SERNOVA CORP.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE THREE AND NINE MONTHS ENDED
JULY 31, 2018 AND 2017

Dated September 28, 2018

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The following management's discussion and analysis ("MD&A") explains the variations in the consolidated operating results, financial position and cash flows of Sernova Corp. ("Sernova", the "Company", "We", "Us" or "Our") for the three and nine months ended July 31, 2018 and 2017. This MD&A should be read in conjunction with the Company's unaudited interim condensed consolidated financial statements for the three and nine months ended July 31, 2018, and 2017 and its audited consolidated financial statements and related notes for the years ended October 31, 2017, and 2016, which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

The Company's accounting policies under IFRS are set out in Note 3 of the audited consolidated financial statements for the years ended October 31, 2017, and 2016.

All amounts are in Canadian dollars.

The information in this report is dated as of September 28, 2018.

FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements and information that are based on the beliefs of management and reflect Sernova Corp.'s ("Sernova") current expectations. When used in this MD&A, the words "estimate", "project", "believe", "anticipate", "intend", "expect", "plan", "predict", "may", "should", "will" and the negative of these words or such variations thereon or comparable terminology, are intended to identify forward-looking statements and information. Forward-looking statements are, by their nature, not guarantees of the Company's future operational or financial performance and are subject to risks and uncertainties and other factors that could cause the Company's actual results, performance, prospects or opportunities to differ materially from those expressed in, or implied by, these forward-looking statements. No representation or warranty is intended with respect to anticipated future results, or that estimates or projections will be sustained.

The Company's statements of "belief" with respect to its product candidates are based primarily upon results derived to date from the Company's research and development programs. The Company also uses the term "demonstrated" in this MD&A to describe certain findings that it makes arising from its research and development including any pre-clinical and clinical studies that the Company has conducted to date.

Specifically, this MD&A contains forward-looking statements which include, but are not limited to, statements regarding:

- The Company's corporate strategies and objectives;
- The availability of various forms of financing;
- The initiation and completion of pre-clinical studies and clinical trials of our Cell Pouch™ for the treatment of insulin-dependent diabetes and other diseases;
- The expected benefit of the Cell Pouch with therapeutic cells;
- The intention to protect therapeutic cells within the Cell Pouch from immune attack using local immune protection such as microencapsulation or other local immune protection technologies, or through the use of systemic antirejection regimens or a combination thereof;
- The intention to use human autograft cells or human donor cells for treatment and the intention to use human stem cell derived cells or xenogeneic cells which are considered unlimited cell sources for our Cell Pouch for the potential treatment of chronic diseases;
- Sernova's intentions to secure academic and pharmaceutical collaborations and to develop and implement partnering strategies;

- The intention to obtain regulatory approval and commercialize the Cell Pouch for the treatment of insulin-dependent diabetes and other potential indications such as hemophilia and thyroid disease;
- The expected benefit of the European Commission's Horizon 2020 grant for our hemophilia program;
- Expectations with respect to the cost of Sernova's products, clinical trials and commercialization of our products;
- Sales and marketing strategy;
- Intentions regarding the development and protection of Sernova's intellectual property; and
- General business and economic events.

In developing the forward-looking statements in this MD&A, the Company has applied several material assumptions, including the availability of financing on reasonable terms, the Company's ability to form and maintain strategic alliances with other business entities and general business and economic conditions.

Forward-looking information is based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made, but which may prove to be incorrect. We believe that the assumptions and expectations reflected in such forward-looking information are reasonable.

Key assumptions upon which the Corporation's forward-looking information are based include:
- our ability to manage our growth effectively;
- the absence of material adverse changes in our industry or the global economy;
- trends in our industry and markets;
- our ability to comply with current and future regulatory standards;
- our ability to protect our intellectual property rights;
- our continued compliance with third-party license terms and the non-infringement of third-party
- intellectual property rights;
- our ability to retain key personnel; and
- our ability to raise sufficient debt or equity financing to support our continued growth.

Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used.

There are a number of important factors that could cause Sernova's actual results to differ materially from those indicated or implied by forward-looking statements and information, including but not limited to: early stage development and scientific uncertainty, lack of product revenues and history of losses, additional financing requirements and access to capital, patents and proprietary technology, dependence on collaborative partners, licensors and others, government regulations, hazardous materials and environmental matters, rapid technological change, competition, reliance on key personnel, status of healthcare reimbursement, potential product liability and volatility of share price, absence of dividends and fluctuation of operating results. Such risks are further described under "Risk Factors" in this Annual Information Form. Potential investors and other readers are urged to consider these factors carefully in evaluating these forward-looking statements and information and are cautioned not to place undue reliance on them. Sernova has no responsibility, nor does it intend, to update these forward-looking statements and information, unless as otherwise required by law.

Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this MD&A or as of the date otherwise specifically indicated herein. Due to risks and uncertainties, including the risks and uncertainties described elsewhere in this MD&A, actual events may differ materially

from current expectations. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

This MD&A has been prepared to help investors understand the financial performance of Sernova in the broader context of the Company's strategic direction, the risks and opportunities as understood by management, and some of the key metrics that are relevant to the Company's performance. This MD&A has been reviewed and approved by the Company's Audit Committee and the Board of Directors. The Company's Audit Committee includes three independent Directors who are financially knowledgeable.

ABOUT SERNOVA

Sernova Corp. is a regenerative medicine therapeutics company, focused on developing and commercializing its proprietary, Cell Pouch and associated technologies including immune-protected therapeutic cells. The Cell Pouch is a scalable, implantable, medical device, designed to create a microvessel rich, tissue environment for the transplantation and engraftment of therapeutic cells. These cells, following transplantation into the vascularized device environment, release proteins, hormones or other factors into the bloodstream for the long-term treatment of a number of serious, chronic diseases such as diabetes, hemophilia and thyroid disease.

Based on the clinical indication, the therapeutic cells may be obtained directly from human autograft (self-cells) or allograft cells (non-self, donor cells), or derived from sources known to provide a virtually unlimited supply of cells such as from a stem cell derived or xenogeneic (non-human) source. Depending on the need, the therapeutic cells may be protected within the Cell Pouch using systemic or local immune protection technologies such as microencapsulation or other local immune protection technologies being developed to create an immune privileged environment for the protection of the Cell Pouch transplant from rejection.

Our initial studies focused on the treatment of insulin-dependent diabetes through the transplantation of pancreatic islets, which control blood glucose levels. To date, we successfully transplanted donor islets into our Cell Pouch to treat insulin-dependent diabetes in multiple animal models and conducted a proof of principle clinical study for the treatment of human subjects with diabetes receiving an islet transplant, protected by the standard of care anti-rejection drug regimen. In this study, results in a small cohort of patients showed the Cell Pouch to be safe alone and when transplanted with human donor islets.

We are continuing clinical investigation of the Cell Pouch with donor islets under a new FDA cleared IND (Investigational New Drug) to conduct a human clinical study at the University of Chicago. Furthermore, pursuant to our strategy of obtaining sources of unlimited supplies of cells for our therapeutic applications, the Company secured a potential source of unlimited cells by entering into a license agreement with the University Health Network ("UHN") of Toronto, Canada. This license agreement gives us exclusive worldwide rights to certain patent-pending technologies that are related to the differentiation of stem cells into insulin-producing glucose-responsive therapeutic cells developed by UHN researchers. In addition to this licensed technology, we continue to identify additional potential sources of cells which are not limited by donor availability through license agreements and/or partnerships. The Company is also investigating other diseases amenable to treatment with therapeutic cells such as hemophilia and thyroid disease.

Research and Product Development

Our research and development efforts are focused principally on the development of the Cell Pouch in conjunction with various therapeutic cells for the treatment of chronic diseases and local immune protection technologies (e.g. microencapsulation) that may protect the therapeutic cells within the Cell Pouch from immune system attack.

Our objective is to advance our medical technologies through the various stages of preclinical and clinical development required to develop a commercial product. The programs we undertake may involve third-party collaborations and corporate partnerships in addition to our internal preclinical and clinical development efforts.

To achieve our goals, our primary activities include the following:

1. Conducting clinical trials required to gain marketing approval for the Cell Pouch System in countries that have a significant market opportunity. We developed our first therapeutic product for the treatment of insulin-dependent diabetes. Our first clinical assessment, designed to demonstrate the safety of the Cell Pouch and therapeutic cells in humans, was conducted in Canada. Based on the learnings of this first-in-human study, we designed a new clinical protocol for a second clinical study of the Cell Pouch system in the United States. Sernova received US Food and Drug Administration (FDA) notice of allowance for its IND for this new clinical trial. Furthermore, the IRB (institutional ethics review board) of the University of Chicago cleared Sernova to begin this new Phase I/II (safety/efficacy) clinical study and patient screening is underway. The trial is a Phase I/II prospective single-arm study of islets transplanted into patients with severe hypoglycemia unawareness implanted with the Cell Pouch prior to islet transplantation. The primary objective of the study is to demonstrate safety and tolerability of islet transplantation into the Cell Pouch. The secondary objective is to assess efficacy through a series of defined measures.
2. The Company is also developing a treatment that we believe could benefit the broader diabetes population using the Cell Pouch transplanted with locally immune protected cells from an unlimited source of cells such as glucose-responsive stem cell derived cells or xenogeneic cells.
3. The Company also has ongoing product development in the following areas:
    a. Conducting development in other therapeutic indications including hemophilia and thyroid disease;
    b. Establishing sources of therapeutic cells for transplantation within our Cell Pouch, including, depending on the clinical application, autologous cells, allogeneic cells such as donor cells and stem cell derived cells as well as xenogeneic cells that could be used to treat significant numbers of patients with these chronic diseases;
    c. Researching complementary technologies which may improve the safety and efficacy of cells within the Cell Pouch, including local immune protection technologies such as microencapsulation;
    d. Contract manufacturing and supply of the Cell Pouch and the processing and supply of therapeutic cells;
    e. Ongoing international development of our intellectual property portfolio and development of new and/or licensing of intellectual property; and,
    f. Establishing partnerships with medical device and/or pharmaceutical companies as well as academic institutions for the development of our products.

Current Year Activities and Corporate Developments

In July 2018, Sernova announced that patient screening and recruitment began at the University of Chicago clinical site in its regenerative medicine US clinical trial for diabetic patients with hypoglycemia unawareness.

In July 2018, the Corporation announced it closed a Private Placement for an aggregate total of $2,754,000 and, in connection therewith, issued 11,016,000 Special Warrants.

Each Special Warrant will convert, for no additional consideration, into one Unit ("Unit") of the Company. Each Unit will consist of one common share and one common share purchase warrant ("Warrant") of the Company. Each Warrant will be exercisable into one common share at $0.35 per share for 24 months, subject to abridgement of the exercise period if the 20-day volume weighted price of the Company's shares exceeds $0.50 per share. All securities issued in connection with the private placement will be subject to a statutory hold period of four months. The Company compensated finders on a portion of the private placement, such compensation consisting of 7% in cash or 7% in finder warrants, or a combination thereof. The Company received approval of the TSX Venture Exchange on August 1, 2018. The Company agreed to file a final short form prospectus to qualify the distribution of the Units upon deemed conversion of the Special Warrants (the "Qualification") following the receipt of a final prospectus. If the Qualification does not occur within 4 months of closing, the Special Warrants will automatically convert into Units immediately following the expiry of the 4-month hold period.

In May 2018, Sernova announced it received University of Chicago Institutional Review Board (IRB) approval to begin a new clinical protocol for the FDA-cleared human clinical trial to investigate the Cell Pouch for the treatment of type 1 diabetes (T1D) in individuals with hypoglycemia unawareness.

In May 2018, Sernova announced Dr. Piotr Witkowski, M.D., Ph.D., as the Clinical Trial Principal Investigator for Sernova's new clinical study. Dr. Witkowski, at the University of Chicago site, will work closely with Sernova's team to conduct the clinical and regulatory aspects of the Cell Pouch trial. Dr. Witkowski is a published diabetes researcher and surgeon with a longstanding record in both basic science and clinical research pertaining to islet cell and abdominal organ transplantation. Under Dr. Witkowski's leadership, multidisciplinary research teams at the University of Chicago are currently conducting several studies designed to improve the quality and outcomes of islet cell transplantation in patients with T1D.

In May 2018 Sernova announced shareholder approval of all management resolutions brought forward at the 2018 Annual General Meeting held in Vancouver, April 25th. In addition, Sernova announced Mr. Sean Hodgins, CA, CPA, CPA (Illinois) joined Sernova as Chief Financial Officer.

In February 2018, Sernova announced that continuous glucose monitoring systems (CGM) (Medtronic Minimed, Northridge, CA) would be provided to patients in Sernova's US regenerative medicine clinical trial of its Cell Pouch. CGM is being used to track the function of the transplanted cells at multiple time points following transplantation into the Cell Pouch. Data from each period will be analyzed for mean glucose concentration, mean glucose variability, number and duration of hyperglycemic and hypoglycemic episodes, and total duration of hypoglycemia.

In December 2017, Sernova announced it received US Food and Drug Administration (FDA) notice of allowance for its IND (Investigational New Drug) for a new human clinical trial with the Cell Pouch System (CPS) in the United States. Sernova is initiating the new clinical trial under this US IND to further investigate the Cell Pouch for the treatment of type 1 diabetes (T1D) in individuals with hypoglycemia unawareness. The trial is a Phase I/II prospective single-arm study of islets transplanted into patients having previously received

the implanted Cell Pouch. The primary objective of the study is to demonstrate the safety and tolerability of islet transplantation into the Cell Pouch and the secondary objective is to assess efficacy through a series of defined measures.

In November 2017, Sernova received a second payment of non-dilutive funds from the European Commission in the amount of €226,603 ($331,770 CDN). The payment is to continue funding activities related to the European Union Horizon 2020 HemAcure Consortium's development of a Factor VIII releasing therapeutic cell product combined with Sernova's Cell Pouch to treat severe hemophilia A, a serious genetic bleeding disorder caused by missing or defective Factor VIII in the blood stream.

Research and Development Outlook

Our research and development program includes the following:

- Continuation of the clinical trial of our Cell Pouch in collaboration with JDRF under our US IND at the University of Chicago for patients with hypoglycemia unawareness using human donor islets and a standard of care antirejection drug regimen to further study the safety and efficacy of the device and islets;
- In coordination with the EU Horizon 2020 HemAcure Consortium, conduct cell production and preclinical proof of principal studies as part of a product development program for treatment of hemophilia A consisting of factor VIII releasing therapeutic cells transplanted within Sernova's Cell Pouch;
- Conduct preclinical proof of principal studies as part of a product development program for treatment of hypo-thyroid disease consisting of thyroid hormone releasing tissue transplanted within Sernova's Cell Pouch;
- Production of human stem-cell-derived cells for diabetes and *in vivo* proof of principle assessment of these differentiated human stem cells for their safety and efficacy within Sernova's Cell Pouch for the treatment of insulin-dependent diabetes;
- Assessment of novel microencapsulation technologies within the Cell Pouch cells, to further develop and advance Sernova's therapeutic vision for diabetes of a product consisting of locally immune protected therapeutic cells within the Cell Pouch; and
- Continue to collaborate with pharmaceutical companies to assess safety and efficacy of our combined technologies in preclinical studies for potential negotiation of a licensing arrangement and commercial development partnership for our hemophilia and diabetes programs.

Sernova's Cell Pouch System™

The Cell Pouch has been uniquely designed and patented to take into consideration the biological requirements of therapeutic cells. Our research demonstrates that vascularized tissue develops within the Cell Pouch environment when implanted beneath the skin or in other locations prior to transplantation of therapeutic cells. The design of the Cell Pouch upon implantation results in development of a biologically suitable environment consisting of vascularized tissue chambers for the placement of therapeutic cells for the potential treatment of diabetes, hemophilia and other chronic diseases. In long-term pre-clinical evaluation, the Cell Pouch has been shown to maintain a stable, vascularized tissue environment prior to placement of these transplanted therapeutic cells. We believe these conditions are essential for maintaining long-term survival and function of therapeutic

cells. We have demonstrated in a series of ISO10993 biocompatibility studies and multiple animal studies that the Cell Pouch is biocompatible and safe. Long-term studies in multiple small and large animal models of diabetes have demonstrated that the islets become well-supported with microvessels as in their natural pancreatic environment following transplantation into the Cell Pouch.

Benefits of the Cell Pouch are anticipated to be enhanced long-term therapeutic cell survival and function. It is crucial for therapeutic cells to have close contact with microvessels. For diabetes, as an example, this enables islets to monitor blood glucose levels and produce the appropriate amount of insulin throughout the day and night and after meals. We believe the Cell Pouch technologies achieve this ideal therapeutic/microvessel connection through alteration of the local environment and may allow for improved efficacy. For example, our studies have shown that islets transplanted into the Cell Pouch can control glucose levels in small and large animal models of diabetes over extended periods, and we believe this may also apply to other therapeutic cellular applications.

Development of the Cell Pouch™ in Diabetes

According to the International Diabetes Association, there are approximately 425 million people worldwide with diabetes with approximately 10% of these individuals with type-1 (insulin-dependent) diabetes. The primary treatment for subjects with type-1 diabetes is insulin injections by needle or insulin pump. The life of a patient with diabetes is consumed with attempting to control blood sugar levels to minimize the severe effects of diabetes which include heart and kidney disease, blindness and amputations. There is a significant need to improve the treatment of diabetic patients and to improve the quality of life of these individuals.

Sernova believes an implantable medical device with a cell therapy approach for the treatment of diabetes could provide a significant improvement in the quality of life of patients as well as a substantial improvement in the potential efficacy and reduction of diabetes side effects in these patients. The goal of a cell therapy approach is essentially to replace the islet cells lost in the pancreas of diabetic patients in a retrievable device to return their blood sugar status to normal and to improve the quality of life of patients with diabetes.

Sernova's lead program is the clinical development of the Cell Pouch for the treatment of patients with insulin-dependent diabetes. By way of background, for diabetic patients with severe hypoglycemia unawareness, aside from the use of daily insulin injections, portal vein transplantation is the only cell-based treatment currently available. The treatment involves receipt of donor pancreata at specialized islet transplantation centres around the world. These pancreata are then put through a digestion process which is to isolate the insulin-producing islets from the pancreatic tissue. These pancreatic islets, often from multiple donors, are then infused into a patient's portal vein in the liver, followed by life-long administration of immunosuppressive drugs to inhibit rejection of the transplant.

It is encouraging that islet transplantation, even into the portal vein in humans when considered a first step proof of concept for diabetes cell therapy, may result in a reduction in the incidence of hypoglycemia unawareness, a reduced requirement for exogenous insulin and reduced diabetes-induced microvascular damage and potential insulin independence. These positive effects show the potential of cell therapy for diabetes.

There are issues with portal vein delivery of islets that we believe could be improved with Sernova's technologies. For example, following islet infusion with portal vein delivery, there is a significant initial reduction in surviving islets due to an immediate blood-mediated inflammatory reaction ("IBMIR"), which may damage and destroy a significant proportion of the islets infused into the portal vein. Due to IBMIR and other factors, up to three pancreata are required to treat a single patient and achieve a reduction in insulin injections using portal vein delivery. Also, the proportion of patients with insulin independence decreases over time, likely due to continued islet destruction with multiple etiologies. A further shortcoming of portal vein transplant is

that infusion of cells into the portal vein is limited to donor islets and is not amenable to advanced technologies such as glucose-responsive insulin-producing stem cell derived cells, similar to those licensed by Sernova, or xenogeneic cells being developed to overcome the limited supply of donor islet cells, as regulatory authorities have indicated, these cell technologies must be transplanted into an implantable and retrievable medical device.

With the encouraging initial results of islet transplantation, there is a need to develop an implantable and retrievable medical device that is highly vascularized for the placement and function of therapeutic cells including donor islets. Sernova Cell Pouch is a minimally invasive, retrievable device which creates vascularized tissue chambers for the placement and long-term survival and function of therapeutic cells. Furthermore, the device was specifically designed to prevent fibrosis, a serious issue with previous implantable devices for therapeutic cells. As Sernova's first clinical indication, these donor islets transplanted into the Cell Pouch not only provide a means to optimize cell therapy within the Cell Pouch in humans while we develop unlimited supplies of cells for the Cell Pouch, but as a potential therapeutic option for patients with hypoglycemia unawareness receiving an islet transplant.

We believe the Cell Pouch can alleviate a number of issues with portal vein transplantation. In the Cell Pouch, the therapeutic cells live within a tissue matrix surrounded by microvessels similar to the islets' natural microenvironment in the pancreas rather than being subjected to a constant flow of blood with immune-reactive cells which is believed to lead to IBMIR. This reduced inflammatory response should enable improved islet survival and potentially lead to the need to implant fewer islets or other sources of insulin-producing cells. This could potentially enable the treatment of patients with diabetes with fewer donor pancreata than are currently being used in portal vein transplantation. In addition, known side effects from an infusion of cells into the portal vein such as portal vein hypertension, thrombosis, and liver steatosis (fatty liver), along with the costs of treating them, will be eliminated with the insulin-producing cells placed into the Cell Pouch.

Table I. Potential Benefits of the Cell Pouch Islet Transplant over the Portal Vein Islet Transplant

Characteristics	**Cell Pouch™**	**Portal Vein Transplant**
Reduced Islet Mass	Yes	no
Tissue matrix to house islets	Yes	no
Vascularized Islets	Yes	no
Retrievable site	Yes	no
Future stem cell technologies	Yes	no
Minimally invasive site	Yes	no
Elimination of liver-associated toxicities	Yes	no
Elimination of IBMIR	Yes	no

The Cell Pouch was uniquely designed and patented to take into consideration the biological requirements of therapeutic cells. Our research demonstrates that highly vascularized tissue develops within the Cell Pouch environment when implanted below the skin or in other locations prior to transplantation of therapeutic cells. In long-term pre-clinical evaluation, the Cell Pouch has been shown to maintain a stable, vascularized tissue environment prior to placement of these transplanted therapeutic cells. We believe these conditions are key for maintaining long-term survival and function of therapeutic cells. We have demonstrated in a series of ISO10993 biocompatibility studies and multiple animal studies that the Cell Pouch is biocompatible and safe. Long-term

studies in multiple animal models have demonstrated that the islets become well-supported with microvessels as in their natural pancreatic environment following islet transplantation into the Cell Pouch.

An independent pre-clinical study published in the journal Transplantation (Transplantation 2015 Nov: 99 (11):2294-300) demonstrated that the Cell Pouch with islets provided insulin independence for the length of the study (100 days) in a small animal model of diabetes using a marginal transplanted islet mass where over 95% of the animals achieved insulin independence. This study supports the concept that the Cell Pouch may require a smaller than anticipated number of cells to achieve efficacy, one of the parameters being investigated for further human clinical evaluation to achieve glucose control in patients with diabetes.

A proof-of-concept, first-in-human clinical study in Canada cleared by Health Canada to evaluate the Cell Pouch with human donor islets, in insulin-dependent diabetic subjects with hypoglycemia unawareness who are receiving islet transplantation, has demonstrated initial safety data for the Cell Pouch alone and with transplanted islets as well as survival of the well-vascularized islets within the Cell Pouch.

In summary, our human clinical results have shown the following important findings:

- First, biocompatibility and a positive safety profile of the Cell Pouch have been shown in these patients. Safety is the primary endpoint of the clinical study; and

- Second, the islets within the Cell Pouch, as shown by independent histological analysis, are well-vascularized, living within a natural tissue matrix and can make insulin, glucagon and somatostatin, key hormones in the control of blood glucose levels. We believe such revascularization of islets and islet metabolic function within an implantable medical device for therapeutic cells in humans in this patient population is an important step forward in the regenerative medicine field.

Based on these encouraging results, we worked closely with Dr. Piotr Witkowski to develop a clinical protocol to address the function of the Cell Pouch specifically. Following significant peer review, Sernova was awarded up to US$2.45 million (approximately $3.2 million) grant under an agreement with the Juvenile Diabetes Research Foundation (JDRF). The grant will support our Cell Pouch diabetes clinical trial, which will be conducted at the University of Chicago under the direction of principal investigator, Dr. Piotr Witkowski. Our IND has been allowed by the FDA and the protocol has been approved by the University of Chicago IRB, and we announced study initiation.

The clinical trial is a Phase I/II non-randomized, unblinded, single arm, company-sponsored trial, where diabetic subjects with hypoglycemia unawareness will be enrolled into the study under informed consent. Subjects will then be implanted with Cell Pouches. Following the development of vascularized tissue chambers within the Cell Pouch, approximately 30 days, subjects will then be stabilized on immunosuppression and placed on the donor transplant list. Upon receipt of a suitable donor pancreas and following isolation of islets a dose of purified islets under strict release criteria will be transplanted into the Cell Pouch.

A sentinel pouch, also transplanted with islets, will be removed at approximately 90 days for an early assessment of the islet transplant. Subjects will be followed for safety and efficacy measures for approximately six months post-transplant. At that time, a decision will be made with regards to the transplant of a further second islet dose with subsequent safety and efficacy follow up. Patients will then be followed for one year. The primary objective of the study is to demonstrate the safety and tolerability of islet transplantation into the Cell Pouch. The secondary objective is to assess efficacy through a series of defined measures.

Our current Cell Pouch clinical trials employ standard systemic immune protection regimens; however, the Cell Pouch may also accommodate local immune protection of therapeutic cells. Local immune protection of islets within the Cell Pouch using technologies such as microencapsulation could result in a significant reduction or elimination of the need for anti-rejection drugs and their ongoing prohibitive costs, as well as associated healthcare costs related to side effects of these drugs. In addition, local immune protection may provide a safer environment for the transplanted islets. The Cell Pouch is believed to be an ideal environment to support microencapsulated cells as the encapsulated cells are housed within the vascularized tissue matrix allowing vessels to be in very close contact with the islets as demonstrated in our preclinical studies of encapsulated islets.

We believe the Cell Pouch can be used with a variety of sources of cells, such as glucose-responsive insulin-producing cells derived from stem cells or xenogeneic cells, addressing the limited availability of donors and allowing the extensive treatment of insulin-dependent diabetes. Sernova is working on these technologies including our licensed technology from UHN to provide an immune-protected cell-based therapeutic for all subjects with type-1 diabetes.

Thus, we believe our approach and its ease of use may provide an opportunity for the Cell Pouch to become the standard of care in therapeutic cell transplantation if it proves to be safe and effective in clinical trials. Sernova believes it has the only such device technology of its kind in which therapeutic cells have been proven to survive in a tissue matrix integrated with microvessels in close association with the therapeutic cells.

Development of the Cell Pouch™ in Hemophilia

We believe the Cell Pouch has multiple potential therapeutic applications. As part of this strategy to expand Cell Pouch clinical applications, we are evaluating Sernova's Cell Pouch for the treatment of patients with hemophilia A.

One such approach involves taking a small blood sample from the patient, correcting the genetic defect in isolated cells and then expanding the cell numbers for placement into Sernova's Cell Pouch for constant release of factor VIII. Initial proof-of-concept studies were conducted by Sernova and a European team of experts forming the HemAcure consortium ("The Consortium"). The Consortium is funded by a €5.6 million (approximately $8.5 million) European Commission's Horizon 2020 grant, to develop a GMP (Good Manufacturing Practice) human cell product suitable for human clinical testing for the completion of safety and efficacy studies in the Cell Pouch as part of a regulatory package in preparation for human clinical testing. To date, significant progress has been made in the development of this product. Blood outgrowth endothelial cells have been successfully isolated from patients with hemophilia A. The cells have been successfully transduced with the gene for Factor VIII. The cells have been scaled up to produce a significant number of cells for preclinical testing. In addition, the cells have been shown to produce Factor VIII on a constant basis and have been demonstrated to survive and engraft in the Cell Pouch when placed in a mouse model of hemophilia.

The current standard of care involves regular infusions of factor VIII, which achieves normal factor VIII blood levels for only a few hours or more at a time. The HemAcure consortium seeks to develop a product that will provide constant delivery of factor VIII to normalize blood levels (the "Program") in an effort to significantly improve the quality of life of patients suffering from hemophilia A. The product being developed by the HemAcure consortium is expected to be highly disruptive to the current standard of care treatments for hemophilia A. The therapeutic goal of the Program is to use the patient's own cells corrected for the factor VIII gene. These cells placed in the implanted Cell Pouch are expected to release factor VIII on a continual basis at a rate that would be expected to significantly reduce disease-associated hemorrhaging and joint damage. The constant delivery of factor VIII is also expected to reduce or eliminate the need for multiple weekly infusions

which is the current standard of care using plasma-derived or recombinant, genetically engineered factor VIII for the prophylactic treatment of hemophilia A.

Dr. David Lillicrap, MD, FRCPC Professor Department of Pathology and Molecular Medicine, Queens University, Canada, Research Chair in Molecular Hemostasis and member of the HemAcure Scientific Advisory Board, suggested that the therapeutic potential to have a constant release of factor VIII from a hemophilia A patient's own genetically corrected cells placed within the implanted Cell Pouch would be a very significant advancement in the treatment of hemophilia A. Sernova's Cell Pouch with its vascularized tissue lined chambers for therapeutic cells, which was already proven for islet safety and survival in human clinical assessment of diabetes, is an ideal, fully scalable first-in-class medical device suitable for the potential treatment of hemophilia.

The preliminary preclinical proof of concept data used as a basis to support the foundation of the Horizon 2020 Grant was generated in a collaborative agreement between Medicyte GmbH under the FP7 ReLiver project, grant agreement 304961 and Sernova Corp where cryopreserved cells with the ex vivo inserted corrected gene for factor VIII were successfully shipped and assessed in Sernova's Cell Pouch at its headquarters in Canada. Regarding Sernova's participation in the consortium, the review of the HemAcure grant proposal stated that Sernova's participation was essential for carrying out the program because Sernova was the partner possessing the technology for the basis of the whole proposal, and which performed all the in vivo studies. At that time, the Cell Pouch had already been in development for more than six years and had already shown success in multiple small and large animal preclinical models and was in a first-in-human clinical trial for diabetes. The Cell Pouch was the only such device that, when implanted under the skin, was proven to become incorporated with blood vessel-enriched tissue-forming chambers for the placement of therapeutic cells, thus securing. Sernova as a key partner for the success of the Program.

In summary, the following developments have been achieved by the Consortium:

- A reliable procedure has been implemented to isolate and maintain required cells from patient's blood.
- The cells have been corrected and tuned to produce the required Factor VIII for treatment of Hemophilia A using a novel gene correction process
- The cells have been successfully scaled up to achieve the required therapeutic number and cryopreserved for shipping and future transplant into the implanted Cell Pouch.
- A preliminary study confirmed the survival of the Factor VIII corrected human cells injected into the hemophilia model, achieving sustained therapeutic Factor VIII levels. This preliminary work is being used to aid in dosing of these cells in the Cell Pouch.
- Safe Cell Pouch surgical implant and cell transplant procedures have been developed in the Hemophilia A animal model in preparation for use in hemophilia patients.
- Development of Cell Pouch vascularized tissue chambers suitable for Factor VIII producing cell transplant has been demonstrated in the Hemophilia A model, expected to mimic the predicted findings in human patients.
- In combination, this work is in preparation for ongoing safety and efficacy studies of human hemophilia corrected Factor VIII producing cells in the Cell Pouch in a preclinical model of hemophilia.

Developing the Cell Pouch for Additional Metabolic Disorders

As the Company continues its work on diabetes and hemophilia indications, we are exploring new indications to expand further the application of our cell therapy platform technologies including for the treatment of hypothyroid disease.

Local Immune Protection & Other Complementary Technologies

To broaden Sernova's local immune protection technologies, we continue to evaluate additional advanced technologies such as microencapsulation to reduce or eliminate the need for anti-rejection medications. We believe that microencapsulation of therapeutic cells within the Cell Pouch may provide a means to contain therapeutic cells within the Cell Pouch while providing a close association of therapeutic cells in a vascularized organ-like environment. We believe this will enable long-term survival and function of cells for our disease indications without toxicity to the transplanted cells.

Alternative Sources of Cells

Our transplantation technologies may incorporate autologous cells, donor cells or other sources of cells including therapeutic cells derived from human stem cells or derived from xenogeneic sources, depending on the clinical indication under evaluation. As such, we will continue to work with academic collaborators and industry partners to identify and secure the required cells for our therapeutic indications. In this regard, as one potential approach, Sernova has signed a license agreement with the UHN to gain access to worldwide, exclusive rights to certain patent-pending technologies for the advancement of glucose-responsive insulin-producing stem cells for treatment of patients with insulin-dependent diabetes. Process development and robust cell-production processes are expected to provide a high standard of production of cells which consistently meets strict release criteria for evaluation of these cells in Sernova's Cell Pouch.

Sernova is also committed to working with pharmaceutical and academic partners to evaluate various insulin-producing cell technologies using different approaches, with the goal of combining Sernova and partner technologies to create best in class products. In this regard, Sernova has signed a number of agreements to test and evaluate several insulin-producing cell technologies in our Cell Pouch. The Company entered into a collaboration with an international pharmaceutical company to study Sernova's Cell Pouch [in] a large animal diabetes model. The collaboration involves the study of safety, survival and efficacy of locally immune protected therapeutic cells in our Cell Pouch proof of concept studies with the goal to establish a future development and commercial partnership. Sernova plans to continue to develop multiple collaborations with pharmaceutical companies for its diabetes and hemophilia indications for the establishment of potential long-term licensing and co-development relationships.

Manufacturing

Our contract manufacturer has manufactured both our Cell Pouch and mini-Cell Pouch technologies (ISO13485; US FDA Quality System Regulations (QSR) 21 CFR 820; EU Medical Devices Regulation MDR 2017/745) for preclinical and clinical evaluation. Device specifications have been set, a semi-automated manufacturing process developed, and the product manufactured, packaged and sterilized under strict regulatory guidelines suitable for testing in clinical trials in North America and Europe to complete the manufacturing process. Sterilization verification studies were completed, and the product previously released for testing in our human clinical trial in Canada with Sernova's ITA (Investigational Testing Authorization) under the jurisdiction of Health Canada. A two-year packaging and product stability study has also been successfully completed demonstrating stability of the product and packaging over this time-period. Furthermore, the manufacturing process has also been completed for the current US FDA IND (Investigational New Drug) application for our clinical study at the University of Chicago.

Intellectual Property

Our patent portfolio currently consists of issued and pending patents in ten families covering our enabling platforms in important markets in North America, Europe and Asia. We strive to obtain broad claims in our patents, including exclusivity of our Cell Pouch device and related technologies in combination with a wide range of therapeutic cell technologies including glucose-responsive insulin-producing stem cell derived cells and for the treatment of a number of chronic diseases. As such, we intend to continue to expand our patent and licensing portfolio, through inventions developed internally as well as through strategic in-licensing, to maximize the commercial potential for our platform technologies.

RESULTS OF OPERATIONS

Selected Financial Information

Selected financial information from the statements of loss and comprehensive loss for the three and nine months ended July 31, 2018 and 2017, were as follows:

	Three months ended July 31,		Nine months ended July 31,	
	2018	2017	2018	2017
Research and development expenses	$681,636	$414,029	$1,703,941	$866,976
General and administrative expenses	430,574	241,369	1,166,826	783,167
Loss and comprehensive loss for the period	$1,111,556	$705,793	$2,864,260	$1,661,749

For the three months ended July 31, 2018, we recorded a loss of $1,111,556 compared to $705,793 for the three months ended July 31, 2017, an increase of $405,763 or 57%. The increased loss was due to increased research and development expenses associated with our clinical trial in the United States and increased general and administrative expenses for travel, consulting, investor relations and professional fees incurred to support our recent financing efforts.

For the nine months ended July 31, 2018, we recorded a loss of $2,864,260compared to $1,661,749 for the nine months ended July 31, 2017, an increase of $1,202,511or 72%. The increased loss was primarily due to increased research and development expenses associated with Cell Pouch manufacturing and associated costs for the clinical trial at the University of Chicago. Increased expenses for our Hemophilia program, as well as additional patent prosecution costs, also contributed to these comparative period increases. We also increased general and administrative expenses for the nine months ended July 31, 2018, compared to the comparable period in 2017 to support raising additional financing to fund the Company's budgeted clinical trial costs and ongoing working capital requirements. The Company anticipates these costs to continue to rise as the clinical trial progresses over the coming quarters.

Research and Development Expenses

Research and development expenditures for the three and nine months ended July 31, 2018 and 2017, were as follows:

	Three months ended July 31,		Nine months ended July 31,	
	2018	2017	2018	2017
Employee costs, supplies and contracts	$558,713	$448,551	$1,256,634	$1,183,753
Manufacturing costs	134,340	42,389	549,882	71,417
Patent fees and costs	113,834	72,029	299,092	155,642
Depreciation of property and equipment	16,228	11,029	46,899	23,949
Share-based compensation	74,863	36,354	235,376	155,862
Contributions and tax credits	(216,342)	(196,323)	(683,942)	(723,647)
Total	$681,636	$414,029	$1,703,941	$866,976

For the three months ended July 31, 2018, we incurred total research and development expenses of $681,636 compared to $414,029 for the three months ended July 31, 2017, an increase of $267,607 or 65%.

Salaries, supplies and contract payments increased from $448,551 to $558,713 due to increased personnel compensation and supplies costs. Our Cell Pouch manufacturing costs also increased to support preclinical programs but more significantly for our clinical trial. These expenses increased from $42,389 for the three months ended July 31, 2017, to $134,340 for the three months ended July 31, 2018, an increase of $91,951 or 217%. These manufacturing costs are expected to decrease as we have enough supply to meet our anticipated requirements over the next few quarters and sufficient manufacturing has been completed for the US clinical trial. Increases in patent fees and related costs is due to patent renewal timing and increased patent maintenance costs. Depreciation of property and equipment increased due to recent additions of laboratory and manufacturing equipment. Contributions and tax credits increased nominally to $216,343 from $196,323 in the prior period which is consistent with the higher expenses incurred on our respective Diabetes and Hemophilia programs that are covered under these arrangements.

Total research and development expenses, for the nine months ended July 31, 2018, increased to $1,703,941 compared to $866,976 for the prior fiscal period, an increase of 319,684 or 97%. Employee costs, supplies and contract payments, for the nine months ended July 31, 2018, increased by $72,881, compared to the equivalent prior fiscal period. The increase is primarily due to increased costs for the Diabetes clinical trial and our Hemophilia research and development programs and resultant increased laboratory supply costs. We incurred $549,882 in the nine months ended July 31, 2018, in manufacturing costs regarding our Cell Pouch related to our preclinical and clinical programs compared to only $71,417 for the prior fiscal year. Depreciation of property and equipment increased due to the purchase of laboratory equipment in the nine months ended July 31, 2018. Contributions and tax credits decreased to $683,942 compared to $723,647 during the prior fiscal period primarily due to the timing of specific payment milestones.

General and administrative expenses

General and administrative costs for the three and nine months ended July 31, 2018, and 2017, were as follows:

	Three months ended July 31,		Nine months ended July 31,	
	2018	2017	2018	2017
Employee costs and consulting fees	$155,977	$73,401	$280,814	$218,822
Professional fees	30,225	19,351	215,904	60,399
Director fees and benefits	24,984	25,455	75,465	76,933
Investor relations	96,142	44,067	173,576	155,422
Travel and other costs	65,348	43,578	206,865	131,137
Depreciation of property and equipment	606	1,221	1,693	1,379
DSU's issued for director compensation	28,014	14,288	105,135	63,007
Share-based compensation	29,278	20,008	107,374	76,068
Total	$430,574	$241,369	$1,166,826	$783,167

Total general and administrative expenses, for the three months ended July 31, 2018, increased by $189,205or 78% as compared to the same period in the prior year. Employee costs and consulting fees increased by $82,576 due primarily to consulting fees associated with supporting financing efforts. Professional fees increased by $10,874, investor relations increased by $52,075, as did travel and other costs which increased by $21,770. Similarly, these costs were mostly higher due to marketing the recently closed financing. DSU's issued for director compensation and share-based compensation for the three months ended July 31, 2018, increased to $28,014 compared to $14,288 during the same period of the prior year due to higher comparative option grants vesting over these respective periods.

Total general and administrative expenses, for the nine months ended July 31, 2018, increased by $383,659 as compared to the same period in the prior year an increase of 49%. Employee costs and consulting fees increase by $61,993 due primarily to higher administrative and consulting fees. Legal and audit professional fees also increased by $155,505, as did investor relations which increased by $18,154, related principally to our recently closed financing. DSU's issued for director compensation and share-based compensation for the nine months ended July 31, 2018, increased by $73,434 compared to the prior nine-month period as a result of higher option and DSU grants.

Other items

Finance income

Finance income, represented primarily by interest income earned on the Company's cash and marketable securities, was $5,525 during the three months ended July 31, 2018, compared to $11,853 for the same period in the prior fiscal period. The interest income for the nine months ended July 31, 2018, was $22,560 compared to $43,135 for the same nine months period in the prior fiscal year. The decreases resulted from lower average balances of cash and marketable securities compared to the prior period.

Finance costs
Finance costs, represented primarily by bank charges were $1,949 and $7,717 for the three and nine months ended July 31, 2018, compared to $2,993 and $11,036 for the same periods in the prior year. The decrease was associated with lower investment account fees.

Foreign exchange losses
Foreign exchange losses were $2,922, for the three months ended July 31, 2018, compared to $59,255 for the same period in the prior fiscal year.

Income taxes
Income taxes have not been recognized in profit and loss to date, as the Company has been incurring losses since inception, and it is not probable that future taxable profits will be available against which the accumulated tax losses can be utilized. Accordingly, the Company has substantial deferred tax assets that have not been recognized in the financial statements that would be available to shelter potential future taxable income from income taxes. See Note 11 to the Company's audited consolidated financial statements for the years ended October 31, 2017, and 2016, for further details related to the Company's income tax position.

LIQUIDITY AND CAPITAL RESOURCES

Selected financial information from the statements of financial position as at July 31, 2018, and October 31, 2017, were as follows:

As At	July 31, 2018	October 31, 2017
Cash and marketable securities	$ 3,799,225	$ 3,631,887
Total assets	4,518,482	4,551,518
Current liabilities	489,204	901,066
Share capital, warrants and contributed surplus	41,685,743	38,442,657
Deficit	(37,656,465)	(34,792,205)
Total equity and laibilities	$ 4,518,482	$ 4,551,518

As at July 31, 2018, we had cash and marketable securities of $3.8 million compared to $3.6 million as at October 31, 2017.

The Company does not have any debt or credit facilities.

The Company's spending and capital requirements will increase materially as the Company advances its recently announced clinical trial. Management believes that the Company has sufficient control over its spending to continue to operate the business for the next twelve months.

Financing Activities

In July 2018, the Company announced it closed a Private Placement for an aggregate total of $2,754,000 and, in connection therewith, issued 11,016,000 Special Warrants.

Each Special Warrant will convert, for no additional consideration, into one Unit ("Unit") of the Company. Each Unit will consist of one common share and one common share purchase warrant ("Warrant") of the

Company. Each Warrant will be exercisable into one share at $0.35 per share for 24 months, subject to abridgement of the exercise period if the 20-day volume weighted price of the Company's shares exceeds $0.50 per share. All securities issued in connection with the private placement will be subject to a statutory hold period of four months. The Company compensated finders on a portion of the private placement, such compensation consisting of 7% in cash or 7% in finder warrants, or a combination thereof. The Company received approval of the TSX Venture Exchange on August 1, 2018. The Company agreed to file a final short form prospectus to qualify the distribution of the Units upon deemed conversion of the Special Warrants (the "Qualification") following the receipt of a final prospectus. If the Qualification does not occur within 4 months of closing, the Special Warrants will automatically convert into Units immediately following the expiry of the 4-month hold period.

For the nine months ended July 31, 2018, 131,250 stock options were exercised for cash proceeds of $30,390, and 465,600 warrants were exercised for cash proceeds of $162,960. During the same period in 2017, 2,695,000 stock options were exercised for cash proceeds of $470,500.

Historically, funding requirements have been met through the issuance of common shares from treasury and common share purchase warrants and stock options that are converted into common shares upon exercise. Management regularly monitors the capital markets and attempts to balance the timing of new equity issues with the progress of our research and clinical development plan, general market conditions, and availability of capital. In addition, management actively targets additional sources of capital, such as grants and contributions, as well as collaborative partners which would assist in progressing our operations and research and clinical development programs.

We anticipate the cash requirements to fund our planned activities for fiscal 2018 will continue to increase over the previous year. Our actual cash requirements will depend on the clinical, pre-clinical, and collaboration activities that we ultimately undertake and the ability to secure partners and non-dilutive funding in the form of government grants.

The interim condensed consolidated financial statements have been prepared using IFRS that are applicable to a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business for the foreseeable future. The Company has experienced operating losses and cash outflows from operations since its inception, and accordingly, it will require ongoing financing to continue its research and development activities. In addition, it has not yet earned significant revenue or reached successful commercialization of its products. The Company will seek new funding from additional equity financings and/or licensing agreements and collaboration arrangements with development partners; however, there is no assurance that these funding initiatives will be successful.

Common Shares

The following table reflects the changes in the number of issued common shares from the most recent year ended October 31, 2017, to the date of this MD&A:

	Number of Common Shares
Balance as at October 31, 2017	159,374,498
Shares issued on the exercise of stock options	131,250
Shares issued on the exercise of warrants	465,600
Balance as at July 31, 2018 and the date of this MD&A	159,971,348

Special Warrants

As at July 31, 2018, and the date of this MD&A, there are 11,016,000 special warrants outstanding. Each special warrant converts, at no additional cost, into 11,016,000 common shares and 11,016,000 common share purchase warrants with an exercise price of $0.35 per share.

Common Share Purchase Warrants

The following table reflects the changes in the number of issued warrants from the most recent year ended October 31, 2017, to the date of this MD&A:

	Number of Warrants	Weighted Average Exercise Price
Balance as at October 31, 2017	26,110,739	$0.33
Issued	581,700	0.35
Expired	(25,645,139)	0.30
Exercised	(465,600)	0.35
Balance as at July 31, 2018 and the date of this MD&A	581,700	$0.35

2015 Incentive Plan

The Company has a 2015 Incentive Plan (the "Plan"), the terms of which were most recently approved by shareholders of the Company on April 25, 2018. The Plan includes both stock options and deferred share units ("DSU's"). Further details on the Company's 2015 Incentive Plan are provided in Note 7 to the unaudited interim condensed consolidated financial statements for the three and nine months ended July 31, 2018, and 2017.

The following table reflects the changes in the number of issued stock options from the most recent year ended October 31, 2017, to the date of this MD&A:

	Number of Options	Weighted Average Exercise Price
Balance as at October 31, 2017	10,548,600	$0.23
Cancelled/forfeited	(1,412,350)	0.25
Exercised	(131,250)	0.23
Balance as at July 31, 2018 and the date of this MD&A	9,005,000	$0.23

As at October 31, 217, July 31, 2018 and the date of this MD&A the Company had issued 1,975,000 deferred share units (DSU's) outstanding.

On August 14, 2017, Sernova's Board of Directors approved an amendment to the Company's Option Plan & Deferred Share Unit Plan (the "Amended Plan") to increase the number of DSUs available by 660,222 to a maximum of 1,975,000. These additional DSUs were conditionally approved and granted subject to the Company obtaining shareholder approval and TSX Venture Exchange approval ("Exchange approval"). Subsequently, on March 18, 2018, the Board approved two further amendments to the Incentive Plan, subject to shareholder and Exchange approval, being: (a) an increase to 15% of the rolling number maximum of Common Shares available for reserve under the Incentive Plan for exercise of Options pursuant to the Option Plan component of the Incentive Plan; and (b) a further amendment to the DSU Plan component of the Incentive Plan to further increase the number of DSUs available by an additional 2,821,797 DSUs to a maximum fixed number total of 4,796,797 DSUs. The new maximum fixed number total of 4,796,797 DSUs represents 3% of the Common Shares at the date hereof. All of the proposed amendments to the Incentive Plan were approved by shareholders of the Company at the Annual General Meeting but have not yet been approved by the TSX Venture Exchange.

No additional options or DSUs were granted post the financial year ended October 31, 2017, and to the date of this MD&A.

COMMITMENTS AND CONTINGENCIES

The Company expects to pay certain future costs related to its pre-clinical and clinical trials. Such payments are expected to include the cost of clinical staff and overhead thereon, trial insurance, and may include travel and a portion of drug or procedure–related expenses or transplantation expenses not covered by insurance. The total payments over the duration of the trial will be impacted by such factors as the rate of enrollment, the location in which the patient resides and the specifics of patient insurance.

By participating in the HemAcure consortium and accepting grant funding, the Company has committed to perform certain product development activities, as outlined in the grant agreement with the European Commission's Horizon 2020 program. While it is anticipated that the funding that has been received and further funding expected to be received by the Company will cover most of the costs expected to be incurred related to the planned product development activities, the actual amount of effort and the related costs may differ from what was expected and may be more than the maximum amounts the European Commission has agreed to cover. Accordingly, any excess costs required to complete the activities would become the Company's responsibility. Under the grant agreement, consortium members may also shift the funding allocated under the grant between members to cover excess costs, so the Company may ultimately receive a different amount of funding than currently expected. The project is subject to a number of risks and uncertainties, and in particular, the risks outlined under the risk factor titled '*Dependence on collaborative partners, licensors, contract manufacturer and others'*, please refer to the risk factors discussed elsewhere in this MD&A.

In July 2016, the Company was awarded up to US$2.45 million (approximately $3.2 million) in a grant under an agreement with JDRF which is payable on achieving milestones in the clinical trial. The grant supports a human clinical trial of Sernova's Cell Pouch for the treatment of patients with type 1 diabetes at a major transplantation center in the United States. In August 2016, the Company received an initial funding payment from JDRF in the amount of US$367,768 ($480,783) as per the terms under the agreement. Under the agreement with JDRF, the Company has committed to perform certain clinical trial activities and to use commercially reasonable efforts to introduce a diabetes product into a major market. Further, the agreement creates an obligation for the Company to pay royalties to JDRF on any future net sales received by the Company from a diabetes product or in certain future license or disposition transactions limited to a certain percentage of funds received over time up to a prescribed limit related to the amount of the grant funding.

In October 2016, the Company entered into a collaboration with an international pharmaceutical company regarding a material transfer agreement to study Sernova's Cell Pouch safety, survival and efficacy of locally immune protected therapeutic cells in a large animal diabetes model. Pursuant to the collaboration agreement, the Company has committed to perform certain pre-clinical activities. This agreement included 50% cost sharing for the agreed studies. A payment in the amount of US$185,778 ($249,611) was received by the Company in December 2016.

In November 2017, the Company received an interim payment in the amount of €226,603 ($331,770) from the EU Horizon2020 grant program related to the HemAcure project based on successful achievement of program milestones.

The Company entered into a three-year lease effective September 1, 2017. Notwithstanding the term, the Company has the right to terminate the lease after the first anniversary by providing 90 days' written notice. As at July 31, 2018, gross minimum payments amounted to $122,595.

RELATED PARTY TRANSACTIONS

The key management personnel of the company are the Directors, the President and Chief Executive Officer and the Chief Financial Officer. Amounts due to related parties, including amounts due to key management personnel, at the period-end are unsecured, interest-free and settlement generally occurs in cash. There have been no guarantees provided or received for any related party receivables or payables. Included in accounts payable and accrued liabilities at July 31, 2018, was $124,984 due to key management personnel.

Compensation to key management personnel for the three and nine months ended July 31, 2018, and 2017, was as follows:

	Three months ended July 31,		Nine months ended July 31,	
	2018	2017	2018	2017
Salaries, benefits and consulting fees	$155,977	$90,685	$416,950	$302,199
Director fees and benefits	24,985	24,985	75,465	74,954
DSU's issued for director compensation	28,014	14,288	105,135	63,007
Share-based compensation	40,881	10,917	149,407	62,888
Total	$249,857	$140,875	$746,957	$503,048

Executive officers and directors participate in the Company's 2015 Incentive Plan, so they are eligible to receive stock options and deferred share units. Executive officers also participate in the Company's health benefits plan.

SUMMARY OF QUARTERLY RESULTS

Selected quarterly data with respect to the statement of loss and comprehensive loss is set out below:

Fiscal Year		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2018	Net loss	$ 766,355	$986,348	$1,111,556	N/A
	Net loss per share	$ 0.00	$0.01	$0.01	
2017	Net loss	$ 317,524	$ 638,431	$ 705,793	$ 977,731
	Net loss per share	$ 0.00	$ 0.00	$ 0.00	$ 0.01
2016	Net loss	$ 676,450	$ 691,917	$ 964,947	$ 166,308
	Net loss per share	$ 0.00	$ 0.01	$ 0.01	$ 0.00

The higher trending quarterly losses in 2018 are reflective of the Company's preparation for the US clinical trial and related costs.

It is important to note that historical patterns of expenditures cannot be taken as an indication of future expenditures. The amount and timing of expenditures, and therefore liquidity and capital resources, may vary substantially from period to period depending on the business and research activities being undertaken at any one time and the availability of funding from investors and prospective collaborative partners.

OFF-BALANCE SHEET ARRANGEMENTS

We do not have any off-balance sheet arrangements.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of financial statements in conformity with IFRS requires the Company to make judgements, estimates and assumptions that affect the application of accounting policies, the reported amounts of assets, liabilities and expenses, as well as the Company's ability to continue as a going concern. The estimates and assumptions made are continually evaluated and have been based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Such estimates and assumptions are inherently uncertain. Actual results could differ materially from these estimates and assumptions. Revisions to estimates are recognized in the period in which the estimate is revised and may impact future periods. A summary of the Company's significant accounting policies and estimates under IFRS is found in Note 3 of the Company's audited consolidated financial statements for the years ended October 31, 2017, and 2016.

Management has applied significant estimates and assumptions to the following:

Valuation of share-based compensation

The Company measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. Estimating fair value for share-based payment transactions requires determining the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determining the most appropriate inputs to the valuation model including the expected: option life, volatility, risk-free interest rate, forfeiture rates, stock option exercise behaviours, dividend yield and corporate performance. Changes in these assumptions affect the fair value estimate for share-based compensation. The assumptions and models used for estimating fair value for share-based payment transactions are discussed in Note 7 of the audited consolidated financial statements for the years ended October 31, 2017, and 2016.

INTERNAL CONTROLS OVER FINANCIAL REPORTING

As a result of the Company's limited administrative staffing levels, internal controls which rely on segregation of duties, in many cases, are not possible. Due to resource constraints and the present stage of the Company's development, the Company does not have sufficient size and scale to warrant the hiring of additional staff to address this potential weakness at this time. To help mitigate the impact of this, the Company is highly reliant on the performance of compensating procedures and senior management's review and approval.

As a venture issuer, the Company is not required to certify the design and evaluation of the Company's disclosure controls and procedure ("DC&P") and internal controls over financial reporting ("ICFR"), and as such has not completed such an evaluation. Investors should be aware that inherent limitations on the ability of the certifying officers of a venture issuer to design and implement, on a cost-effective basis, DC&P and ICFR as defined in NI 52-109, may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.

CHANGES IN ACCOUNTING POLICIES

New standards, amendments and interpretations adopted during 2018

IFRS 9, Financial Instruments

As at November 1, 2017, the Company adopted IFRS 9, Financial Instruments (IFRS 9). The Company has elected to not restate comparative periods in the year of initial application of IFRS 9 relating to the transition

for classification, measurement and impairment. As a result, the comparative information provided continues to be accounted for on a basis consistent with those followed in the most recent annual consolidated financial statements.

IFRS 9 replaces the provisions of IAS 39 that relate to the recognition, classification and measurement of financial assets and financial liabilities, derecognition of financial instruments, impairment of financial assets and hedge accounting. IFRS 9 also significantly amends other standards dealing with financial instruments such as IFRS 7, Financial Instruments: Disclosures.

The Company assessed the classification and measurement of the financial instruments it held at the date of initial application of IFRS 9 (November 1, 2017) and has classified its financial instruments into the appropriate IFRS 9 categories. There were no changes to the carrying value of the Company's financial instruments resulting from this reclassification and accordingly there was no impact to the Company's opening balance of deficit as at November 1, 2017, as a result of the adoption of IFRS 9.

New standards and interpretations not yet effective

IFRS 15 *Revenue from Contracts with Customers*
In May 2014, the IASB issued IFRS 15 *Revenue from Contracts with Customers* ("IFRS 15") which covers principles for reporting about the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. The new standard is required to be applied for years beginning on or after January 1, 2018. The Company has assessed there is no impact of this standard on the Company's consolidated financial statements, and accordingly, these interim condensed financial statements have been prepared in accordance with IFRS 15 Revenue from Contracts with Customers.

IFRS 16 *Leases*
In January 2016, the IASB issued IFRS 16 *Leases* ("IFRS 16"), its new lease standard that requires lessees to recognize assets and liabilities for most leases on the statement of financial position. Lessees applying IFRS 16 will have a single accounting model for all leases, with certain exemptions. Lessor accounting is substantially unchanged. The new standard will be effective from January 1, 2019, with limited early application permitted. The Company is currently monitoring the development of this standard and assessing the impact that adoption of this standard may have on the consolidated financial statements.

RISKS AND UNCERTAINTIES

There are a number of risks that may have a material and adverse impact on the future operating and financial performance of the Corporation and could cause its operating and financial performance to differ materially from the estimates described in forward-looking statements relating to the Corporation. These include widespread risks associated with any form of business and specific risks associated with the Corporation's business and its involvement in the base metal exploration and development industry.

An investment in the securities of the Corporation is considered speculative and involves a high degree of risk due to, among other things, the nature of the Corporation's business and the present stage of its development, and should be considered speculative. A prospective investor should carefully consider the risk factors set out below as well as other information contained in this MD&A. An investment in the securities of the Corporation should only be undertaken by those persons who can afford the total loss of their investment. The risks and uncertainties below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we believe to be immaterial may also adversely affect our business. Such risk factors could materially affect the Corporation's future operating results and could cause actual events to differ materially from those described in forward-looking statements relating to the Corporation. Further, if we fail to meet the expectations of the public market in any given period, the market price of our common shares could decline. We operate in a highly competitive environment that involves significant risks and uncertainties, some of which are outside of our control.

The Corporation has identified the following non-exhaustive list of inherent risks and uncertainties that it considers to be relevant to its operations and business plans. For a detailed description of each risk and uncertainty, please refer to the annual Management's Discussion and Analysis for the years ended October 31, 2017, and 2016 as filed on SEDAR.

Investment Risk

- *Volatility of share price, absence of dividends and fluctuation of operating results.*
- *Dilution.*

Issuer Risk

- *Early stage development and scientific uncertainty.*
- *We depend heavily on the success of our Cell Pouch platform.*
- *HemAcure Risk*
  - *The consortium may not be able to develop a GMP source of Factor VIII cells*
  - *The preclinical safety and efficacy may not be sufficient to warrant clinical evaluation*
  - *Clinical studies may not prove the combination of the Cell Pouch and Factor VIII producing cells to be safe and efficacious and thus may not result in a commercial product.*
- *We do not expect to realize material revenues until, if and when, our medical technologies become commercially viable.*
- *Additional financing requirements and access to capital.*
- *We heavily rely on the capabilities and experience of our key executives and scientists and the loss of any of them could affect our ability to develop our products.*
- *Clinical trials are long, expensive and uncertain processes and Health Canada, FDA, European Union or other regulatory jurisdictions may ultimately not approve any of our products. We may never develop any commercial applications or products that generate revenues.*
- *Patents and proprietary technology.*

- *We may expend our limited resources to pursue particular research and development opportunities and fail to capitalize on others that may be more profitable or for which there is a greater likelihood of success.*
- *Dependence on collaborative partners, suppliers, licensors, and others.*
- *Employee misconduct or other improper activities.*
- *Lack of product revenues and history of losses.*
- *Conflict of interest.*
- *We are likely a "passive foreign investment company", which may have U.S. federal income tax consequences for U.S. shareholders.*
- *It may be difficult for non-Canadian investors to obtain and enforce judgements against us because of our Canadian incorporation and presence.*
- *As a foreign private issuer, we are not subject to certain United States securities law disclosure requirements that apply to a domestic United States issuer, which may limit the information which would be publicly available to our shareholders.*

Industry Risk

- *Rapid technological change.*
- *Competition.*
- *Government regulations.*
- *Hazardous materials and environmental matters.*
- *Status of healthcare reimbursement.*
- *Potential product liability.*
- *Reliance on Information Technology.*

DIRECTORS AND OFFICERS

Frank Holler, Chair of the Board of Directors
Jeffrey Bacha, Director
James Parsons, Director
Bruce Weber, Director
Dr. Philip Toleikis, President, Chief Executive Officer and Director
Sean Hodgins, Chief Financial Officer

ADDITIONAL INFORMATION

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