ARCH BIOPARTNERS INC.

MANAGEMENT DISCUSSION AND ANALYSIS:

FOR THE QUARTER ENDED JUNE 30, 2024

DATED AUGUST 29, 2024

Management's Discussion and Analysis

The following Management Discussion and Analysis ("MD&A") should be read in conjunction with Arch Biopartners Inc's (the "Company") unaudited condensed interim consolidated financial statements (the "Interim Quarterly Financial Statements") and related notes for the three months ended June 30, 2024, which were prepared in accordance with International Financial Reporting Standards ("IFRS") and comparative periods have been restated in accordance with IFRS where applicable.

The Interim Quarterly Financial Statements have been prepared in accordance with IFRS applicable to a going concern that contemplates the realization of assets and the payment of liabilities in the ordinary course of business. Accordingly, they do not give effect to adjustments that would be necessary should the Company be unable to continue as a going concern. In other than the normal course of business, the Company may be required to realize its assets and liquidate its liabilities and commitments at amounts different from those in the accompanying Interim Quarterly Financial Statements. The Company's viability as a going concern is dependent upon its ability to obtain adequate financing, the on-going support of its shareholders, affiliates, and creditors, and to achieve profitable levels of operation. It is not possible to predict whether financing efforts shall be successful or if the Company will attain profitable levels of operations.

These financial statements, along with additional information relating to the Company, are available by accessing the Canadian Securities Administrators' System for Electronic Document Analysis and Retrieval ("SEDAR") at www.sedar.com.

Forward-Looking Statements

This Management Discussion and Analysis contains forward-looking statements within the meaning of applicable Canadian securities laws regarding expectations of our future performance, liquidity and capital resources, as well as the ongoing clinical development of our drug candidates targeting the dipeptidase-1 (DPEP-1) pathway, including the outcome of our clinical trials relating to LSALT Peptide (Metablok) or cilastatin, the successful commercialization and marketing of our drug candidates, whether we will receive, and the timing and costs of obtaining, regulatory approvals in Canada, the United States, Europe and other countries, our ability to raise capital to fund our business plans, the efficacy of our drug candidates compared to the drug candidates developed by our competitors, our ability to retain and attract key management personnel, and the breadth of, and our ability to protect, our intellectual property portfolio. These statements are based on management's current expectations and beliefs, including certain factors and assumptions, as described in our most recent annual audited financial statements and related management discussion and analysis under the heading "Business Risks and Uncertainties". As a result of these risks and uncertainties, or other unknown risks and uncertainties, our actual results may differ materially from those contained in any forward-looking statements. The words "believe", "may", "plan", "will", "estimate", "continue", "anticipate", "intend", "expect" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We undertake no obligation to update forward-looking statements, except as required by law. Additional information relating to Arch Biopartners Inc., including our most recent annual audited financial statements, is available by SEDAR at www.sedar.com.

Corporate Structure Overview

Arch Biopartners Inc. ("Arch" or the "Company") is incorporated under the Business Corporation Act (Ontario) with continuance under the Canadian Business Corporations Act.

On May 7, 2010, the Company was restructured into a biotechnology firm following a reverse takeover transaction involving three private Canadian biotechnology firms, all formed in 2009: Arch Biotech Inc. (Ontario), Arch Biophysics Ltd. (Alberta), and Arch Cancer Therapeutics Ltd (Alberta). The Company formed Arch Bio Ohio Inc. (Delaware) in 2014, Arch Bio Ireland Ltd. in 2016 and Arch Clinical Pty Ltd (Australia) in 2018 to facilitate future activity in the United States, Europe, and Australia respectively. Four of the six subsidiaries continue to operate as separate entities, though 100% owned, and consolidated for financial purposes. Arch Biotech and Arch Biophysics were dissolved by the Company due to long term inactivity following the September 30, 2023 year end. The status of the four remaining subsidiaries is as follows:

Arch Clinical Pty Ltd. (Australia) has been used as a vehicle to conduct Phase I human trials in Australia. A dose escalation trial was conducted in early 2023 and is now complete.

Arch Bio Ohio Inc. (Delaware) is an entity available to the Company for any US operations. Currently a dormant entity with no active operations.

Arch Bio Ireland Ltd. is a dormant subsidiary and was formed as a holding company to act as the holder of an orphan drug designation from the European Medicines Authority. This subsidiary has no active operations.

Arch Cancer Therapeutics Ltd. (Alberta) is a holding company for IP assignments. Currently no active operations.

The Company's common shares are listed on the TSX Venture Exchange ("TSXV") and trade under the ticker "ARCH". The Company's common shares trade in the U.S. on the OTCQB Venture Market under the ticker "ACHFF".

As of the date hereinabove, the Company has 64,650,633 common shares outstanding. Please see ***Outstanding Share Data*** below for more information on the Company's outstanding shares and options.

Business Overview

Arch Biopartners Inc. is a portfolio-based biotechnology company focused on the development of innovative technologies that have the potential to make a significant medical or commercial impact. Arch works closely with the scientific community, universities, and research institutions to advance and build the value of select preclinical technologies, develop the most promising intellectual property, and create value for its investors.

At present, the Company is focused on the clinical development of its novel drug platform targeting dipeptidase-1 (DPEP-1) mediated organ inflammation in the lungs, liver and kidneys. Organ inflammation often results in organ damage or failure, including in the cases of ischemia reperfusion, toxic insult, crush injury (kidney), viral infections and sepsis. The Company's lead drug candidate is LSALT Peptide (also known as "Metablok").

LSALT Peptide is currently in a second Phase II trial, targeting the prevention and treatment of cardiac surgery-associated acute kidney injury (CS-AKI). CS-AKI is often caused by ischemia-reperfusion injury (IRI) that reduces blood flow (ischemia) and thus oxygen in the kidney causing kidney cell damage. Once blood flow is restored to normal (reperfusion), inflammation is triggered and injury to kidney cells is exacerbated. In the worst cases of AKI, kidneys fail, leading to kidney dialysis or kidney transplant. At present, there are no therapeutic treatments available to prevent or treat CS-AKI or IRI.

LSALT Peptide completed an international Phase II trial targeting lung inflammation which was often experienced in hospitalized pandemic patients in 2021. Following this trial, LSALT Peptide entered the Canadian Treatments for COVID-19 Phase III trial (CATCO) in the first quarter of 2022. In May 2023, the World Health Organization ended the pandemic's status as a health emergency and CATCO leadership subsequently decided to halt patient recruitment in the study. The study was a nationwide trial and mainly funded by the Canadian Institutes of Health Research and was managed and sponsored by the Sunnybrook Research Institute and not Arch Biopartners.

The Company continues to pursue the therapeutic development of LSALT Peptide and other DPEP-1 targeting drug candidates, such as cilastatin, for new indications where inflammation of the lungs, liver and kidneys is an unmet problem. The Company will be providing cilastatin to support a Phase II trial targeting drug toxin-related AKI. The investigator-initiated trial was announced in late July, 2024 and is titled *Prevention of Nephrotoxic Acute Kidney Injury with Cilastatin* ("PONTIAC trial"). The team of investigators plan to start the PONTIAC trial in late Q4, 2024. The Company will not be managing or sponsoring this trial, and its main role is supplying the cilastatin. If successful, the data results generated by the trial may be used to support future commercial development.

The goal of pre-clinical studies and all human trials testing LSALT Peptide or cilastatin is to produce data demonstrating safety and therapeutic efficacy in humans to support new drug approval by health authorities, such as the U.S. FDA, European Medicines Agency, and Health Canada ("Health Authorities"). Such drug approval is necessary to enable commercialization and future sales of LSALT Peptide or cilastatin.

Future disclosure regarding the initiation, budgeting, and financial management of other human trials to generate sufficient human data to support future drug approval will be made only after such a trial is organized and involves any of the Health Authorities.

The Company owns, or has exclusive licensing rights on, the intellectual property ("IP") emanating from the programs described below.

Technology Overview

LSALT Peptide – Lead DPEP-1 Inhibitor Drug Candidate

LSALT Peptide is a new peptide drug candidate and has emerged to be the lead opportunity among the Company's growing pipeline of DPEP-1 inhibitor drug candidates. LSALT Peptide is also referred to as "LSALT" or "Metablok" in Company communications.

The Company is currently focused on executing the human trials required by the Health Authorities to produce sufficient human data to support new drug approval and future drug sales.

Scientific Background of LSALT Peptide

LSALT has the potential to be a breakthrough in the treatment of diseases where inflammation plays a major role. The inventors of LSALT published the details of the mechanism of action and efficacy of LSALT. The publication, titled "Dipeptidase-1 is an adhesion receptor for neutrophil recruitment in lungs and liver" by Choudhry et. Al. was published by the journal *Cell* in August 2019 and can be found at the following link:

"Dipeptidase-1 is an adhesion receptor for neutrophil recruitment in lungs and liver"

In February 2022, Arch scientists and their collaborators published a paper in the journal *Science Advances* describing the mechanism of action for dipeptidase-1 (DPEP-1) in acute kidney injury (AKI) in a pre-clinical study. Importantly, the study also confirmed the mechanism of action of two DPEP-1 inhibitors (the LSALT Peptide and cilastatin) that effectively protected the kidney during ischemia reperfusion injury. These findings provide Arch with the scientific rationale to pursue a Phase II trial for LSALT and/or cilastatin targeting the prevention of cardiac surgery-associated AKI. The publication, entitled "Dipeptidase-1 governs renal inflammation during ischemia reperfusion injury" by Lau et al. can be found at:

"Dipeptidase-1 governs renal inflammation during ischemia reperfusion injury"

LSALT was invented by Arch scientists led by Dr. Stephen Robbins and Dr. Donna Senger. The inventors have assigned the intellectual property related to Metablok to the Company. All the DPEP-1 inhibitors invented by the Arch team, including LSALT, are protected by composition patents held by Arch. These include proprietary peptides and antibodies that target DPEP-1

Cilastatin, for treatment of kidney inflammation, is protected by methods of use patents also held by Arch, or exclusively licensed to Arch.

Inflammation Based Disease

Inflammation is a localized physical condition that involves the activation of the immune system in response to infection, tissue injury, or autoimmunity. Inflammation is involved in the pathogenesis of many diseases and contributes to organ dysfunction and failure, such as certain types of acute injury in the lungs, liver and kidneys.

Sepsis

Sepsis is caused by the body's immune response to an infection. If the immune system activates too many white blood cells, or leukocytes, to fight an infection or defend against toxins, there is a risk of widespread, life-threatening inflammation termed "sepsis".

Sepsis is known to cause inflammation and cause damage in organs. Blood clotting during sepsis inhibits blood flow to organs, reducing their intake of nutrients and oxygen. In severe cases of sepsis, one or more organs can fail. In the worst cases, infection leads to a dangerous drop in blood pressure, called septic shock, which can quickly lead to the failure of several organs such as lungs, kidneys, and liver, causing death.

LSALT Peptide has the potential to treat or prevent organ inflammation due to sepsis.

Human Trial Development for LSALT Peptide

New drug candidates such as LSALT Peptide must follow Health Authority regulations which dictate the general requirements for producing sufficient human safety and efficacy data to support new drug approval. In general, a new drug must show safety during in vivo non-human studies before safety and tolerability can be tested in humans in a clinical trial, commonly known as a Phase I trial.

Following a successful and safe Phase I trial, a Phase II trial is typically a human trial where the new drug candidate is tested to treat a specific disease in humans. Phase II trials typically involve a smaller number of sick patients, often less than one hundred. The goal of a Phase II trial is to show a signal that the new drug is showing enough therapeutic efficacy to support a subsequent Phase III trial.

The Phase III trial usually involves a greater number of patients than the Phase II trial to confirm, with a high degree of statistical confidence, that the new drug shows therapeutic efficacy and safety in humans to warrant new drug approval from the Health Authorities.

The size of Phase III trials depends on the strength of the new drug's performance in the Phase II trial. Generally, drugs that show strong performance versus a placebo will require fewer patients in a Phase III trial, and those new drugs that show minimal benefit in a Phase II trial will generally require many more patients in a Phase III trial to confirm therapeutic efficacy and safety to support drug approval.

Phase I Trials for LSALT Peptide

In pre-clinical studies, Arch scientists have demonstrated LSALT's ability to prevent acute kidney injury by blocking the inflammatory response triggered by ischemia/reperfusion and other insults to the kidney. The Arch team has similarly shown LSALT Peptide's ability to prevent acute inflammation injury to the lungs and liver in preclinical in vivo models. Currently, there are no specific or effective treatments to prevent acute organ injury caused by inflammation.

The Company completed initial toxicology, including a maximum tolerable dose and pharmacokinetic studies for LSALT, to support a pre-Investigational New Drug (IND) meeting with the U.S. Food and Drug Administration (FDA) in April 2018. The FDA members addressed questions from the Arch team and confirmed key components of a future IND application for Metablok.

Arch received approval from the Alfred Health Human Research Ethics Committee (HREC) in Melbourne, Australia to conduct a Phase I human trial for LSALT.

The Phase I human trial, completed in March 2020, was a double-blind, placebo-controlled, randomized, single and multiple ascending dose study to evaluate the safety and pharmacokinetic profile of LSALT in 52 healthy, normal participants. The drug was well tolerated by all volunteers to a maximum daily dose of 5mg of LSALT and no significant drug related adverse effects were observed.

In the second quarter ending March 31, 2023, the Phase I trial in Australia was reopened and another 16 healthy, normal participants were enrolled to receive 10 mg once daily and 10mg, twice daily. The drug was well tolerated by all volunteers and no significant drug related adverse effects were observed.

The cost of the entire Phase I trial involving the 68 volunteers was approximately $1.5 million CAD, net of Australian Government research investment incentives.

First Phase II Trial for LSALT Peptide

In May 2020, Health Canada granted a *No Objection Letter* to Arch to conduct a Phase II trial to investigate LSALT's efficacy to prevent organ damage caused by inflammation in patients with COVID-19.

In June 2020, U.S. Food and Drug Administration (FDA) granted permission to the Company to proceed with a Phase II trial in the U.S. and an Investigational New Drug application was activated. The trial began October 2020, at a hospital site in Florida, which was followed by clinical trial sites elsewhere in the U.S., Canada, and Turkey. A total of 7 sites were activated into the trial, with two each in Canada and Turkey and three sites in the U.S.

In December 2020, the Company entered into a Contribution Agreement (CA) with the Canadian government. As part of the CA, the Company received a commitment to contribute up to $6.7 million CAD to complete the Phase II trial and related activities to support drug approval. This funding represented up to approximately 75-80% of the Company's budget for the Phase II trial

and came from Innovation Science and Economic Development (ISED) Canada's Strategic Innovation Fund (SIF).

The Phase II trial was an international, multicenter, randomized, double-blind, placebo-controlled, proof of concept study of LSALT Peptide as prevention of organ inflammation known to trigger acute respiratory distress syndrome (ARDS) and acute kidney injury (AKI) in patients infected with SARS-CoV-2 (COVID-19).

Secondary endpoints to measure the performance of LSALT included continuous measurements of respiratory, renal, hepatic, cardiac, and blood-clotting function throughout treatment and end of study, hospital stays (floor, ICU, and overall), 28-day mortality, and viral infection (clearance rate, SARS-CoV-2-specific immunoglobulins) compared between the active treatment arm and the placebo group. Exploratory endpoints included changes in cytokines between treatment arms and description of the pharmacokinetics of LSALT peptide.

Patient recruitment into the Phase II trial was completed at the end of April 2021 and the dosing of the final patients occurred in May 2021. The exploratory study was designed to detect a clinical signal of efficacy or biomarker data and was not powered for statistical significance. A total of 65 patients were randomized into the trial with 61 patients receiving at least one dose of treatment.

Overview of Top-Line Phase II Results

The Arch clinical team published a peer reviewed paper in the *British Medical Journal Open* (*BMJ Open*) detailing the results of the international Phase II human trial for LSALT Peptide targeting acute lung and kidney inflammation in hospitalized patients infected with SARS-CoV-2 virus.

The paper in *BMJ Open* describes the clinical highlights, outcomes and biomarker results of the study. The Phase II trial was an international, multicenter, randomized, double-blind, placebo-controlled, proof of concept study of LSALT peptide for the prevention of organ inflammation such as acute respiratory distress syndrome (ARDS) and acute kidney injury (AKI) in patients infected with SARS-CoV-2. The exploratory, adaptive trial was initiated with urgency in the early stages of the global pandemic to identify clinical signals of efficacy for LSALT peptide in the treatment of acute lung and kidney inflammation.

The results of the Phase II trial provided first-ever evidence validating DPEP-1 as a mediator of organ inflammation and therapeutic target in humans. In addition, LSALT peptide was well tolerated with no safety issues related to the drug.

New biomarker data for LSALT peptide was also disclosed for the first time in the *BMJ Open* publication. An analysis of serum inflammatory biomarkers was performed from blood samples collected from study participants. Biomarkers analyzed which relate to organ inflammation included cytokines and chemokines such as IL-6, CXCL8, CXCL10, IL-1β and CCL7. Collectively, a greater proportion of inflammatory biomarkers decreased in patients receiving LSALT peptide compared with placebo. In particular, the reduction of CXCL10 in the LSALT peptide group versus the placebo group was statistically significant at the end of treatment.

CXCL10 plays a role in facilitating leukocyte recruitment to various vascular beds including the

lungs and kidneys. The reduction of CXCL10, and the other inflammatory biomarkers during LSALT peptide treatment is consistent with LSALT peptide's mechanism of action as an inhibitor of DPEP-1 mediated leukocyte recruitment to the lungs and kidneys.

The new data provides more scientific rationale for Arch to advance LSALT peptide to prevent leukocyte recruitment and organ inflammation for other indications, including a larger Phase II trial targeting cardiac surgery-associated AKI, which is now an active trial and recruiting patients. More information on the current trial can be found below and at clinicaltrials.gov

Details of the results from the Phase II trial are reported in the peer-reviewed journal *BMJ Open*. The publication, titled *"Multicenter, Randomized, Double-Blind, Placebo-Controlled, Proof of Concept Study of LSALT Peptide as Prevention of Acute Respiratory Distress Syndrome and Acute Kidney Injury in Patients Infected with SARS-CoV-2 (COVID-19)"* by Somayaji et. al. can be found at the *BMJ Open* website

Previously disclosed in December 2021 and included in the *BMJ Open* publication, there were no significant differences in adverse events between LSALT peptide and placebo treated patients. The study population of the Phase II trial did not have enough incidence of ARDS or AKI to detect a conclusion on these two particular clinical outcomes. In a secondary evaluation of patients on ventilation, despite being older by an average of 5 years, subjects in the LSALT peptide group demonstrated 22.8 ventilation-free days compared to 20.9 days in the placebo group in the unadjusted analysis at 28 days. "Ventilation" was defined as a need for high flow oxygen therapy (≥ 6L/min), non-invasive ventilation, mechanical ventilation, or extracorporeal membrane oxygenation (ECMO). In a post-hoc analysis adjusting for age, body mass index (BMI), and PaO2/FiO2 ratio (a measure of lung disease severity), the difference in ventilation-free days was 6.7 days favoring the LSALT peptide group compared to the placebo group.

These Phase II results provide key human data which, in conjunction with extensive preclinical studies, further support DPEP-1 as a relevant therapeutic target for diseases of the lung, liver and kidney where inflammation plays a major role. Arch Biopartners continues to pursue its strategy to develop new DPEP-1 targeting drugs for these clinical indications.

Entry into the Phase III Canadian Treatments for Covid-19 Trial

In December 2021, the Company announced that LSALT Peptide would enter the Canadian Treatments for COVID-19 (CATCO) human trial, a multi-centre adaptive, randomized, open-label, controlled study conducted in fifty-five hospitals across Canada. The CATCO trial took place in conjunction with the World Health Organization's (WHO) SOLIDARITY trial, in collaboration with countries around the world and with support from the Canadian Institutes of Health Research (CIHR).

Usually, Phase III trials in the biotech and pharmaceutical industry can cost the sponsor of the trial millions upon millions of dollars. The Company did not pursue a financing to support the participation of LSALT Peptide in the CATCO trial due to the national funding sources already in place to complete the Phase III trial. This is unusual among biotech companies and represented a financial de-risking for the Company for this trial.

Based on results of the Phase II study, the primary endpoint of the confirmatory Phase III clinical trial was the difference in the number of respiratory support free days between study groups during the 28-day study period.

Sunnybrook Research Institute (SRI) was the manager and sponsor of the CATCO trial. The Company's main responsibility during the trial included supplying LSALT drug vials to support the trial until completion.

The progress of the trial depended on the incidence of patients with severe complications from COVID admitted to hospitals at any given time. The later stage of the pandemic saw a decrease in patients with severe complications of COVID-19 and very few patients on ventilators during 2022, not only in Canada, but around the world.

LSALT Peptide and a Potential Path to Drug Registration (Drug Approval)

The path to drug approval for LSALT Peptide will depend on additional human data showing efficacy in preventing or treating organ inflammation. As a result, Arch Biopartners is currently pursuing opportunities to generate additional human safety and efficacy data for LSALT Peptide to support future drug approval from Health Authorities in areas where acute organ inflammation is prevalent.

Second Phase II trial for LSALT Peptide – Cardiac Surgery Associated AKI (CS-AKI)

LSALT peptide is currently being dosed in a Phase II trial targeting the prevention of ischemia reperfusion-associated acute kidney injury in high-risk cardiac surgery patients. In June 2023, the U.S. Food and Drug Administration (FDA) granted permission to the Company to proceed with this Phase II trial in the U.S. and a new Investigational New Drug application was activated. In addition, the Company also received approval from the Turkish Ministry of Health and Health Canada in December 2023 and January 2024 respectively to have hospital sites in both countries participate in this trial. Dosing of eligible cardiac surgery patients began in March 2024.

The CS-AKI Phase II trial is an international multi-center, randomized, double-blind, placebo-controlled study of LSALT peptide. The recruitment target for the trial is 240 patients. The primary objective of the trial is to evaluate the percentage of subjects with AKI within seven days following on-pump (heart-lung machine) cardiac surgery, defined by the KDIGO (Kidney Disease: Improving Global Outcomes) criteria.

Details of the Phase II trial, entitled "*Phase 2 Global, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study of LSALT peptide for the Prevention or Attenuation of Acute Kidney Injury (AKI) in Patients Undergoing On-Pump Cardiac Surgery"* can be viewed at clinicaltrials.gov.

Advisory services and a funding contribution from the National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP) announced by the Company in March 2023, will significantly offset the costs of the CS-AKI Phase II trial.

To date, the CS-AKI Phase II trial has been recruiting and dosing patients at five clinical sites in

Turkey. The original study protocol has been enhanced to improve the recruitment of patients with a high risk of AKI during bypass cardiac surgery, so that LSALT peptide can be more effectively tested against the incidence of AKI. Performing a human trial in the cardiac surgery arena is very complicated and challenging due to the severe illness that many of these patients experience by the time they require cardiac surgery. The recent enhancements to the study design are based on lessons learned during the recruitment of patients early in the trial, and will support the performance of all clinical sites in the trial, including the Canadian sites that are pending activation into the study.

The Canadian sites contracted to join the CS-AKI Phase II trial following local approvals are the University of Calgary Hospital, the University Health Network (at Toronto General Hospital) and the Unity Health Network (at St. Michael's Hospital). All three are expected to begin recruiting patients in Canada in Q4 of 2024.

Cardiac Surgery-Associated Acute Kidney Injury (CS-AKI) and LSALT peptide

CS-AKI is often caused by ischemia-reperfusion injury (IRI) that reduces blood flow (ischemia)and thus oxygen in the kidney, causing kidney cell damage. Once blood flow is restored to normal (reperfusion), inflammation is triggered and injury to kidney cells is exacerbated. In the worst cases of AKI, kidneys fail, leading to kidney dialysis or kidney transplant. There is no treatment available in the market today that prevents acute kidney injury of the type commonly experienced by on-pump cardiac surgery patients.

LSALT peptide targets the dipeptidase-1 (DPEP-1) pathway and has been shown by Arch scientists and their collaborators to prevent IRI to the kidneys in pre-clinical models, providing the scientific rationale for Arch to use LSALT peptide in this CS-AKI trial. Details of their findings were published in a *Science Advances* publication, titled "*Dipeptidase-1 governs renal inflammation during ischemia reperfusion injury*" by Lau et. al. and can be found at the following link at the journal's website.

Incidence of Cardiac Surgery-Associated Acute Kidney Injury (CS-AKI)

Acute kidney injury (AKI) is a known common complication in patients after coronary artery bypass grafting (CABG) and other cardiac surgeries, including on-pump surgeries which increase the risk of AKI. The reported prevalence of CS-AKI is up to 30% and is independently associated with an increase in morbidity and mortality.

Manufacturing of LSALT Peptide

During 2022, Arch management was working to prepare new LSALT Peptide drug supply to enable future organ inflammation related human trials.

During the calendar year 2022 and the first half of 2023, the Company actively developed the manufacturing capability to produce LSALT Peptide at the standard required to enable phase II and III trials, as well as future drug approval and commercial scale production.

In 2019, the Company produced LSALT Peptide with the US FDA and Health Canada standards

required to support a Phase I trial. Once the global pandemic ensued, the Health Authorities allowed the Company, on an urgent basis, to use the Phase I supply of LSALT Peptide to support the international Phase II trial to treat patients in hospital suffering from severe organ complications from COVID-19. Health Canada subsequently allowed the Company and the CATCO Phase III trial to also use the Phase I supply of LSALT peptide, again on an urgent basis.

Outside of the phase II pandemic trial, the Company, and its manufacturers, were required to abide by pre-pandemic regulations to produce LSALT Peptide drug substance and drug product with the necessary chemistry, manufacturing, and control standards. These milestones are necessary to enable phase II and Phase III clinical trials, regulatory drug approval and commercial scale manufacturing for non-pandemic indications.

During 2022 and early 2023, the Company successfully worked with a new U.S. contract manufacturing organization to produce Phase II/III drug substance that was used to create a new supply of LSALT Peptide drug product vials to support future trials.

Cilastatin – A Second DPEP-1 inhibitor drug candidate for the treatment of AKI

The Arch team had a pre-investigational new drug application (PIND) meeting with the U.S. Food and Drug Administration (FDA) Division of Cardiovascular and Renal Products (DCRP) in February, 2024, to discuss Arch's plan to repurpose cilastatin as a new treatment to prevent toxin related acute kidney injury (AKI).

The FDA PIND meeting provided the Arch team with guidance from the FDA for the content of a future IND application for cilastatin. An IND application is a request to the FDA for authorization to administer a new drug to patients in a human trial. The Arch team received clarity on several items including cilastatin pharmacology; manufacturing of a cilastatin drug product; design of Phase II study protocol targeting toxin-related AKI; and the regulatory path that would lead to a New Drug Application (NDA).

Following the FDA PIND meeting, Arch management oversaw the development and manufacturing of a first-ever, stand-alone cilastatin drug product during the third quarter of 2024. This lot of cilastatin drug product will be used the upcoming investigator led trial entitled "**P**revention **O**f **N**ephro**T**oxin **I**nduced **A**cute kidney injury with **C**ilastatin" (PONTIAC). PONTIAC is a 900 patient Phase II trial that will evaluate the efficacy of the dipeptidase-1 inhibitor cilastatin for preventing AKI caused by drugs such as antibiotics, chemotherapeutic agents and radiographic contrast.

The PONTIAC clinical team of investigators, based out of the Universities of Calgary and Alberta, was awarded $1,500,000 by the Canadian Institutes of Health Research (CIHR) to fund the trial. The clinical team also received $400,000 as part of the Accelerating Clinical Trials (ACT) call for proposals to "Evaluate Canadian Biotechnologies with Randomized Controlled Trials" (October 2023). Funds from both grants will be used by the clinical team to conduct the PONTIAC trial.

The PONTIAC clinical team sponsoring the trial and is currently preparing to submit a Clinical Trial Application (CTA) to Health Canada to proceed with the trial by the fourth quarter of 2024. Arch is acting as a study partner for grant funding opportunities, providing cilastatin drug product

and providing scientific and regulatory advice. Arch is not managing the trial or applying for regulatory approvals and has no influence on the timeline toward the first patient dosed in the study.

Arch was also exploring the opportunity to support an investigator-initiated Phase II trial for cilastatin targeting rhabdomyolysis-associated AKI, also known as "crush-AKI". This opportunity is currently not being pursued by Arch at this time and the Company may revisit this opportunity at a later date.

Arch has method of use patents in several jurisdictions for repurposing cilastatin as a treatment for AKI. The patents are either proprietary or exclusively licensed to Arch.

Other Technology Platforms in the Arch Portfolio

The Company has additional technology platforms in its portfolio, currently not under active clinical or commercial development, namely: (i) AB569: an anti-infective candidate for treating or preventing antibiotic resistant bacterial infections, primarily as a topical treatment for wounds; and, (ii) Borg: Peptide-Solid Surface Interface: a binding of proprietary peptides to solid metal and plastic surfaces to inhibit biofilm formation and to reduce corrosion.

For more information on these programs not under commercial development at this time, please visit the Company's website at www.archbiopartners.com or visit the Company's past disclosures at www.sedar.com.

Discussion Regarding Key Milestones

The Company is focused primarily on the approval of its lead drug candidate, LSALT Peptide, and secondarily on the approval of cilastatin as a new treatment for toxin related AKI. Key milestones to achieve drug approval with the Health Authorities and pursue drug sale revenues may be determined by the performance of LSALT Peptide or cilastatin in a Phase III trial. The Company intends to pursue other indications where the DPEP-1 pathway is important to inflammation injury, to demonstrate sufficient safety and efficacy data to support drug approval.

Since there are no treatments to prevent cardiac surgery-associated acute kidney injury caused by ischemia reperfusion injury, a potential milestone for the Company would be to demonstrate sufficient efficacy and safety of LSALT Peptide (or cilastatin) in preventing or treating AKI to warrant any of the Health Authorities to grant a faster regulatory path toward drug approval and drug sales. The actual path can only be determined by the specific health authority after such a trial is completed.

Contrarily, if LSALT Peptide or cilastatin do not show therapeutic effect in treating or preventing AKI, then either drug will unlikely be approved by any of the Health Authorities. Please see ***Risk Factors*** of this management discussion and analysis for various risk factors that may inhibit LSALT Peptide from achieving drug approval and future drug sales.

Financial and Operating Performance

The Company has not yet generated commercial revenue.

The Company incurred $440,274 of research expenses during the third quarter ended June 30, 2024, the Company's largest expense in the quarter and an increase from $289,326 from the same quarter last year. Research expenses for the quarter were incurred mainly for the manufacturing of cilastatin drug product and costs related to the ongoing Phase II trial targeting CS-AKI. Not including research and non-cash expenses, the Company spent approximately $127,000 per month during the quarter on regulator fees, exchange fees, patents, salaries, professional fees, marketing, communications, interest and governance. The current monthly non-research cash-burn rate of the Company is in line with the spending rate during and subsequent to the year ending September 30, 2023, and the Company's current pace of growth.

The current operations of the Company do not show a buildup of capital expenditures as any facilities used for continuing research and development to date have been owned by third parties. Cash flow used by operating activities totaled $864,113 and the Company reported a net loss of $884,565 for the quarter ending June 30, 2024.

Results from Operations

The Company reported a *loss from operations* of $862,933 for the quarter ended June 30, 2024, versus a *loss from operations* of $577,425 for the quarter ending June 30, 2024. The increase in operational loss of $285,508 in the third quarter compared with the same quarter last year is mostly explained by increased research activity including the manufacturing cost to produce cilastatin drug product and the ongoing costs of the Phase II trial targeting CS-AKI.

Interest on long-term debt was $39,916 in the third quarter of fiscal year 2024 compared with $41,699 in the third quarter of 2023. The similar interest year over year reflects the constant level of debt and interest rates maintained during the entire year. The Deferred Convertible Debt issued by the Company, remains at $3,100,000, unchanged year over year. The Deferred Convertible Debt notes outstanding are accruing interest that is scheduled to be paid in common shares priced at the market at the time of settling the interest outstanding. Please see Notes 7 and 8 of the third quarter 2024 interim financial statements for more detail on the deferred convertible notes and the loan from a shareholder respectively.

Interest expense on the promissory notes decreased to $54,600 during the third quarter compared to $60,479 in the same period last year. The decrease is the result of the decrease in the total amount of promissory notes outstanding that were issued by the Company to help fund operations paid for by the NRC-IRAP industry grant. Please see Note 14 of the third quarter 2024 interim financial statements for more detail.

Patent expense increased slightly to $32,830 from $23,561 in the third quarter of 2023, a reflection of ongoing patent work performed by the Company during both third quarter recording periods. There is no trend or seasonality associated with this consistency in patent expense from the prior year's third quarter.

Professional fees for the third quarter of 2024 increased to $121,145 from $105,845 in the third quarter last year due to the increased cost of hiring external consultants and the increased need for professionals to assist in the Company's clinical trials and drug manufacturing activities during 2024 compared to the prior year.

The remaining expenses associated with managing the Company, including wages, communication, marketing, and administrative expenses were similar to the prior year's third quarter as the company maintained stable operating costs. The Company's net loss was $884,565 for the quarter ended June 30, 2024, compared with a net loss of $450,782 in the third quarter a year earlier.

Management of the Company expects to maintain a controlled cost environment for progressing drug candidates through clinical development and toward the goal of drug approval. Management expects a steady pace of expenditures, consistent with past quarters, during the remainder of 2024 in order to advance certain drug candidates through additional clinical trials and toward viable commercial opportunities. If deemed necessary, management of the Company will access capital markets to raise more funds to complement existing resources. Please see ***Liquidity, Capital Resources and Cash Flows*** below.

Comment Regarding Operating Segments

The interim consolidated Financial Statements for the quarter ending June 30, 2024, include the accounts of the Company and its subsidiaries. Each subsidiary is considered an operating segment for consolidation purposes. The Company and its subsidiaries represent one reporting segment as all activity is effectively in the same line of business.

Selected Annual Information

This section is not applicable to the interim MD&A pursuant to Form 51-102F1 contained in National Instrument 51-102. To view selected annual information, please refer to the Company's annual financial statements for the year ended September 30, 2023, and MD&A filed on SEDAR at www.sedar.com.

Selected Quarterly Information

The variations in revenue and income (loss) from quarter to quarter do not reflect any seasonality nor any pattern. The differences in loss are the result of increased or decreased research expenses and/or non-dilutive funding events in any given quarter, depending on the level of clinical trial activity underway at the time.

The following table sets forth, for each quarter ended on the date indicated, information relating to the Company's revenue, net income (loss) per common share as prepared under IFRS.

All values in CAD

Quarter Ending:	June 30 2024 Q3	Mar 31 2024 Q2	Dec 31 2023 Q1	Sept 30 2023 Q4	June 30 2023 Q3	Mar 31 2023 Q2	Dec 31 2022 Q1	Sept 30 2022 Q4
Revenue	-	298,145	(1,098,869)	116,371	2,531,421	434,719	(593,700)	-
Income (loss)	(884,565)	(783,250)	244,281	(450,782)	(962,424)	(2,157,801)	(498,005)	(247,394)
Per share	(0.014)	(0.013)	0.005	(0.007)	(0.015)	(0.035)	(0.008)	(0.004)

Based on weighted average shares outstanding as at quarter end

Liquidity, Capital Resources and Cash Flows

The Company's adjusted working capital deficit as at June 30, 2024 was $3,340,851 adjusted to exclude the Deferred Convertible Debt notes maturing within the next 12 months and interest expense on the Deferred Convertible Debt, both converting into, and payable in common shares, respectively. This adjusted working capital deficit is a calculated number and does not have a formal definition according to IFRS but management feels it provides useful information to the user of the Financial Statements. Calculations of adjusted working capital are as follows:

	Quarter Ended	Year Ended	
	June 30 2024	Sept 30 2023	Sept 30 2022
Current assets	1,539,106	1,171,172	621,641
Current liabilities	7,596,313	5,977,070	2,779,434
Working capital surplus (deficit)	(6,057,207)	(4,805,898)	(2,157,793)
Adj. for: convertible debt	2,600,000	2,600,000	2,100,000
Adj. for: interest on convertible debt	116,356	172,500	190,000
Adj. for: Deferred Revenue	-	1,098,869	-
Adjusted working capital surplus (deficit)	(3,340,851)	(934,529)	132,207

The Company's primary source of cash flow in the last two completed fiscal years has been from the contribution agreement with the NRC IRAP to support the commercial drug development of LSALT (Metablok). This grant award is described below and in Note 13 of the interim quarterly financial statements for the period ending June 30, 2024.

	Quarter Ended		Year Ended		
	June 30 2024	June 30 2023	Sept 30 2023	Sept 30 2021	Sept 30 2020
Cash from (used in) operating activities	(864,113)	567,652	(234,075)	479,476	(2,980,743)
Cash from (used in) investing activities	-	-	-	-	-
Cash from (used in) financing activities	901,500	121,000	559,000	(421,370)	2,775,300
Increase (decrease) in cash	37,387	688,652	324,925	58,106	(205,443)
Cash, beginning of period	6,560	708,488	506,348	448,242	653,685
Cash, end of period	43,947	1,397,140	831,273	506,348	448,242

In addition, the Company relies on the issuance of its own securities to fund much of its activities, as the Company has not generated positive cash flow from operations. Raising capital through the issuance of its own securities can be difficult or uncertain, depending on the state of the economy, the health of the stock market, restrictions on capital and liquidity due to crises, such as the global financial crisis of 2008-09 or the impact of the global COVID-19 pandemic.

In the next 6 to 12 months, management of the Company will consider accessing capital markets

to raise more funds to complement existing resources and improve its cash position. Ongoing funding from industry and academic grants has reduced the need for equity funding during difficult financial market conditions over the last 3 years.

The Company has taken the following steps to improve liquidity and working capital since August 2022 and subsequent to the year ending September 30, 2023:

- On July 30, 2024, the Company closed a non-brokered, private placement financing of CAD $600,000 by issuing 400,000 common shares at $1.50 per share. These shares have a four month hold period from the close date and all investors are considered non-insiders to the Company.

- During the third quarter of 2024, insiders of the Company, employees and consultants collectively exercised stock options which resulted in the issuance of 1,495,000 common shares and gross proceeds of $762,500

- Company management had secured loans from Richard Muruve, CEO and director of the Company and repaid the outstanding loan during the quarter ending June 30, 2024. Please see related party transactions below for more information.

- In November 2023, the Company issued 156,818 common shares at a price of $1.10 to settle $172,500 in total annual interest that accrued up to September 30, 2023, on all the outstanding convertible notes. These notes originally were structured to have the interest paid by the issuance of common shares instead of cash payments and the issuance of such shares to settle the accrued interest was subject to TSXV approval

- In May 2023, the Company received final reimbursement of $535,795 under the Canadian Government's Strategic Innovation Fund-Innovation Science and Economic Development contribution agreement.

- In May 2023, the estate of a former director exercised 200,000 stock options for gross proceeds to the Company of $128,000.

- During the second quarter of 2023, the Company announced that it is receiving advisory services and up to $4,000,000 in funding from the National Research Council of Canada Industrial Research Assistance Program ("NRC IRAP") to support the research and development of the LSALT peptide program. In the second quarter of 2024, revenue related to the NRC IRAP totaling $2,184,360 was recorded on the income statement. On the balance sheet, deferred revenue was reduced from $800,724 at Dec 31, 2023 to nil. The Company's accounts receivable totaling $967,463 in the third quarter of 2024 includes the remaining amounts of the NRC-IRAP funds to be paid to the Company.

- In December 2022, the Company issued 68,523 common shares at a price of $2.94 to settle $201,459 in total annual interest that accrued up to September 30, 2022, on all the outstanding convertible notes. These notes originally were structured to have the interest paid by the issuance of common shares instead of cash payments and the issuance of such shares to settle the accrued interest was subject to TSXV approval.

As of the date hereinabove, the Company continues to sponsor a Phase II trial targeting cardiac surgery-associated acute kidney injury to produce additional human data showing efficacy and safety of LSALT Peptide to support future drug approval. Funding from the NRC-IRAP grant will significantly help offset these costs.

Management expects during the next 12 months to make additional expenditures of at least $100,000 to protect intellectual property emanating from its R&D efforts. Management views this as vital to maintaining the Company's competitive position in developing new technologies for commercial use and to be able to fund development activities in the future. Exact amounts of future patent expense will depend on future success of technology development within the Company's subsidiaries.

Presently, the Company does not have significant sources of capital other than issuing new equity or receiving government contracts or research grants.

Off-Balance Sheet Arrangement

Intellectual Property Transfer Agreements

The university scientists in Arch contractually assigned ownership of current and future intellectual property relating to the Arch Biotech, Arch Biophysics and Arch Cancer Therapeutics' research projects to the Company in return for equity or commitment from Arch to clinically develop commercial products. Through the patent process managed and financed by Arch, the IP was assigned to the Company and enables Arch to have commercial freedom to operate and develop new therapeutics. These IP assignments are irrevocable.

Future Revenue Sharing Arrangements if Company realizes drug sales

The Company has revenue sharing agreements with the University of Calgary on potential revenue emanating from the Company's intellectual property that was invented at the University of Calgary. The revenue sharing covenants in these agreements are triggered only if the Company succeeds in obtaining new drug approval from Health Authorities and begins to sell a drug such as LSALT peptide. The royalties contained in the revenue sharing agreements are within a range that is consistent with current industry standards. There are no milestone or other payments in the agreements with the University of Calgary.

The Company has an exclusive licensing contract with the University of Cincinnati on the intellectual property relating to wound care applications for AB569. This exclusive license is legally binding and governs a future revenue sharing arrangement with the University of Cincinnati only if the Company succeeds in obtaining drug approval from Health Authorities and begins to sell AB569. The royalty contained in the exclusive licensing contract is within the expected range determined by industry standards. There are no other milestone or other payments in the agreement with the University of Cincinnati. The AB569 program is dormant at this time.

These agreements with the universities of Calgary and Cincinnati cannot be terminated unilaterally by the universities without cause and the Company is not aware of any event or uncertainty that may affect the availability of the benefits to the Company of these agreements.

The Company has determined that its business is not substantially dependent on any one of these agreements, given, among other factors, the Company's current stage of development and operations, the status of clinical trials and the lack of regulatory drug approvals. As a result, the Company does not consider any of these agreements to be currently material. The Company will continue to assess the materiality of these agreements on an ongoing basis as circumstances warrant.

Transactions with Related Parties

The following were transactions with Related Parties during the last two years from the date hereinabove:

- In the third quarter of 2024, three officers of the Company exercised a total of 1,250,000 stock options for gross proceeds of $625,000 to the Company.

- In December 2023, the board of directors granted a total of 350,000 stock options to directors and officers pursuant to the Company's stock option plan and the requirements of the TSX Venture Exchange (TSXV). 200,000 of the stock options represents the total remuneration for directors serving on the board throughout the year. The remaining 150,000 stock options were allocated equally to the Company's three named executives for managing the affairs of the Company for the annual period ending April 1, 2024. Each of the director and officer stock options is exercisable into one common share of the Company for a period of ten years. All the stock options issued to the related parties are exercisable at $1.50 per share and will be subject to all necessary regulatory approvals.

- In December 2022, the board of directors granted a total of 735,000 stock options to directors, officers, and certain consultants pursuant to the Company's stock option plan and the requirements of the TSX Venture Exchange (TSXV). The total grant of 500,000 options to the directors and officers (the related parties) represents remuneration for serving on the board and managing the Company's affairs for the annual periods ending April 1, 2022, and April 1, 2023. Each of the director and officer stock options is exercisable into one common share of the Company for a period of ten years. All the stock options issued to the related parties are exercisable at $3.00 per share and will be subject to all necessary regulatory approvals.

- Company management secured a loan from a director, shareholder and CEO of the Company, Richard Muruve. The funds were used when the Company had insufficient working capital at various times to settle payables and ongoing expenses of the Company's operations. During January 2024, the Company agreed to extend this loan to September 30, 2024, and continue to pay 6% per annum, paid semi-annually. The outstanding amount was $173,718 as at March 31, 2024. Subsequent to the end of the second quarter in April 2024, the Company repaid the outstanding loan and interest amount of $175,000 to Mr. Muruve in full and the loan has been retired.

Proposed Transactions

The Company does not have any proposed transactions as at the date of this MD&A.

For more information regarding past transactions, please consult ***Corporate Structure Overview*** above and the Company's public filings at www.sedar.com.

Outstanding Share Data

The table below sets out the outstanding share capital of the Company as at June 30, 2024, and as of the date of this MD&A:

Class of Security	As of the date of this MD&A	As of June 30, 2024
Common Shares	64,650,633	64,650,815
Convertible Debentures (underlying Common Shares)	3,781,945	3,781,945
Stock Options	3,740,000	3,640,000
Warrants	Nil	Nil

The Company is authorized to issue an unlimited number of common shares, where each common share provides the holder to one vote. At of the date of this Management Discussion and Analysis there were 64,650,633 common shares issued and outstanding.

As at the date of this MD&A, there were 3,740,000 stock options are outstanding, as follows:

Stock Options	Quantity	Exercise Price	Expiry Date
	250,000	$0.60	March 27, 2025
	200,000	$1.48	June 11, 2025
	1,000,000	$0.78	May 8, 2028
	880,000	$1.48	June 11, 2030
	100,000	$3.00	December 15, 2026
	635,000	$3.00	December 15, 2032
	50,000	$1.50	December 15, 2028
	350,000	$1.50	December 15, 2033
	150,000	$1.50	February 8, 2029
	25,000	$1.50	February 15, 2029
	100,000	$1.55	August 6, 2034
	3,740,000		

Please see ***Transactions with Related Parties*** for details on stock option transactions.

In addition, the Company had the convertible securities outstanding as detailed in Note 7 of the Financial Statements for the quarter ending June 30, 2024, which can be converted into 3,781,945 common shares, as follows:

Convertible Series	Par Value	Exercise Price	Common Shares
Note A	$500,000	$0.50	1,000,000
Note B	$600,000	$0.60	1,000,000
Note C	$500,000	$1.27	393,701
Note D	$1,000,000	$1.21	826,446
Note E	$500,000	$0.89	561,798
	$3,100,000		**3,781,945**

Share-Based Payments

The fair value of share-based compensation expenses is estimated using the Black-Scholes option pricing model and rely on a number of estimates, such as the expected life of the option, the volatility of the underlying share price, the risk-free rate of return, and the estimated rate of forfeiture of options or warrants granted.

Critical Accounting Estimates

This section is not required as the Company is a Venture Issuer, as the term is defined in National Instrument 51-102. Comments on accounting estimates are disclosed in the notes to the annual financial statements.

Financial Instruments and Other Instruments

Please refer to Note 3 "**Summary of Significant Accounting Policies - *Financial Instruments***" and Note 5 "**Financial Instruments**" in the Company's audited annual Financial Statements for the year ending September 30, 2023.

Summary of Significant Accounting Polices

Please refer to Note 3 of the Company's interim unaudited financial statements for the quarter ending June 30, 2024, for a **Summary of Significant Accounting Policies** and future accounting changes.

Disclosure and Internal Controls

As a venture issuer, Arch Biopartners management is not required to certify or include representations about the design and maintenance of Disclosure Controls & Procedures or Internal Control over Financial Reporting and none of the following comments should be so interpreted; however, in the interest of full disclosure, management wishes to include the following comments on Internal Control over Financial Reporting and Disclosure Controls & Procedures.

In assessing Disclosure Controls and Procedures and Internal Control over Financial Reporting, readers are cautioned that a control system can only provide reasonable, not absolute, assurance that the objectives of the control system are achieved. Due to the inherent limitations in all control systems, an evaluation of controls cannot provide absolute assurance that all control issues, including instances of fraud, if any, have been detected. Inherent limitations include the possibility

that the assumptions and judgments of management could ultimately prove to be incorrect under varying conditions and circumstances; or that isolated errors could prove to have a significant impact on the reliability of information.

Additionally, controls may be circumvented by the unauthorized acts of individuals, by collusion of two or more people, or by management override. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and it is not possible

to provide complete assurance that a control system will succeed in achieving its stated goals under all potential future conditions.

Risk Factors

An investment in the Common Shares of the Company should be considered highly speculative due to the nature of the business of the Company, consisting of research, development, and commercialization of patents for industrial products, pharmaceuticals or therapies for the treatment related of human diseases, as well the Company's present stage of its development and its lack of operating history. In evaluating the business of the Company, readers should carefully consider the following risk factors; and additional risks not currently known to the Company as of the date hereof may also impair future business operations of Company. The list below is not a definitive list of all risk factors associated with the business of the Company.

Current Global Financial and Economic Conditions

Current global financial and economic conditions remain uncertain and at times volatile due to the effects of the global pandemic, high global debt levels, inflation risks and political risks. Such factors may impact the Company's ability to obtain financing in the future on favourable terms or obtain any financing at all. Additionally, global economic conditions may cause a long-term decrease in asset values. If such global volatility, market turmoil and a global recession emerges, the Company's operations and financial condition could be adversely impacted.

Risks Related to Clinical Stage Development

The Company is currently at a clinical stage of development and subject to human trial risks, including among other things, the potential for its lead drug candidate to not show efficacy or safety in human patients, unforeseen cost increases, the potential emergence of superior new drugs from competitors and the unavailability of patients to recruit into a particular human trial. There is no guarantee that a successful human trial will result in future revenue.

Risks Associated with Biomedical Research, Development and Product Commercialization

The Company's growth and future success will be substantially dependent on its ability to develop, license or otherwise acquire new commercially viable patents and products and obtain related governmental approvals. Any failure in respect of the commercially viability of the Company's patents or failure to obtain related governmental approvals could result in a material adverse effect on the business, financial condition, and results of operations of the Company. The business of the Company is subject to significant and material risks that cannot be eliminated or adequately

mitigated, even with careful and prudent planning and evaluation, experience, knowledge, and managerial and operational know-how. The Company will face a number of uncertainties. Development of intellectual property into commercially viable patents can oftentimes completely fail or be terminated at any stage in the research and development process, oftentimes after the expenditure of considerable financial resources.

Health Canada's Pharmaceutical Drugs Directorate (the "**PDD**") is the Canadian federal authority that regulates pharmaceutical drugs and medical devices for human use. The United States Food

and Drug Administration (the "**FDA**") performs a similar function at the federal level in the United States. Prior to being given market authorization to sell products sold in the U.S. and Canada, respectively, the PDD and FDA must be presented with substantive scientific evidence of a product's safety, efficacy, and quality. Member states of the European Union and other nations may impose similar regulatory pre-approvals before products can be brought to market. Obtaining FDA, PDD and other regulatory and governmental approvals is extremely time consuming, requires a material amount of capital and subjects' products to thorough testing. The outcome of such regulatory applications can be unpredictable and yield unanticipated outcomes. The time involved, and the potential failure to obtain, FDA, PDD and other similar regulatory approvals could adversely affect the Company's business plan, product pipeline, financial condition, and results of operations.

The Company may rely on the acquisition or licensing of other patents, products or technologies sourced from third parties. The use of such a strategy will draw down the Company's resources in connection with due diligence and expenses in identifying, evaluating, and negotiating joint venture or acquisition agreements. In addition, the licensing of patents, products, or technologies from third parties can involve significant counterparty contractual risk.

Risks Related to Pre-Clinical and Clinical Trials

Extensive preclinical and clinical trials (collectively "Clinical Trials") are required to commercialize the Company's pipeline of products, which involves, among other things, demonstrating safety and efficacy. Clinical Trials are capital intensive undertakings, take years to complete and can oftentimes yield unintended outcomes, including, among other things, harmful side effects that may delay or bar regulatory approval or limit commercial use of the product, if approved. The Company's future success will depend, to a significant degree, on obtaining successful outcomes to Clinical Trials. In general, Clinical Trials are risky, time-consuming endeavours and can oftentimes result in complete failure after material expenditures are made, especially where a novel use or chemical is proposed or tested, which can also increase the risk of harmful side effects. The Company's developmental pipeline may never evolve into commercially viable products if adverse outcomes or failures arise in connection with Clinical Trials. The scope, duration and number of Clinical Trials will vary according to the relevant governmental agency. Failure to obtain regulatory approval or successful commercialization of the product pipeline could result in a material adverse effect on the business and financial condition of the Company.

The outcome of preclinical studies and earlier-stage clinical trials may not be predictive of the success of later-stage clinical trials.

The outcome of preclinical testing and earlier-stage clinical trials may not be predictive of the success of later-stage clinical trials. LSALT and any other product candidates we may develop may fail to show the desired safety and efficacy in clinical development despite positive results in preclinical studies or having successfully advanced through initial clinical trials. Numerous companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in later-stage clinical trials even after achieving promising results in preclinical testing and earlier-stage clinical trials, and we cannot be certain that we will not face similar setbacks. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical

studies and clinical trials have nonetheless failed to obtain marketing authorization of their products. Furthermore, the failure of any product candidate to demonstrate safety and efficacy in any clinical trial could negatively impact the perception of any other product candidates then under development and/or cause applicable Health Authorities to require additional testing before approving any other product candidates.

We may not achieve our projected development goals in the announced and expected time frames.

From time to time, we set goals for and make public statements regarding the expectations for and timing of the accomplishment of objectives material to our success, such as the commencement and completion of clinical trials, expected results, anticipated regulatory submission and approval dates, and timing of product launch. The actual timing of these events can vary dramatically due to factors such as delays or failures in clinical trials, the uncertainties inherent in the marketing authorization process, and delays in achieving manufacturing or marketing arrangements sufficient to commercialize products. There can be no assurance that our clinical trials will be completed, that we will make regulatory submissions or receive regulatory approvals as planned, or that we will be able to adhere to our current schedule for the launch of LSALT or any other future product candidates we may develop. If we fail to achieve one or more of these milestones as planned, the price of our common shares would likely be adversely affected.

Negative Results of External Clinical Trials or Studies

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 the Company's prescription drug product candidates, or the therapeutic areas in which the Company's prescription drug product candidates compete, could adversely affect its share price and the Company's ability to finance future development of its prescription drug product candidates, and its business and financial results could be materially and adversely affected.

Completion of Clinical Trials

As the Company's prescription drug product candidates advance from preclinical testing to clinical testing, and then through progressively larger and more complex clinical trials, the Company will need to enroll an increasing number of patients that meet its eligibility criteria. There is significant competition for recruiting patients in clinical trials, and the Company may be unable to enroll the patients it needs to complete clinical trials on a timely basis or at all. The factors that affect the Company's ability to enroll patients are largely uncontrollable and include, but are not limited to, the size and nature of the patient population, eligibility and exclusion criteria for the trial, design of the clinical trial, competition with other companies for clinical sites or patients, perceived risks and benefits of the prescription drug product candidate, and the number, availability, location, and accessibility of clinical trial sites.

Reliance on Third Parties for Clinical Development Activities

The Company relies and will continue to rely on third parties to conduct a significant portion of its preclinical and clinical development activities. For example, clinical development activities include trial design, regulatory submissions, clinical patient recruitment, clinical trial monitoring, clinical data management and analysis, safety monitoring and project management. If there is any dispute or disruption in its relationship with third parties, or if it is unable to provide quality services in a timely manner and at a feasible cost, the Company's active development programs will face delays. Further, if any of these third parties fails to perform as the Company expects or if their work fails to meet regulatory requirements, the Company's testing could be delayed, cancelled or rendered ineffective.

Risks Related to Marketplace Acceptance of the Resulting Issuer's Products

The Company's product pipeline may appear promising but may ultimately fail to reach a defined market. Additionally, the Company's products may have limited or no commercial success. Market acceptance of the Company's products will be impacted by several factors, none of which (collectively or individually) can necessarily be eliminated, adequately mitigated, or managed, even with careful and prudent planning and evaluation, experience, knowledge, and managerial and operational know-how. Such factors include, but are not limited to, the following (in no particular order): (i) timing of regulatory approvals, (ii) competition from more established firms, (iii) safety of the proposed product as compared to existing treatments, including the availability of alternatives, (iv) scope of approved use and marketing approval, (v) costs to produce the product and (vi) price.

Risks Related to Intellectual Property (Licenses, Patents and Proprietary Rights)

The patent positions of other persons are oftentimes uncertain and tend to involve an examination of increasingly complex legal and factual questions. The patent situation outside the U.S. and Canada is even more uncertain. The business of the Company will be characterized by a significant amount of potential litigation risk in relation to patent defence and patent infringement claims. The success of the Company will depend upon its ability to protect its own intellectual property while simultaneously conducting its affairs in a manner that does not infringe upon the proprietary rights of others. Existing patent holders, or others, may seek to oppose or challenge some or the

Company's entire portfolio of patents or may actively attempt to circumvent the Company's patents. Additionally, the Company may discover that existing patents may impede its ability to capitalize on the outcomes of its research projects. The Company can provide no assurances that it can successfully defend its patents and can provide no comfort that a court will ultimately uphold their validity. The costs of litigation, if any, may be material and may quickly strain the limited financial resources of the Company. In addition to cost any litigation could be time-consuming and place severe operational strains upon senior management team and technical personnel. The loss of actual litigation, if any, could result in monetary damages being levied against the Company or subject the Company to an interlocutory or permanent injunction.

Risks Related to Competition and Technological Change

The biotechnology industry is extremely competitive and is subject to rapid and significant technological change which, among other things, places immense pressure on the business of the Company. The Company competes against other, more established research teams and firms who may be examining the same subject matter being researched by the Company. Many of the Company's competitors, which include, among others, major pharmaceutical and chemical companies, specialized contract research organizations, research-and-development firms, universities, and other research institutions will have superior financial and operational resources and more experience in research and development. Competitors may develop new treatments or technologies that compete with the Company's products or even render the Company's technologies obsolete.

Risks Related to Product Liability Claims

Product liability claims may arise against the Company in connection with the testing and administration of pharmaceuticals, whether in Clinical Trials or commercially, and may arise regardless of whether the Company's product is at fault. In general, product liability claims may produce product recalls, result in protracted litigation, and could cause adverse publicity, any of which outcomes could adversely affect the regulatory approval process and/or cause a long-term decline in the value of the Common Shares. The defense of product liability claims (which oftentimes comes in the form of a class proceeding) can be extremely time consuming and costly, even against bogus claims, and may place significant strains on the financial resources of the Company. The Company does not carry any product liability insurance at this time but intends to so as its business develops, and its product pipeline is commercialized. However, product liability insurance coverage is very expensive, is oftentimes difficult to obtain, may not be available on commercially reasonable terms or may be capped at certain thresholds, which may result in uninsurable risks to the Company. The Company can provide no assurances that product liability insurance, if any, will be obtained or if obtained will be adequate in scope.

Management of Growth

The Company may be subject to growth-related risks including pressure on its internal systems and controls. The Company's ability to manage its growth effectively will require it to continue to implement and improve its operational and financial systems. The inability of Company management to deal with this growth could result in a material adverse impact on its business, operations, and prospects. While management believes that it will make the necessary investments

in infrastructure to process anticipated volume increases in the short term, the Company may experience growth in the scope of its operating and financial systems, resulting in increased responsibilities for the Company's personnel, the hiring of additional personnel and, in general, higher levels of operating expenses. To manage its current operations and any future growth effectively, the Company will also need to continue to implement and improve its operational, financial and management information systems and to hire, train, motivate, manage, and retain its employees. There can be no assurance that the Company will be able to manage such growth effectively, that its management, personnel, or systems will be adequate to support the Company's operations.

Key Personnel

The Company's business involves a high degree of risk, which a combination of experience, knowledge and careful evaluation may not be able to be managed or overcome. As such, the Company's success is dependent on the services of its senior management and the members of its Scientific Advisory Board. The loss of one or more of the Company's key employees or consultants could have a material adverse effect on the Company's operations and business prospects. In addition, the Company's future success will depend on its ability to attract and retain skilled technical, management and marketing personnel. There can be no assurance that the Company will be successful in attracting and retaining such personnel and the failure to do so could have a material adverse effect on the Company's business, its operating results as well its overall financial condition.

Lack of Significant Product Revenue

To date, the Company has generated little product revenue and cannot predict when and if it will generate significant product revenue. The Company's ability to generate significant product revenue and ultimately become profitable depends upon its ability, alone or with partners, to successfully develop its prescription drug product candidates, obtain regulatory approval, and commercialize products, including any of its current prescription drug product candidates or other prescription drug product candidates that it may develop, in-license or acquire in the future. The Company does not anticipate generating revenue from the sale of products for the foreseeable future. The Company expects its research and development expenses to increase in connection with its ongoing activities, particularly as it advances its prescription drug product candidates through clinical trials.

Negative Cash Flow and Absence of Profits

The Company has not earned any operating profits from product sales to date and there is no assurance that it will earn any such profits in the future. The Company expects to continue to incur significant operating losses as continued development and clinical trials occur. Such losses are anticipated to have an adverse effect on shareholders' equity and working capital. The Company will need to generate significant revenues in order to achieve and maintain profitability and there can be no guarantees that profitability, if ever achieved, will be sustained.

The Company's ability to generate revenue in the future is dependent, in large part, on completing product development, obtaining regulatory approvals and successful commercialization and

marketing of the Company's patents for pharmaceuticals or therapies for the treatment related of human diseases. The Company cannot provide any assurances that the products it may develop, or license will ever successfully commercialize or achieve revenues from sales. There can be no assurance that future revenues will be sufficient to generate the required funds to continue in the biotechnology industry.

Debt and Interest Risk

The Company does not have any external debt other than the Deferred Convertible Debt described in Note 7 and Promissory Note described in Note 15. As previously mentioned, the Company has a loan outstanding from a director and a shareholder for working capital purposes.

Management of the Company does not consider this debt exposure to have material sensitivity to changes in interest rates.

Currency Risk

The Company is exposed to currency risk related to the fluctuation of foreign exchange rates and the degree of volatility of those rates. Currency risk is limited to the portion of the Company's business transactions and balances denominated in currencies other than the Canadian dollar.

The majority of expenses that are not hedged are currently in Canadian dollars. At the present time, the Company does not use any foreign exchange risk management tools such as currency forward or options contracts.

No Anticipated Dividends

The Company does not expect to pay dividends on its issued and outstanding Common Shares in the foreseeable future. If the Company generates any future earnings such cash resources will be retained to finance further growth and current operations. The Board of Directors of the Company will determine if and when dividends should be declared and paid in the future based on the financial position of the Company and other factors relevant at the particular time. Until the Company pays dividends, which it may never do, a shareholder will not be able to receive a return on his or her investment in the Common Shares unless such Common Shares are sold. In such event, a shareholder may only be able to sell his or her Common Shares at a price less than the price the shareholder originally paid for them, which could result in a significant loss of such shareholder's investment.

Estimates or Judgments Relating to Critical Accounting Policies

The preparation of financial statements in conformity with the International Financial Reporting Standards requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. The Company bases its estimates on historical experience and on various other assumptions that it believes to be reasonable under the circumstances, as provided in the notes to the financial statements of the Company, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. The Company's operating

results may be adversely affected if the assumptions change or if actual circumstances differ from those in the assumptions, which could cause its operating results to fall below the expectations of securities analysts and investors, resulting in a decline in the share price of the Company. Significant assumptions and estimates used in preparing the financial statements include those related to income tax credits receivable, share based payments, impairment of non-financial assets, fair value of biological assets, as well as cost recognition.

Significant Future Capital Requirements, Future Financing Risk and Dilution

No assurances can be provided that the Company's financial resources will be sufficient for its future needs. Current projections for revenues from operations are insufficient to meet the Company's future capital requirements. As such, the Company will likely be required to undertake future financings that may be in the form of a sale of equity, debt secured by assets or forward purchase payments. No assurances can be made that the Company will be able to complete any of these financing arrangements or that the Company will be able to obtain the capital that it requires. In addition, the Company cannot provide any assurances that any future financings will be obtained on terms that are commercially favourable to the Company. Any such future sale of Common Shares or other securities convertible into Common Shares will lead to further dilution of the equity ownership of existing shareholders.

Market for the Common Shares

There can be no assurance that an active trading market for the Common Shares will develop or, if developed, that any market will be sustained. The Company cannot predict the prices at which the Common Shares will trade. Fluctuations in the market price of the Common Shares could cause an investor to lose all or part of its investment in Common Shares. Factors that could cause fluctuations in the trading price of the Common Shares include: (i) announcements of new offerings, products, services or technologies; commercial relationships, acquisitions or other events by the Company or its competitors; (ii) price and volume fluctuations in the overall stockmarket from time to time; (iii) significant volatility in the market price and trading volume of companies commercializing similar pharmaceuticals; (iv) fluctuations in the trading volume of the Common Shares or the size of the Company's public float; (v) actual or anticipated changes or fluctuations in the Company's results of operations; (vi) whether the Company's results of operations meet the expectations of securities analysts or investors; (vii) actual or anticipated changes in the expectations of investors or securities analysts; (viii) litigation involving the Company, its industry, or both; (ix) regulatory developments; (x) general economic conditions and trends; (xi) major catastrophic events; (xii) sales of large blocks of the Common Shares; (xiii) departures of key employees or members of management; or (xiv) an adverse impact on the Company from any of the other risks cited herein.

Additional Information

Additional information relating to the Company can be found on SEDAR at www.sedar.com.