of ACP-01 in Montreal.

On September 28, 2023, the Company closed a non-brokered private placement consisting of an aggregate of 2,669,875 units at a price of \$0.12 per Unit for gross proceeds of \$320,385. Each unit ("Unit") consisted of one common share, and one half of one common share purchase warrant, with each full warrant entitling the holder to acquire one common share at a price of \$0.25 per common share, for a period of 24 months. In connection with the private placement, the Company paid eligible finders fees of aggregate cash finder's fees of approximately \$10,228 as well as granted 47,920 agent warrants with a fair value of \$3,101 which are exercisable for a period of 12 months from closing to acquire common shares at a price of \$0.12 per common shares.

On October 23, 2023, the Company announced that it had amended its \$2.5 million 5 year convertible debenture, which originally closed on June 11, 2021, resulting in an expected interest saving of \$569,868. The 4 material amendments are summarized as follows: 1) Interest will be amended from 6% per annum to nil (zero) from January 1, 2023 to maturity (June 11, 2026) saving the Company up to \$569,868 of interest; 2) the Company's conversion rights will be limited to allow conversion, at the originally stated conversion rate of \$0.40 per common share, for any or all, of the outstanding debentures at maturity, thus removing the Company's ability to convert amounts prior to maturity that were generally limited to conversion amounts that would not increase the holder's share position to 10% or more of the Company's then outstanding shares; 3) the Company will grant the holder the ability to convert at any time, any or all, of their debentures at the originally stated conversion rate of \$0.40 per common share; and 4) Security will be amended from unsecured to secured, and will rank in a second secured position behind the already secured \$2.75 million 5 year secured debenture, issued on April 25, 2022.

On October 30, 2023, the Company announced that Stem Cell Research & Therapy published the Company's seventh peer reviewed study of ACP-01 - the third peer reviewed study of ACP-01 as a treatment for heart disease (ischemic and non- ischemic dilated cardiomyopathy), which demonstrates ACP-01 regenerates and improves cardiac function by up to 24.1% at 12 months in ischemic cardiomyopathy, and regenerates and improves cardiac function in non- ischemic cardiomyopathy patients by up to 47.1% at 12 months (dLVEF%/iLVEF%).

On December 29, 2023, The Board of Directors has authorized the issuance of 2,385,000 Stock Options at \$0.07 each, to Directors, Officers, and Consultants of the Company, subject to the approval of the TSX Venture Exchange.

On March 7, 2024, the Company announced the non-exclusive engagement of Oak Hill Asset Management Inc., an Exempt Market Dealer to provide capital markets advice related to the Company's capital markets strategy. Services include advice on the structure of equity or debt capital financing and the identification of potential future investors.

Management leadership

On April 3, 2023, the Company announced it is completing a second round of interviews with candidates who may join the Company as Executive Vice President, Business Development.

On May 2, 2023, the Company announced it has engaged Chris McNorgan, PhD, to drive a license agreement of NCP-01 with a company that is pursuing neural electrode-based brain intervention. Dr. McNorgan's research - the neural bases of cognition, including AI methods to decode and simulate neocortical representations of knowledge and motor intention - is directly relatable to neural electrode-based implantation.

Scientific Advisory Board

In 2018, Hemostemix formalized our Scientific Advisory Board ("SAB"). The members of our SAB are all leaders in their fields of expertise, which spans biochemistry, molecular biology, genomics, and medicine.

The mandate of the SAB is to serve as a strategic resource for the Board of Directors, Board of Advisors and Management of Hemostemix, to advise on competitive initiatives and products, research and development initiatives related to and surrounding its stem cell technology products, clinical pipelines, and support of the Company's overall mission.

Product Update

Angiogenic Cellular Precursor (ACP-01)

Our main product, ACP-01, is created from a process we discovered, developed and patented. From blood a synergetic cell population is isolated, cultured, differentiated into our products, then reinjected into the patient's ischemic tissue or organ(s). Our process for harvesting stem cells is less invasive, as the stem cells are taken from the patient's blood, which is a simplified process as compared to taking stem cells from fatty tissue or bone marrow. Hemostemix's proprietary technology is a personalized regenerative therapy that is administered to a patient within 7 days of the initial blood draw.

Based on four open label studies, a randomized phase I study, a randomized double blind phase II Clinical trial and the retrospective study of 53 consecutive patients treated for ischemic and dilated cardiomyopathy, we believe that ACP-01 has applications in the treatment of other vascular diseases such as cardiovascular disease, peripheral arterial disease ("PAD"), angina pectoris, and other diseases of ischemia.

Regulatory Update for ACP-01

In the first quarter of 2019, the Company submitted an application to the US Food and Drug Administration ("FDA") for Orphan Drug Designation ("ODD") for ACP-01 for the treatment of patients with CLI. The Orphan Drug Act provides for granting special status to a drug or biological product to treat a rare disease or condition upon request of a sponsor. The FDA defines rare diseases as those affecting fewer than 200,000 people in the United States at any given time. Our application sought ODD for the treatment of end-stage CLI patients. The FDA responded to the Company's application stating that based on the information and data they reviewed ACP-01 had the potential to treat all patients suffering from CLI, not just those with end-stage CLI. Based on the potential

to treat such a large patient population, ACP-01 did not qualify for Orphan Drug Status.

Neural Cellular Precursor (NCP-01)

On October 19, 2022 the Company and its wholly-owned subsidiary, PreCerv Inc., announced the preclinical commencement of PreCerv Inc.'s study of NCP-01 at Clemson University, South Carolina. The objectives of the study, a spinal cord repair model, are to evaluate the fate of NCP-01 cells following injection into the spinal fluid pathway, and evaluate the dosing effect on neuropathic pain and motor function recovery.

Intellectual Property

Our proprietary technologies are based on more than 16 years of clinical data, four open label studies, a randomized phase I study, a randomized double blind phase II Clinical trial and the retrospective study of 53 consecutive patients treated for ischemic and dilated cardiomyopathy, and a truncated randomized, placebo-controlled, double blind Phase II clinical trial of Critical Limb Ischemia.

The Company continuously monitors its patent portfolio and vigorously defends its intellectual property rights. The Company has 87 patents, organized into five patent families, issued in more than 25 jurisdictions.

The five patent families are:

Family Patent	Status	Title
1	Granted in several countries including in the US Pending in Canada and Thailand	In-vitro techniques for use with stem cells
2	Granted in several countries including Canada To be filed in US	Production from blood of cells of neural lineage
3	Granted in Singapore Pending in Canada, Europe and US	Regulating stem cells
4	Granted in several counties including the US and Canada Pending in Europe	Regulating stem cells
5	Granted Mexico, Singapore	Automated cell therapy

Clinical Trial Updates

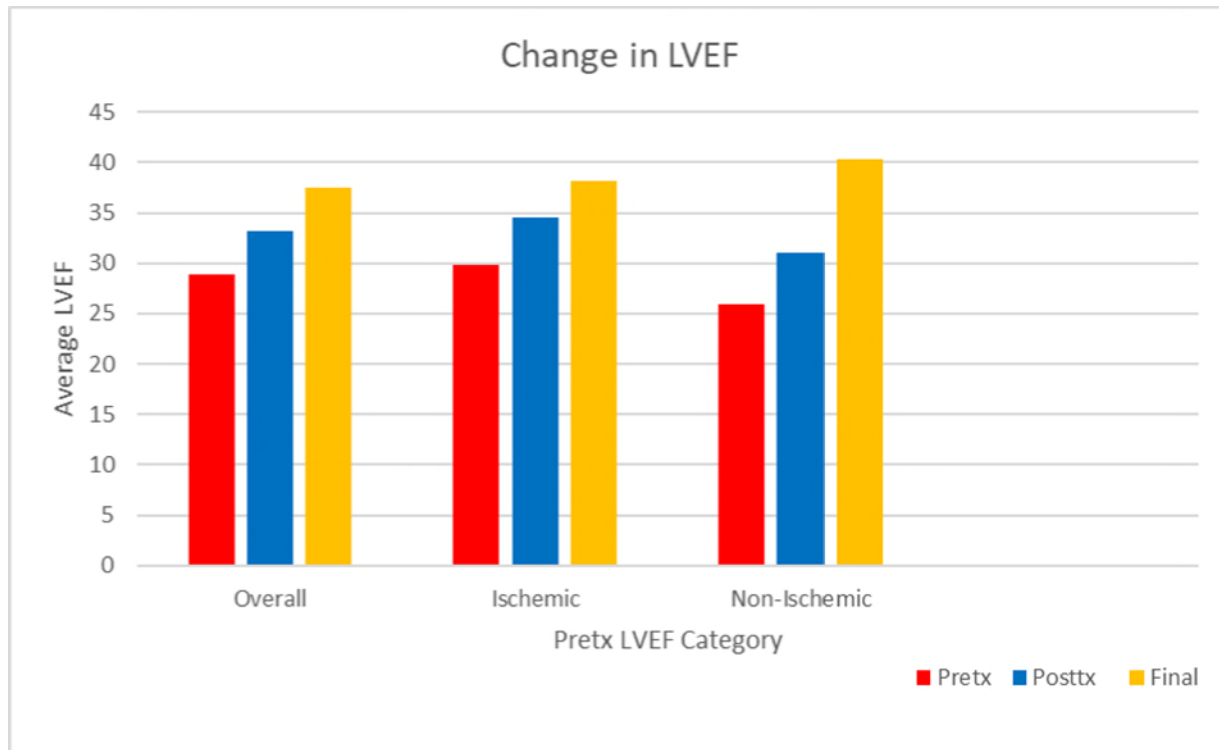
Retrospective Cardiomyopathy Study

On August 30, 2022, the Company announced the results of a new retrospective study of 53 consecutive patients who underwent a trans-catheter, intramyocardial injection of angiogenic cell precursors (ACP-01) as a treatment for heart failure (ischemic and non-ischemic dilated cardiomyopathy).

The 2021 American Heart Association estimated the prevalence of heart failure (HF) in the United States to be 6 million; within 5-years of hospitalization, the death rate amongst this population is approximately 50%. ACP-01 in its capacity to replace damaged cells, secrete growth factors, stimulate angiogenesis and exert an anti-inflammatory effect to minimize scarring, have emerged as a therapeutic option. Hemostemix has just completed an IRB approved, retrospective, outcomes study to analyse the effect of ACP-01 implants on cardiac function in patients with severe heart failure (New York Heart association Grades 3 and 4). Cardiac function was measured in terms of ejection fraction of the left ventricle (LVEF %).

At first follow-up (average 4 months) after ACP-01 cell implantation, for all types of heart failure, the LVEF was increased by 4.6% (from 28.6% to 33.2%), representing a statistically significant improvement ($p < 0.0011$). On final follow-up (average 12 months after cell implantation) for all patients, the LVEF% had improved by 7.69%, which was statistically significant ($p < 0.003$).

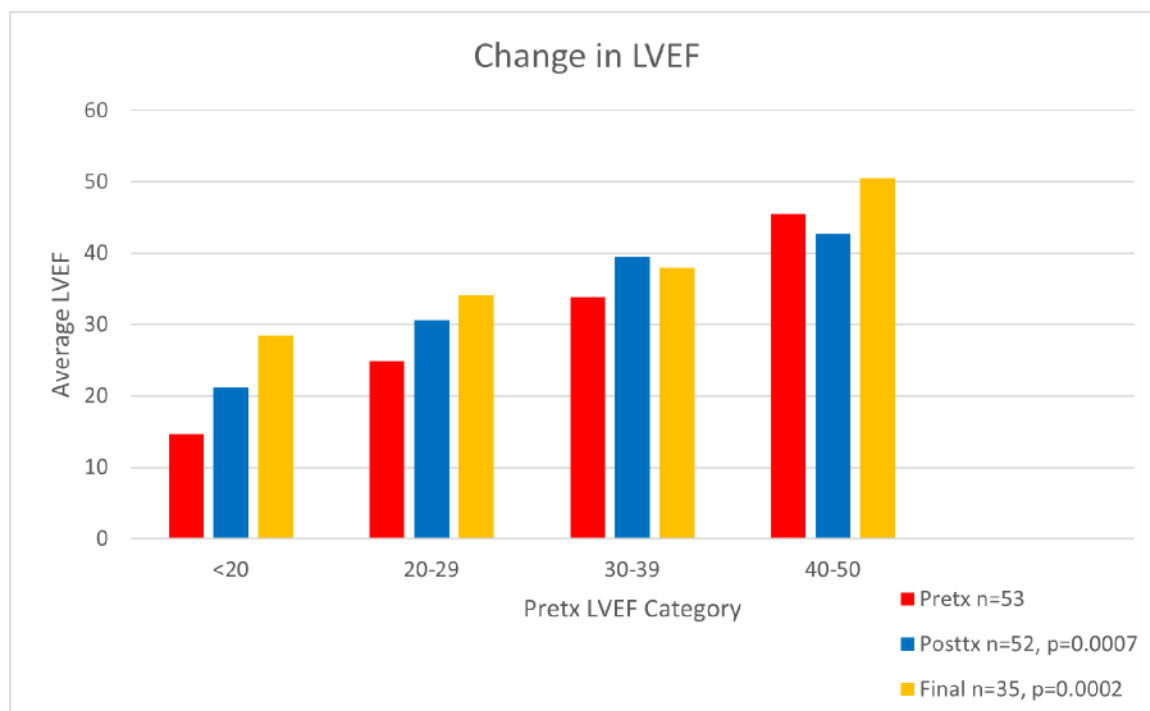
When analyzing ischemic heart failure alone ($n=41$), LVEF increased from 29.9% before implantation, to 34.5%, and to 38.2% at final follow-up, for an overall improvement of 8.37%, which was statistically significant ($p < 0.003$). There was greater improvement in the non-ischemic dilated cardiomyopathy patients ($n=8$), who improved from 25.94% before treatment to 40.29% at final follow-up, for an overall improvement of 14.35% ($p < 0.002$).



To determine whether the observed improvements after ACP-01 implantation occurred at different levels of cardiomyopathy severity, the patients were divided into quartiles of pre-procedural LVEF%:

- i. those with extremely severe cardiomyopathy, pre-procedural LVEF% $< 20\%$;
- ii. those with severe pre-procedural LVEF% $20-29\%$;
- iii. those with moderately severe cardiomyopathy pre-procedural LVEF% $30-39\%$
- iv. those termed “heart failure with mid-range EF”, with pre-procedural LVEF% $40-50\%$ (per American College of Cardiology/American Heart Association/European Society of Cardiology)

Overall, upward mobility from one quartile to the next quartile was significant ($p < 0.0007$) for first follow up, and more significant ($p < 0.0002$) for final follow up. Three of the four groups moved up into the next category of LVEF function. The greatest improvement of LVEF% was generated in patients with extremely severe cardiomyopathy (LVEF% $< 20\%$).



Quality of life statements were used also to assess response to treatment. Patients receiving ACP-01 implantation reported “improvement of quality of life” in 66% of cases, no overall change in 28% of cases, and worsened quality of life in 6% of cases. Although not statistically significant, 94% of cases were the same or improved following ACP-01 treatment, a contradistinction to the deterioration of quality of life exhibited by the general population of patients with heart failure.

The study’s conclusion was that trans-catheter intramyocardial injection of angiogenic precursor cells (ACP-01) as a treatment for heart failure is feasible and safe. The results are statistically significant and merit randomized, double-blind, placebo-controlled trials to confirm the benefit of this type of cell transplantation.

The calculated LVEF%, derived from MUGA scan, echocardiogram or SPECT was normally distributed, fulfilling the assumption for parametric testing, and treated as continuous variables, expressed as probability density functions. The paired t test compared mean preoperative and postoperative LVEF%. A p value of < 0.05 was considered statistically significant.

Phase II Clinical Trial for Patients with Critical Limb Ischemia

CLI is a severe blockage in the arteries of the lower extremities, which markedly reduces blood-flow. It is a serious form of peripheral arterial disease ("PAD"). PAD is caused by atherosclerosis, the hardening and narrowing of the arteries over time due to the build-up of fatty deposits called plaque. CLI is a chronic condition that results in severe pain in the extremities due to nerve and tissue damage. Complications of poor circulation can include sores and ulcerating wounds that will not heal in the legs and feet. Left untreated, the complications of CLI may result in the amputation of the affected limb.

Most patients with CLI are treated surgically and depending on the severity, the surgery can be minimally invasive (angioplasty or stents) or very invasive (bypass surgery, grafts, or amputation). ACP-01 may be an alternative to surgery, which, based on our prior clinical trials, we believe is safer and more cost effective, as no lengthy hospital stay or recovery time is needed. The prevalence of CLI is increasing, as CLI predominately affects the growing baby boomer population aged 50 and older. According to The Sage Group LLC, in the United States alone, approximately 20 million people are affected by PAD, and it is estimated that approximately 7-8 million people in

the United States and Europe suffer from CLI. The Sage Group LLC estimates that in the United States, medical costs attributable to CLI amount to US\$25 billion annually.

The HS 12-01 clinical trial was a randomized, placebo-controlled, double blind Phase II clinical trial of ACP-01 as a potential treatment of CLI.

On October 21, 2019, the Company was provided a summary of the presentation entitled “Autologous Stem Cell Treatment for CLI Patients with No Revascularization Options: An Update of the Hemostemix ACP-01 Trial with 4.5 Year Follow up” by the lead investigator, Dr. York Hsiang, who gave this update at the 41st Annual Canadian Society for Vascular Surgery Meeting, September 14, 2019. Dr. Hsiang reported on the blinded results from the long-term follow-up of the first cohort of patients enrolled at two trial sites, Vancouver Coastal Health Research Institute (“VCHRI”) and the University Health Network, Peter Munk Cardiac Centre located in Toronto, Ontario.

The following is a summary of Dr. Hsiang's the results and conclusion:

- Twelve patients with CLI with no interventional options were enrolled at two treatment centers (10 male, 2 female, mean age 76)
- Prior to treatment, three patients had ischemic rest pain, eight patients had ulceration, and one patient had gangrene
- Study subjects were randomized 2:1 to receive injection of ACP-01 or placebo into their most affected lower extremity and followed for at least 1 year
- Healing of ulcers and resolution of ischemic rest pain occurred in 10 of the 12 patients (83%)
- There were no clinically significant safety issues
- Outcomes were maintained for up to 4.5 years. (3.5 years for two patients, 3 years for one patient, and one patient who died after ulcer healing secondary to congestive heart failure)
- These blinded preliminary results in the study are promising, and show an acceptable safety profile for ACP-01

On August 31, 2022, the Company reported the unblinded results of the HS 12-01 CLI trial as follows:

Category	Statistic	ACP-01	Placebo	Total
Subjects randomized	n	47	21	68
Subjects randomized but were not treated	n (%)	1 (2.1)	0	1 (1.5)
Subjects treated	n (%)	46 (97.9)	21 (100)	67 (98.5)
Subjects who completed the study	n (%)	27 (57.4)	19 (90.5)	46 (67.6)
Withdrawal from the study	n (%)	20 (42.6)	2 (9.5)	22 (32.4)
Amputation	n (%)	3 (11.1)	2 (10.5)	5 (10.8)

- As originally designed, the clinical trial power analysis required 95 subjects to achieve a statistically significant result. The previous management team, however, truncated the trial to 68 subjects, reducing the power of the analysis of the study's primary endpoint to 25%. The trial demonstrated that ACP-01 was safe and treated patients, as compared to placebo treated patients:
- trended toward improvements in ulcer healing at 3 months
- trended toward ulcer healing at 6 months
- trended toward ulcer healing at the end of study at 12 months
- trended toward a reduction in pain associated with critical limb ischemia at 12 months

Neural Cellular Precursor (NCP-01).

On January 7, 2020, the Company announced that it was issued its 87 patent for the generation of NCP-01 from peripheral blood. The patent, Production from Blood of Cells of Neural Lineage, was issued by Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Netherlands, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Monaco, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Financing

Convertible debenture

On October 23, 2023, the Company announced that it had amended its \$2.5 million 5 year convertible debenture, which originally closed on June 11, 2021, resulting in an expected interest saving of \$569,868. The 4 material amendments are summarized as follows:

- 1) interest will be amended from 6% per annum to nil (zero) from January 1, 2023 to maturity (June 11, 2026);
- 2) the Company's conversion rights will be limited to allow conversion, at the originally stated conversion rate of \$0.40 per common share, for any or all, of the outstanding debentures at maturity;
- 3) the Company will grant the holder the ability to convert at any time, any or all, of their debentures at the originally stated conversion rate of \$0.40 per common share and
- 4) security will be amended from unsecured to secured, and will rank in a second secured position behind the already secured \$2.75 million 5 year secured debenture, issued on April 25, 2022.

A gain of \$200,990 was recorded. There was no change in classification of the convertible debt.

Stock Options and Warrants

On December 29, 2023, the Company granted 2,385,000 stock options to various officers, directors and consultants of the Company. The stock options granted have an exercise price of \$0.07 and an expiry date of December 29, 2028. 1,910,000 of these stock options will vest immediately. The remaining 475,000 stock options will vest 50% immediately with the remaining 50% fully vested on December 29, 2024. The fair value of the stock options were \$149,848 and was estimated on the date of grant using the Black-Scholes model with the following assumptions: expected volatility of 260%, risk-free interest rate of 3.17% and an average expected life of 5 years.

During the years ended December 31, 2023, 91,417 broker warrants were exercised into 91,417 common shares for proceeds of \$12,798.

In conjunction with the private placement on March 21, 2023, the Company issued 3,812,000 warrants that entitle the holder to acquire an additional common share at \$0.65 per share, and expiring in a 24 month period. The Company also granted 136,120 agent warrants which entitle the holder to acquire a purchase warrant at \$0.20 per share and expiring in a 12 month period. The fair value of the warrants was estimated on the date of grant using the Black-Scholes relative fair value approach with the following assumptions: stock price of \$0.175, expected dividend yield of 0%, expected volatility of 80.81%-102.31%, risk-free interest rates of 3.70%, and an average expected life of 12-24 months.

In conjunction with the private placement on June 28, 2023, the Company issued 1,681,417 warrants that entitle the holder to acquire an additional common share at \$0.25 per share, and expiring in a 24 month period. The Company also granted 165,027 agent warrants which entitle the holder to acquire a purchase warrant at \$0.12 per share and expiring in a 12 month period. The fair value of the warrants was estimated on the date of grant using the Black-Scholes relative fair value approach with the following assumptions: stock price of \$0.12, expected dividend yield of 0%, expected volatility of 103.57%, risk-free interest rates of 3.63%, and an average expected life of 12-24 months.

In conjunction with the private placement on September 28, 2023, the Company issued 1,334,938 warrants that entitle the holder to acquire an additional common share at \$0.25 per share, and expiring in a 24 month period. The Company also granted 47,920 agent warrants which entitle the holder to acquire a purchase warrant at \$0.12 per share and expiring in a 24 month period. The fair value of the warrants was estimated on the date of grant using the Black-Scholes relative fair value approach with the following assumptions: stock price of \$0.11, expected dividend yield of 0%, expected volatility of 107.21%, risk-free interest rates of 3.63% and an average expected life of 12-24 months.

Capital Raise

On March 21, 2023, the Company closed a non-brokered private placement consisting of an aggregate of 3,812,000 units at a price of \$0.20 per Unit for gross proceeds of \$762,400. Each unit ("Unit") consisted of one common share, and one common share purchase warrant. Purchase warrants were valued at \$145,939 which entitles the holder to acquire one common share at a price of \$0.65 per common share, for a period of 24 months. In connection with the private placement, the Company paid eligible finders fees of aggregate cash finder's fees of approximately \$27,224 as well as granted 136,120 agent warrants with a fair value of \$6,709 which are exercisable for a period of 12 months from closing to acquire units at a price of \$0.20 per unit.

On June 28, 2023, the Company closed a non-brokered private placement consisting of an aggregate of 3,362,833 units at a price of \$0.12 per Unit for gross proceeds of \$403,540. Each Unit consisted of one common share, and one half of one common share purchase warrant, with each full warrant entitling the holder to acquire one common share at a price of \$0.25 per common share, for a period of 24 months. Purchase warrants were valued at \$103,818. In connection with the private placement, the Company paid eligible finders fees of aggregate cash finder's fees of approximately \$19,803 as well as granted 165,027 agent warrants with a fair value of \$11,037 which are exercisable for a period of 12 months from closing to acquire common shares at a price of \$0.12 per common shares.

On September 28, 2023, the Company closed a non-brokered private placement consisting of an aggregate of 2,669,875 units at a price of \$0.12 per Unit for gross proceeds of \$320,385. Each Unit consisted of one common share, and one half of one common share purchase warrant, with each full warrant entitling the holder to acquire one common share at a price of \$0.25 per common share, for a period of 24 months. Purchase warrants were valued at \$88,384. In connection with the private placement, the Company paid eligible finders fees of aggregate cash finder's fees of approximately \$10,228 as well as granted 47,920 agent warrants with a fair value of \$3,101 which are exercisable for a period of 12 months from closing to acquire common shares at a price of \$0.12 per common shares.

OUTLOOK

The Company continues to strongly believe in the technology based on the safety profile and efficacy of ACP-01 as reported in four heart studies and three critical limb ischemia trials, and its extensive work to optimize and scale its manufacturing processes.

Our ability to accomplish all our future strategic plans is dependent upon obtaining additional financing or executing other strategic options and there is no assurance that we will achieve these objectives. Management will continue to pursue various options to raise additional funding, some which could be dilutive to existing shareholders. Alternatives for raising further capital could include the issuance of additional equity, debt, convertible debentures, government or partnership funding. We intend to seek commercialization partners for our therapy and development partners for accelerating clinical development of novel therapies for significant and unmet medical needs.

CONSOLIDATION AND PRESENTATION

Wholly-Owned Subsidiaries

Hemostemix has three wholly-owned subsidiaries, Kwalata Trading Limited ("Kwalata"), Hemostemix Ltd. ("HEM Israel") and PreCerv Inc. ("PreCerv"). All of the Company's patents and trademarks are registered in the name of Kwalata. HEM Israel was the original manufacturing company.

On October 1, 2018, previous management structured the sale of the intellectual property ("IP") from Kwalata to Hemostemix and planned the wind up of Kwalata. This transaction was not completed and Kwalata remains a wholly-owned subsidiary of Hemostemix Inc., and it continues as the IP holding company.

On October 1, 2017, the Company ceased its operations in Israel and moved its manufacturing and research and development activities to Aspire under License. The Israel operations had current assets of \$1,784 as at December 31, 2023 (December 31, 2022 - \$1,784) and current liabilities of \$nil as at December 31, 2023 (December 31, 2022 - \$nil).

On June 14, 2022, the Company incorporated PreCerv to enable PreCerv to obtain from Hemostemix a global field of use license to NCP-01 and ACP-01 to treat conditions of the central and peripheral nervous system, including but not limited to the following:

1. Neuropathic pain syndromes.
2. Traumatic spinal cord injury, chronic brainstem injury, traumatic brain injury, peripheral nerve injury.
3. Rare diseases including: syringomyelia, Charcot-Marie tooth disease, and Guillain-Barre syndrome, Amyotrophic lateral sclerosis (ALS), age-related macular degeneration (ARMD), corneal or eye diseases and retinopathies of any cause.
4. Cerebral stroke.

On August 29, 2023, the Company incorporated Hemostemix Quebec Inc. as a wholly-owned subsidiary. Hemostemix Quebec Inc. has applied for grant funding of \$6 million, to locate production of ACP-01 in Montreal.

Functional and Presentation Currency

The consolidated financial statements are presented in Canadian dollars, which is the Company's functional and presentation currency. Each subsidiary determines its own functional currency and items included in the consolidated financial statements of each entity are measured using that functional currency. The functional currency of the subsidiaries is Canadian dollars. Transactions denominated in foreign currency (other than the functional currency) are recorded on initial recognition at the exchange rate at the date of the transaction. After initial recognition, monetary assets and liabilities denominated in foreign currency are translated at the end of each reporting period into the functional currency at the exchange rate at that date. Exchange differences, other than those capitalized to qualifying assets or recorded in equity in hedging transactions, are recognized in profit or loss. Non-monetary assets and liabilities measured at cost in a foreign currency are translated at the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currency and measured at fair value are translated into the functional currency using the exchange rate prevailing at the date when the fair value was determined.

SELECTED FINANCIAL INFORMATION FOR THE PERIODS

The following table provides selected consolidated financial information for the Company as at and for the year ended December 31, 2023 and 2022.

	Year ended December 31,	
	2023	2022
Total Assets	313,765	465,345
Total Liabilities	7,684,993	7,234,075
Net loss and comprehensive loss before taxes	(2,502,109)	(4,748,553)
Basic and diluted loss per share	(0.030)	(0.075)
Weighted average number of shares outstanding	82,499,189	69,981,296

Total Assets decreased primarily as a result of other receivables and prepaid expenses.

Total Liabilities increased by \$450,918, related to operations during the period.

Net loss and comprehensive loss before taxes decreased to \$2,502,109 for the year ended December 31, 2023, primarily as a result of decreased legal fees related to the settlement of the Aspire lawsuit in the prior year as well as the settlement of the Elmar Burchardt arbitration.

RESULTS OF OPERATIONS

Comparison of Expenses

	Three months ended December 31, December 31,		Increase (Decrease)	Increase (Decrease)
	2023	2022		
	\$	\$	\$	%
Research and development	(109,911)	320,002	(429,913)	(134)
Consultants	266,822	64,188	202,634	316
Stock-based compensation	146,759	4,756	142,003	2,986
Marketing and office expenses	2,642	4,465	(1,823)	(41)
Professional fees	(282,891)	211,310	(494,201)	(234)
Gain on extinguishment	(200,990)	-	(200,990)	-
Travel	95,099	19,737	75,362	100
Foreign exchange (gain) loss	87,001	104,300	(17,299)	(17)
Finance expense	364,536	131,598	232,938	177
Gain on write down of payables	314,465	-	314,465	100
Depreciation and amortization	56	124	(68)	(55)
Net loss from operations	683,588	860,480	(176,892)	(21)

	Year ended			
	December 31,	December 31,	Increase	Increase
	2023	2022	(Decrease)	(Decrease)
	\$	\$	\$	%
Research and development	384,887	622,651	(237,764)	(38)
Consultants	882,863	958,565	(75,702)	(8)
Stock-based compensation	149,898	178,683	(28,785)	(16)
Marketing and office expenses	375,308	458,996	(83,688)	(18)
Professional fees	268,690	2,295,446	(2,026,756)	(88)
Gain on settlement of debt through shares	6,193	(2,214)	8,407	(380)
Travel	95,099	63,175	31,924	51
Foreign exchange (gain) loss	(16,180)	(181,262)	165,082	(91)
Finance expense	556,118	354,018	202,100	57
Gain on extinguishment	(200,990)	-	(200,990)	-
Depreciation and amortization	223	495	(272)	(55)
Net loss from operations	2,502,109	4,748,553	(2,246,444)	(47)

Analysis of expenses

Research and development (“R&D”)

R&D expense is the cost for the third party manufacturing laboratory which produces ACP-01 that is used in the clinical trials and provides continued research and development work in their laboratory. It also includes the costs paid to clinical trial sites to reimburse them for the costs associated with the treatment and follow-up for patients in our study, as well as the fees paid to the Contract Research Organization (“CRO”) which provides services to conduct the clinical trials. R&D costs for the year ended December 31, 2023 were \$(109,911) and \$384,887, respectively compared to \$320,002 and \$622,651, respectively for the year ended December 31, 2022 representing a decrease of \$(429,913) and \$(237,764), respectively). The majority of the decrease is related to R&D on ACP-01 and NCP-01.

Consultants

Consulting fees and salaries changed to \$266,822 and \$882,863, respectively for the year ended December 31, 2023, as compared to \$64,188 and \$958,565, respectively in the corresponding period of the prior year. The change was due to the increase in investor relation services being utilized for the period.

Stock-based compensation expense (“SBC”)

SBC increased by \$142,003 and \$28,785, respectively in the year ended December 31, 2023, compared to the corresponding periods of 2022. The increase is primarily due to the grant of stock options on December 29, 2023, and the impact of the change in vesting terms for certain stock options issued. Stock options are granted to certain officers, directors, employees and consultants, with the number, term and vesting period of the options granted being determined at the discretion of the Company’s board of directors and in conjunction with the terms of the Company’s stock option plans, to a maximum of 10% of the outstanding Common Shares.

Marketing and office expenses

For the year ended December 31, 2023, marketing and office expenses changed to \$2,642 and \$375,308, respectively compared to \$4,465 and \$458,996, respectively in the same period of the prior year. Marketing and office expenses includes office administration costs including courier, and utilities as well as marketing and communications costs. The (decrease) increase in expenses is primarily due to the increase in marketing expenses for the year.

Professional fees

	Three months ended December 31,			Year ended December 31,		
	2023	2022	% change	2023	2022	% change
Patent costs	96,742	82,315	18	185,464	155,811	19
Accounting & audit fees	(36,454)	90,344	(140)	30,675	245,216	(87)
Legal - litigation	(349,716)	14,338	(2,539)	(176,572)	1,304,374	(114)
Legal - Other	8,915	(57,669)	(115)	67,735	380,088	(461)
Other Professional fees	(8,017)	67,993	(112)	10,920	72,873	(85)
Investor relations	5,639	13,989	(60)	150,468	137,084	10
Total	(282,891)	211,310	(234)	268,690	2,295,446	(88)

Professional fees decreased to \$282,891 and \$268,690, respectively, for the year ended December 31, 2023, as compared to \$211,310 and \$2,295,446, respectively in the prior year, primarily as a result of decreased legal costs which were incurred relating to the Aspire lawsuit, from the prior year.

Depreciation expense for the three months and year ended December 31, 2023, were \$56 and \$223, respectively compared to \$124 and \$495, respectively in the corresponding periods of the prior year.

Finance expense, for the three months and year ended December 31, 2023 were \$364,536 and \$556,118, respectively compared to \$131,598 and \$354,018, respectively in the corresponding periods of the prior year. Interest expense relates to the interest on the convertible debenture balance. The increase in finance expense is primarily due to the inclusion of the second convertible debenture added in Q2 of the prior year.

Foreign exchange for the three months and year ended December 31, 2023 were a (loss) gain of \$(87,001) and \$16,180, respectively compared to a gain of \$(104,300) and \$181,262, respectively in the corresponding prior year period. The change from the current and prior year periods relates to an unrealized foreign exchange gain due to a change in rates, as well as a substantial payables balance in US currency.

QUARTERLY FINANCIAL INFORMATION

The following table sets out the quarterly results for the most recently completed 8 quarters:

	December 31, 2023	September 30, 2023	June 30, 2023	March 31, 2023
Net Loss (\$)	(683,588)	(257,243)	(284,941)	(1,276,337)
Weighted Average # of Shares	82,499,189	84,511,122	81,200,473	75,801,594
Loss per Share (\$)	(0.030)	(0.003)	(0.004)	(0.017)

	December 31, 2022	September 30, 2022	June 30, 2022	March 31, 2022
Net Loss (\$)	(1,347,401)	(810,527)	(1,445,860)	(1,631,686)
Weighted Average # of Shares	75,743,019	73,643,465	70,530,667	62,525,308
Loss per Share (\$)	(0.018)	(0.011)	(0.020)	(0.026)

LIQUIDITY AND CAPITAL RESOURCES

Hemostemix is a development stage Company that to date has had no revenue and negative operating cash flows, which are expected to continue in the foreseeable future. As a development stage Company, we require significant additional investment for research and development, manufacturing, clinical testing and regulatory submissions prior to commercialization. Since inception, we have financed our cash requirements primarily through issuances of equity and debt securities. Our ability to continue as a going concern is dependent upon obtaining additional investment capital and grant monies.

Based on the foregoing, we will continue to pursue various funding options and opportunities; however, no assurances can be made that we will be successful in raising additional investment capital, to continue as a going concern. If we are not able to raise capital, we will have to reduce our cash requirements by eliminating or deferring spending on research, development and corporate activities.

For the years ended December 31, 2023, there was a net cash outflow from operating activities of \$1,419,761 compared to a net cash outflow of \$6,101,745 for the years ended December 31, 2022, an increase in outflow of \$4,681,984.

Expressed in tabular form, the decrease from the net cash used for operations is as follows:

Net loss from operations for the period	\$2,733,365
Decrease in stock compensation expense	\$(28,785)
Increase in finance expense	\$202,100
Decrease in depreciation and amortization	\$(272)
Foreign Exchange	\$165,082
Gain on extinguishment	\$(200,990)
Loss on settlement of debt through shares	\$6,193
Deferred tax expense	\$(486,921)
Change in subscription receivables	\$(226,000)
Change in other receivables and prepaid expenses	\$247,402
Change in HST/GST receivable	\$136,117
Change in accounts payable and accrued liabilities	\$2,102,333
Decrease in the net cash used for operations	<u>\$(4,649,624)</u>

As at December 31, 2023, the Company had a working capital deficit of \$2,562,987 compared to \$2,156,398 at December 31, 2022, resulting in an increase in working capital deficit of \$406,589.

Outstanding Share Data

As at December 31, 2023, the number of issued and outstanding common shares was 87,122,318 (December 31, 2022 – 75,743,019). As at April 29, 2024, the number of common shares issued and outstanding is 87,122,318.

As at December 31, 2023, the Company had 8,676,694 share purchase options outstanding (December 31, 2022 – 6,775,694). As at April 29, 2024, the number of outstanding share purchase options outstanding is 8,676,694.

As at December 31, 2023, the Company had 39,654,288 share purchase warrants outstanding (December 31, 2022 – 74,670,531). As at April 29, 2024, the number of outstanding warrants was 39,654,288.

MATERIAL ACCOUNTING POLICIES

Refer to Note 2 in the 2023 audited annual consolidated financial statements for a detailed description of our material accounting policies. We have consistently applied the same accounting policies for all periods presented in these consolidated financial statements for the year ended December 31, 2023, as those used in our audited consolidated financial statements.

CHANGES IN ACCOUNTING POLICIES AND DISCLOSURE

New accounting standard not yet adopted

Classification of Liabilities as Current or Non-Current (Amendments to IAS 1)

The IASB has published Classification of Liabilities as Current or Non-Current (Amendments to IAS 1) which clarifies the guidance on whether a liability should be classified as either current or non-current. The amendments:

- clarify that the classification of liabilities as current or non-current should only be based on rights that are in place "at the end of the reporting period".
- clarify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability.
- make clear that settlement includes transfers to the counterparty of cash, equity instruments, other assets or services that result in extinguishment of the liability.

This amendment is effective for annual periods beginning on or after January 1, 2024. Earlier application is permitted. The extent of the impact of adoption of this amendment has not yet been determined.

COMMITMENTS & CONTINGENCIES

Commitments

Clinical Trial Costs

In 2021, the Company averaged approximately \$15,000 per month for activities related to our clinical trial such as manufacturing, contract research, software and patient care. In 2022, the clinical trial costs increased to an average of approximately \$51,000 per month. In 2022, and continuing into 2023, these costs will primarily relate to analytical and trial planning and initiation activities.

Contingencies

In the ordinary course of operating, the Company may from time to time be subject to various claims or possible claims. Management believes that there are no claims or possible claims that if resolved would either individually or collectively result in a material adverse impact on the Company's financial position, results of operations, or cash flows. These matters are inherently uncertain, and management's view of these matters may change in the future.

Dr. Elmar Burchardt Arbitration

On October 17, 2019, Dr. Elmar R. Burchardt ("Burchardt"), the Company's former CEO, commenced a formal arbitration over disputed amounts for unpaid salary, severance and benefits amounts allegedly owing to Burchardt after his resignation from the Company in January 2017. The Company's position is that Burchardt's claim is without merit, and it will defend its position vigorously.

On January 24, 2023, the Company announced the arbitrator has dismissed Dr. Burchardt's claim for compensation and damages against the Company, set aside the Change of Control Agreement on the grounds that it was entered into in violation of Dr. Burchardt's duties as a director under sections 120 and 122 of the Business Corporations Act (Alberta), and determined that he lacked jurisdiction to consider the Burchardt stock option claims, and tort claims for defamation and interference with economic relations.

On August 14, 2023, the Company announced that on August 10, 2023 it received a final cost award from the International Center for Dispute Resolution (ICDR), International Arbitration Tribunal, in the Matter of Arbitration between Elmar Burchardt vs Hemostemix Inc. The award stipulates Dr. Burchardt is to pay Hemostemix Inc. CAD \$315,684 of its costs. Certified, for the purposes of Article I of the New York Convention of 1958 on the Recognition and Enforcement of Foreign Arbitral Awards, the Final Award was made in Calgary, Alberta, Canada.

Aspire Lawsuit

On May 10, 2022, the Company settled all litigation with, and closed the settlement agreement with, Aspire Health Science LLC, AJIA Global, LLC and Alan Jacobs, Jed Wood, Randi Wood, Blake Wood, Kyle Makofka, Reginald Cooper, and Kingsman Scientific Management.

Accudata Lawsuit

On July 2, 2020 counsel for the Company filed a preliminary injunction application in the United States District Court for the District of Delaware to obtain the return of the Company's data from Accudata Solutions ("Accudata"), and Aspire following Aspire's application to intervene. On March 21, 2023, Hemostemix and Accudata reached a confidential out of court settlement that included dismissal of all claims and mutual releases.

Zenith Appraisal & Land Consulting Ltd. Lawsuit

On October 28, 2022 counsel for Company filed a statement of defense in the Court of King's Bench of Alberta, seeking dismissal of Zenith Appraisal and Land Consulting Ltd's claim for compensation, notwithstanding that its principal, Dave Wood, a former director of the Company signed a release following his resignation from the Board during April 2020. Zenith's claim is without merit and the Company will defend itself.

RELATED PARTY BALANCES AND TRANSACTIONS

Related party transactions are conducted on the terms and conditions agreed to by the related parties. It is the Company's policy to conduct all transactions and settle all balances with related parties on market terms and conditions.

The following includes all compensation to key management personnel:

The Company recorded share based compensation expense for the year ended December 31, 2023 of \$139,440 (year ended December 31, 2022 - \$150,090) to the current management and directors of the Company.

For the year ended December 31, 2023, the Company incurred \$198,000 (year ended December 31, 2022 - \$308,000) to Mr. Thomas Smeenck for consulting services. As at December 31, 2023, Mr. Smeenck was owed \$158,535 (December 31, 2022 - \$nil) and this amount was included in accounts payable and accrued liabilities.

For the year ended December 31, 2023, the Company incurred \$137,500 (year ended December 31, 2022 - \$150,000) to a consultant of the Company. As at December 31, 2023, they were owed \$96,394 (December 31, 2022 - \$nil) and this amount was included in accounts payable and accrued liabilities.

For the year ended December 31, 2023, the Company incurred \$49,966 (year ended December 31, 2022 - \$50,870) to Marrelli Support Services Inc., a company which the CFO is related to. As at December 31, 2023, the Company owed \$nil (December 31, 2022 - \$nil) to Marrelli Support Services Inc. for accounting fees, and this amount was included in accounts payable and accrued liabilities.

FINANCIAL INSTRUMENTS & CAPITAL RISK MANAGEMENT

Our financial instruments consist of cash and cash equivalents, subscriptions receivables, other receivables and accounts payable, debentures and accrued liabilities. As at December 31, 2023, there are no significant differences between the carrying values of these amounts and their estimated market values.

Financial risk management

The Company's financial risk management policies are established to identify and analyze the risks faced by the Company, to set acceptable risk tolerance limits and controls, and to monitor risks and adherence to limits. The financial risk management policies and systems are reviewed regularly to ensure they remain consistent with the objectives and risk tolerance acceptable to the Company and current market trends and conditions. The Company, through its training and management standards and procedures, aims to uphold a disciplined and constructive control environment in which all employees understand their roles and obligations.

Interest rate risk

Interest rate risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in market interest rates. We are exposed to interest rate risk through our cash and cash equivalents. The Company mitigate this risk by investment of excess cash resources in investment grade vehicles while matching maturities with our operational requirements.

Fluctuations in market rates of interest do not have a significant impact on our results of operations due to the short term to maturity of the investments held.

The Company mitigate our exposure to interest rate risk on loans by utilizing fixed rates.

Currency risk

Currency risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. In the normal course of our operations. The Company are exposed to currency risk from the purchase of goods and services in the United States. In addition, the Company are exposed to currency risk to the extent cash is held in foreign currencies. The impact of a 10% increase in the value of the U.S. dollar against the Canadian dollar would have increased our net loss for the December 31, 2023 by approximately \$111,668 (December 31, 2022- \$117,475).

We mitigate our foreign exchange risk by maintaining sufficient foreign currencies, through the purchase of foreign currencies, when cash allows, to settle our foreign accounts payable and future commitments.

Balances in foreign currencies at December 31, 2023 are as follows:

	<u>US Dollars (\$)</u>
Cash and cash equivalents	122,501
Accounts payable and accrued expenses	<u>(1,239,179)</u>
	(1,116,678)

Liquidity risk

Liquidity risk is the risk that we will encounter difficulty in meeting obligations associated with financial liabilities. We manage liquidity risk through the management of our capital structure. Accounts payable are all due within the current operating period.

As at December 31, 2023, the Company has a working capital deficit of \$2,562,987 (December 31, 2022 – \$2,156,398). As at December 31, 2023, the Company has an accumulated deficit of \$63,265,309 (December 31, 2022 - \$60,763,200) and is not yet generating operating cash flows. As such, there is material uncertainty about the ability of the Company to continue as a going concern. In order to continue as a going concern, the Company requires additional capital to fund ongoing operations and intends on continuing to raise additional funds through the issuance of equity and/or debt.

Capital risk management

The Company's objectives when managing capital are:

- ensuring sufficient liquidity to support its financial obligations and execute its operating and strategic plans;
- maintaining healthy liquidity reserves and access to capital; and
- minimizing the after-tax cost of capital while taking into consideration current and future industry, market and economic risks and conditions.

To assess its effectiveness in managing capital, management monitors certain key ratios to ensure they are within targeted ranges.

The Company defines its capital as its equity. Its capital management objectives and approach were unchanged during the quarter.

SUBSEQUENT EVENTS

On March 7, 2024, the Company announced the non-exclusive engagement of Oak Hill Asset Management Inc., an Exempt Market Dealer to provide capital markets advice related to the Company's capital markets strategy. Services include advice on the structure of equity or debt capital financing and the identification of potential future investors.

DISCLOSURE CONTROLS, PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

Management has established and continues to complement a system of disclosure controls and procedures and internal controls over financial reporting. This system is designed to provide reasonable assurance that material information relating to the issuer and its subsidiaries are available and reported to senior management and permits timely decisions regarding public disclosure. As of December 31, 2023, the Company's Chief Executive Officer and Chief Financial Officer have evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based on this evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that the Company's disclosure controls and procedures, as defined in Multilateral Instrument 52-109 – Certification of Disclosure in Issuer's Annual and Interim Filings are effective, except as noted below, to ensure that the information required to be disclosed in reports that are filed or submitted under Canadian Securities legislation are recorded, processed, summarized and reported within the time period specified in those rules.

The Company's disclosure controls and procedures are indicative of many small and growing companies. Consequently, management has identified certain weaknesses that currently exist in the disclosure controls and procedures including, but not limited to, the segregation of duties and expertise in specific areas of public disclosure. The existence of these weaknesses is partially compensated for by senior management monitoring these issues, and in the case of complex or extraordinary transactions, consulting with external experts to advise management in their analysis and conclusions.

Throughout the year management continued to address, as required, steps to improve disclosure controls and procedures and internal controls over financial reporting. However, no specific changes to disclosure controls and procedures were made during the period. The Company recognizes this is an ongoing and dynamic process and continues to focus on internal controls related to financial reporting and disclosure controls and procedures and is committed to further improvements in the future.

RISKS AND UNCERTAINTIES

Lack of Product Revenues and History of Losses

To date, Hemostemix has not recorded any revenues from the sale of biopharmaceutical products or earning any licensing revenues, and, as a result, it faces a high risk of business failure. Hemostemix expects to incur additional losses during the periods of research and development, clinical testing, and application for regulatory approval of its product candidates. Hemostemix expects to incur losses unless and until such time as payments from corporate collaborations, product sales and/or royalty or license payments generate sufficient revenues to fund its continuing operations.

Ability to Continue as a Going Concern

The Company's auditors' opinion on its December 31, 2023 financial statements includes an explanatory paragraph in respect of there being doubt about the Company's ability to continue as a going concern.

Biotech Public Market Risks

Prospects for companies in the biotechnology industry generally may be regarded as uncertain given the nature of the industry and, accordingly, investments in biotechnology companies should be regarded as speculative. Biotechnology research and development involves a significant degree of risk. An investor should carefully consider the risks and uncertainties described below. The risks and uncertainties described below are not an exhaustive list. Additional risks and uncertainties not presently known to Hemostemix or that Hemostemix believes to be immaterial may also adversely affect Hemostemix's business. If any one or more of the following risks occur, Hemostemix business, financial condition and results of operations could be seriously harmed. Further, if Hemostemix fails to meet the expectations of the public market in any given period, the market price of Hemostemix shares could decline.

Early Stage Development and Scientific Uncertainty

Hemostemix's products are at an early stage of development. Significant additional investment in research and development, product validation, manufacturing, production scale-up, clinical testing, and regulatory submissions of such product candidates is required prior to commercialization. There can be no assurance that any such products will actually be developed. The development and regulatory processes may require access to raw materials and inputs which may not be available to Hemostemix in sufficient amounts or in a timely fashion to allow Hemostemix to complete the development or receive regulatory approval of any product or process. A commitment of substantial time and resources is required to conduct research and clinical trials if Hemostemix is to complete the development of any product. It is not known whether any of these product or process candidates will meet applicable health regulatory standards and obtain required regulatory approvals, or whether such products can be produced in commercial quantities at reasonable costs and be successfully marketed, or if Hemostemix 's investment in any such products will be recovered through sales or royalties. The Company's technology will require significant research and development and preclinical and clinical testing prior to regulatory approval, if required, being obtained in the United States or other countries. The Company may not be able to obtain regulatory approvals, if required, to complete necessary clinical trials for its cell technology, or to commercialize it. The Company's technology may prove to have undesirable and unintended side effects, or other characteristics adversely affecting its safety, efficacy or cost-effectiveness could prevent or limit its use. The Company's technology may fail to provide its intended benefit or achieve benefits equal to or better than its competitor's products at the time of testing or production and, if so, its business may fail.

Clinical Trial Risks

The Company's clinical trials may fail to produce successful results or could be suspended due to unacceptable safety risks, which could cause its business to fail. Clinical trials are subject to extensive regulatory requirements, and are very expensive, time-consuming and difficult to design and implement, in part because they may be subject to rigorous regulatory requirements. The Company's products may fail to achieve necessary safety and efficacy endpoints during clinical trials. The Company believes that its clinical trials will take a substantial period of time to complete. Furthermore, failure can occur at any stage of the trials, and the Company could encounter problems that cause us to abandon or repeat clinical trials. The commencement and completion of clinical trials may be delayed by several factors, including: unforeseen safety issues; lack of effectiveness during clinical trials; slower than expected rates of patient recruitment; and inability to monitor patients adequately during or after treatment. In addition, the Company or regulatory officials may suspend the Company's clinical trials at any time if it appears that the Company is exposing participants to unacceptable health risks. If the Company's clinical trials fail to produce successful results, or are suspended due to unacceptable safety risks, the Company's business may fail.

Additional Financing Requirements and Access to Capital

Hemostemix will require substantial additional funds for further research and development, planned clinical testing, regulatory approvals, establishment of manufacturing capabilities and, if necessary, the marketing and sale of its products. Hemostemix may attempt to raise additional funds for these purposes through public or private equity or debt financing, collaborations with other biopharmaceutical companies and/or from other sources. There can be no assurance that additional funding or partnership will be available on terms acceptable to Hemostemix and which would foster successful commercialization of Hemostemix products.

Government Regulations

Biotechnology and pharmaceutical companies operate in a high-risk regulatory environment. The manufacture and sale of human diagnostic and therapeutic products is governed by numerous statutes and regulations in the United States, Canada, and other countries where Hemostemix intends to market its products. The subject matter of such legislation includes approval of manufacturing facilities, controlled research and testing procedures, review and approval of manufacturing, preclinical and clinical data prior to marketing approval, as well as regulation of marketing activities, notably advertising and labelling.

The process of completing clinical testing and obtaining required approvals is likely to take several years and require the expenditure of substantial resources. Furthermore, there can be no assurance that the regulators will not require modification to any submissions which may result in delays or failure to obtain regulatory approvals. Any delay or failure to obtain regulatory approvals could adversely affect the ability of Hemostemix to utilize its technology, thereby adversely affecting operations. Further, there can be no assurance that Hemostemix's diagnostic product candidates will achieve levels of sensitivity and specificity sufficient for regulatory approval or market acceptance, or that its therapeutic product candidates prove to be safe and effective in clinical trials or receive the requisite regulatory approval. There is no assurance that Hemostemix will be able to timely and profitably produce its products while complying with all the applicable regulatory requirements. Foreign markets, other than the United States and Canada, generally impose similar restrictions.

Hazardous Materials and Environmental Matters

Certain of Hemostemix's research and development processes may involve the controlled use of hazardous materials. Hemostemix is subject to federal, provincial, and local laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. Although management of Hemostemix believes that its procedures for handling and disposing of such materials comply with the standards prescribed, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, Hemostemix could be held liable for damages and such liability could exceed the resources of Hemostemix. Hemostemix is not specifically insured with respect to this liability. Although management of Hemostemix believes that it currently complies in all material respects with applicable environmental laws and regulations, Hemostemix may be required to incur significant costs to comply with environmental laws and regulations in the future. Furthermore, there can be no assurance that the operations, business, or assets of Hemostemix will not be materially adversely affected by current or future environmental laws or regulations.

Patents and Proprietary Technology

Hemostemix's success will depend in part on its ability to obtain, maintain, and enforce patent rights, maintain trade secret protection, and operate without infringing the proprietary rights of third parties. There can be no assurance that pending patent applications will be allowed, that Hemostemix will develop additional proprietary products that are patentable, that issued patents will provide Hemostemix with any competitive advantage or will not be challenged by any third parties, or that patents of others will not have an adverse effect on the ability of Hemostemix to do business.

Furthermore, there can be no assurance that others will not independently develop similar products, duplicate any of the Hemostemix products, or design around the products patented by Hemostemix. In addition, Hemostemix may be required to obtain licenses under patents or other proprietary rights of third parties. No assurance can be given that any licenses required under such patents or proprietary rights will be available on terms acceptable to Hemostemix. If Hemostemix does not obtain such licenses it could encounter delays in introducing one or more of its products to the market, while it attempts to design around such patents, or could find that the development, manufacturing or sale of products requiring such licenses could be foreclosed. In addition, Hemostemix could incur substantial costs in defending itself in suits brought against it on such patents or in suits where it attempts to enforce its own patents against other parties.

Until such time, if ever, that patent applications are filed, the ability of Hemostemix to maintain the confidentiality of its technology may be crucial to its ultimate possible commercial success. While Hemostemix has adopted procedures designed to protect the confidentiality of its technology, no assurance can be given that such arrangements will be effective, that third parties will not gain access to Hemostemix trade secrets or disclose the technology, or that Hemostemix can meaningfully protect its rights to its trade secrets.

Dependence on Collaborative Partners, Licensors and Others

Hemostemix activities will require it to enter into various arrangements with corporate and academic collaborators, licensors, licensees and others for the research, development, clinical testing, manufacturing, marketing, and commercialization of its products. Hemostemix intends to attract corporate partners and enter into additional research collaborations. There can be no assurance, however, that Hemostemix will be able to establish such additional collaborations on favourable terms, if at all, or that its current or future collaborations will be successful. Failure to attract commercial partners for its products may result in Hemostemix incurring substantial clinical testing, manufacturing, and commercialization costs prior to realizing any revenue from product sales or result in delays or program discontinuance if funds are not available in sufficient quantities. If any collaborative partner fails to develop, manufacture, or commercialize successfully any product to which it has rights, or any partner's product to which Hemostemix will have rights, Hemostemix's business may be adversely affected. Failure of a collaborative partner to continue to participate in any particular program could delay or halt the development or commercialization of products generated from such program. In addition, there can be no assurance that the collaborative partners will not pursue other technologies or develop alternative products either alone or in collaboration with others, including Hemostemix's competitors, as a means for developing treatments for the diseases targeted by Hemostemix programs.

Furthermore, Hemostemix may hold licenses for certain technologies and there can be no assurance that these licenses will not be terminated, or that they will be renewed on conditions acceptable to Hemostemix. Hemostemix may negotiate additional licenses in respect of technologies developed by other companies and academic institutions. Terms of license agreements to be negotiated may include, inter alia, a requirement to make milestone payments, which may be substantial. Hemostemix will also be obligated to make royalty payments on the sales, if any, of products resulting from licensed technology and, in some instances, may be responsible for the costs of filing and prosecuting patent applications. Should any of Hemostemix licensees breach their regulatory, clinical, operational or legal requirements this may impact Hemostemix reputation and/or ability to conduct its business or make progress as anticipated.

Rapid Technological Change

The biotechnology and pharmaceutical industries are characterized by rapid and substantial technological change. There can be no assurance that developments by others will not render Hemostemix proposed products or technologies noncompetitive, or that Hemostemix will keep pace with technological developments. Competitors have developed or are developing technologies that could be the basis for competitive products. Some of these products have an entirely different approach or means of accomplishing the desired diagnostic or therapeutic effect as compared with products to be developed by Hemostemix and could be more effective and less costly than the products to be developed by Hemostemix. In addition, alternative forms of medical treatment may be competitive with Hemostemix products.

Competition

Technological competition from pharmaceutical companies, biopharmaceutical companies and universities are intense and is expected to increase. Potential competitors of Hemostemix have or may develop product development capabilities or financial, scientific, marketing, and human resources exceeding those of Hemostemix. Competitors may develop products before Hemostemix develops its own products, obtain regulatory approval for such products more rapidly than Hemostemix, or develop products which are more effective than those which Hemostemix intends to develop. Research and development by others may render Hemostemix's proposed technology or products obsolete or non-competitive or produce treatments or cures superior to any therapy developed or to be developed by Hemostemix, or otherwise preferred to any therapy developed by Hemostemix.

Status of Healthcare Reimbursement

Hemostemix's ability to successfully market certain diagnostic or therapeutic products may depend in part on the extent to which reimbursement for the cost of such products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Significant uncertainty exists as to whether newly approved healthcare products will qualify for reimbursement. Furthermore, challenges to the price of medical products and services are becoming more frequent. There can be no assurance that adequate third-party coverage will be available to establish price levels, which would allow Hemostemix to realize an acceptable return on its investment in product development.

Acceptance of Technology

The Company's success depends on the acceptance of its stem cell technology by the medical community and consumers as a safe and effective solution. The success of its technology will depend on its acceptance by potential consumers and the medical community. Because its technology is new in the treatment of CLI, the long term effects of using its new technology are unknown. The results of short-term clinical trials do not necessarily predict long-term clinical benefit or reveal adverse effects. If results obtained from future commercial experience indicate that its technology is not as safe or effective as other treatments, adoption of this technology by consumers and the medical community may suffer and its business will be harmed.

Potential Product Liability

Pharmaceutical products involve an inherent risk of product liability claims and associated adverse publicity. Product liability insurance is costly, and availability is limited and may not be available on terms which would be acceptable to Hemostemix, if at all. An inability to maintain sufficient insurance coverage on reasonable terms or to otherwise protect against potential product liability claims could prevent or inhibit the commercialization of Hemostemix's products. A product liability claim brought against Hemostemix, or withdrawal of a product from the market, could have a material adverse effect upon Hemostemix and its financial condition.

Manufacturing

Hemostemix product manufacturing was done at a single facility without secondary backup. Hemostemix's ability to conduct its clinical trial may depend on its ability to manufacture and ship product in and out of a third-party manufacturing facility.

Reliance on Key Personnel

Hemostemix is dependent on certain members of its management and scientific staff as well as consultants and contractors, the loss of services of one or more of whom could adversely affect Hemostemix. In addition, Hemostemix's ability to manage growth effectively will require it to continue to implement and improve its management systems and to recruit and train new employees. There can be no assurance that Hemostemix will be able to successfully attract and retain skilled and experienced personnel.

Lack of Product Revenues and History of Losses

To date, Hemostemix has not recorded any revenues from the sale of biopharmaceutical products. Hemostemix expects to incur additional losses during the periods of research and development, clinical testing, and application for regulatory approval of its product candidates. Hemostemix expects to incur losses unless and until such time as payments from corporate collaborations, product sales and/or royalty or license payments generate sufficient revenues to fund its continuing operations.

Volatility of Share Price, Absence of Dividends and Fluctuation of Operating Results

Market prices for the securities of biotechnology companies, including Hemostemix, have historically been highly volatile. Factors such as fluctuation of Hemostemix operating results, announcements of technological innovations, patents or new commercial products by Hemostemix or competitors, results of clinical testing, regulatory actions, or public concern over the safety of biopharmaceutical products and other factors could have a significant effect on the share price or trading volumes for the common shares. Hemostemix's shares, may be subject to significant price and volume fluctuations and may continue to be subject to significant price and volume fluctuations in the future. Hemostemix has not paid dividends to date and does not expect to pay dividends in the foreseeable future.

Conflict of Interest

Certain of the directors and senior officers of Hemostemix may, from time to time, be employed by or affiliated with organizations which have entered into agreements with Hemostemix. As disputes may arise between these organizations and Hemostemix, or certain of these organizations may undertake or have undertaken research with competitors of Hemostemix, there exists the possibility for such persons to be in a position of conflict. Any decision or recommendation made by these persons involving Hemostemix will be made in accordance with his or her duties and obligations to deal fairly and in good faith with Hemostemix and such other organizations. In addition, as applicable, such directors and officers will refrain from voting on any matter in which they have a conflict of interest.

No Key Management Insurance

The Company does not currently have key management insurance in place in respect of any of its senior officers or personnel.

No Anticipated Dividends

The Company does not intend to pay dividends on any investment in the shares of stock of the Company. The Company has never paid any cash dividends and currently do not intend to pay any dividends for the foreseeable future. To the extent that the Company requires additional funding currently not provided for in its financing plan, its funding sources may prohibit the payment of a dividend. Because the Company does not intend to declare dividends, any gain on an investment in the Company will need to come through an increase in the stock's price. This may never happen, and investors may lose all of their investment in the Company.

ADDITIONAL DISCLOSURE FOR VENTURE ISSUERS WITHOUT SIGNIFICANT REVENUE

The Company's main focus is to develop, blood-derived cell therapies primarily for the treatment of severe medical conditions not adequately addressed by current treatments.

To achieve commercialization of its products, the Company must obtain regulatory approval in each respective jurisdiction it intends to market its products. Management of Hemostemix believes it may be possible to achieve this in certain jurisdictions on the basis of positive Phase 2 clinical trial data, but in most jurisdictions additional clinical data from larger clinical trials will be required to obtain such approval.

Hemostemix does not currently distribute any commercial products or provide any commercial services in any markets. Future revenues should come through royalty payments from partnering, licensing arrangements or through direct commercialization of its products.