



PASCAL BIOSCIENCES INC.
Suite 1780 – 400 Burrard Street, Vancouver, BC, Canada

Form 51-102F1

**Management's Discussion & Analysis of Financial Condition and Results of Operations for the Financial
Six Months Ended May 31, 2019**

Date: July 26, 2019

Management's Discussion and Analysis

The following management discussion and analysis ("MD&A") of the financial information of Pascal Biosciences Inc. (the "Company") and results of operations should be read in conjunction with the Company's condensed consolidated interim financial statements for the six months ended May 31, 2019 and the audited consolidated financial statements and accompanying notes for the year ended November 30, 2018. These documents are intended to provide investors with a reasonable basis for assessing the financial performance of the Company as well as forward-looking statements relating to future performance. The financial statements are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and include the operating results of the Company.

This MD&A was reviewed by the Audit Committee and approved and authorized for issue by the Board of Directors on July 26, 2019. The information contained within this MD&A is current to July 26, 2019.

The Company's critical accounting estimates, significant accounting policies and risk factors have remained substantially unchanged and are still applicable to the Company unless otherwise indicated. All amounts are expressed in Canadian Dollars unless noted otherwise.

Forward-Looking Statements

This MD&A contains forward-looking statements within the meaning of applicable securities laws. All statements contained herein that are not clearly historical in nature are forward-looking, and the words "believe," "expect," "plan," "may," "will," "could," "leading," "intend," "estimate," or words of a similar nature are generally intended to identify forward-looking statements. Forward-looking statements in this MD&A include, but are not limited to, statements with respect to the Company's:

- expected future loss and accumulated deficit levels;
- projected financial position and estimated cash burn rate;
- expectations about the timing of achieving milestones and the cost of development programs;
- requirements for, and the ability to obtain future funding on favourable terms or at all;
- projections for the development of our core technologies, particularly with respect to the timely and successful completion of trials and availability of results from such studies and efficacy;
- expectations about its product's safety and efficacy;
- expectations regarding the progress and the successful and timely completion of the various stages of regulatory processes;
- ability to secure strategic partnerships with larger pharmaceutical and biotechnology companies;
- expectations regarding the acceptance of our products and technologies by the market;

- ability to retain and access appropriate staff, management and expert advisors; and
- expectations with respect to existing and future corporate alliances and licensing transactions with third parties, and the receipt and timing of any payments to be made by the Company or to the Company in respect of such arrangements.

All forward-looking statements reflect the Company's beliefs and assumptions based on information available at the time the assumption was made. These forward-looking statements are not based on historical facts but rather on management's expectations regarding future activities, results of operations, performance, future capital and other expenditures (including the amount, nature and sources of funding thereof), competitive advantages, business prospects and opportunities.

By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties, both general and specific, known and unknown, that contribute to the possibility that the predictions, forecasts, projections or other forward-looking statements will not occur. In evaluating forward-looking statements, readers should specifically consider various factors, including the risks outlined under the heading "Risk Factors" in this MD&A. Some of these risks and assumptions include, among others:

- substantial fluctuation of losses from quarter to quarter and year to year due to numerous external risk factors, and anticipation that the Company will continue to incur significant losses in the future;
- uncertainty as to the Company's ability to raise additional funding to support operations;
- the Company's ability to generate product revenue to maintain our operations without additional funding;
- the risks associated with the development of the Company's product candidates which are at early stages of development;
- reliance on third parties to plan, conduct and monitor our pre-clinical studies and clinical trials;
- the Company's product candidates may fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or may not otherwise produce positive results;
- risks related to filing Investigational New Drug applications (INDs), to commence clinical trials and to continue clinical trials if approved;
- the risks of delays and inability to complete clinical trials due to difficulties involved in enrolling patients;
- competition from other biotechnology and pharmaceutical companies;
- the Company's reliance on the capabilities and experience of its key executives and scientists and the resulting loss of any of these individuals;
- the Company's ability to adequately protect trade secrets;
- the Company's ability to source and maintain licenses from third-party owners; and
- the risk of patent-related litigation.

Although the forward-looking statements contained in this MD&A are based upon what management believes to be reasonable assumptions, we cannot assure readers that actual results will be consistent with these forward-looking statements. Any forward-looking statements represent estimates only as of the date of this MD&A and should not be relied upon as representing estimates as of any subsequent date. The Company undertakes no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events, except as may be required by securities legislation.

Overview

The Company was incorporated on January 28, 2011 pursuant to the *Business Corporations Act* (British Columbia). On May 24, 2013, the Company acquired all of the issued and outstanding shares of bioMmune Advanced Technologies Inc. ("BAT"),

a private company (incorporated on July 5, 2012) formed to commercially exploit a number of patents and patent applications that surround three technologies. On March 27, 2017, the Company incorporated a wholly owned subsidiary in Seattle, Washington, named Pascal Biosciences US, Inc. ("Pascal (US)"). The Company is a Tier 2 Biotechnology Issuer engaged in the research and development of products for the treatment of cancers and for modulation of the immune system, trading on the TSXV Exchange under the trading symbol "PAS".

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

Overall Performance

Research and Development

In March 2017, Pascal Biosciences (US), Inc. began operating a research lab in Seattle, Washington. The Company currently has seven full-time employees; the CEO, five conducting research and drug development and one in business development.

On September 11, 2017, Pascal announced that the Company had executed an exclusive, worldwide license option agreement with STC.UNM, the University of New Mexico's technology-transfer and economic-development organization, to acquire a therapeutic monoclonal antibody for potential treatment of Acute Lymphoblastic Leukemia (ALL). ALL is the most common childhood cancer, with the incidence peaking at approximately two to five years of age, but about 45% of ALL patients are above age twenty. Current therapies for this leukaemia have serious side effects and about 15% of pediatric patients fail therapy, thus there is a need for new approaches for treatment. The monoclonal antibody originally identified by the New Mexico laboratory has properties that suggests its suitability for delivering cytotoxic agents to tumour cells in the form of antibody-drug conjugates, thus killing the cancer cells (details below: "*Core Assets – Modulating the Immune System*", pages 3-6). Pascal scientists have recently identified additional monoclonal antibodies specific for ALL targets.

On February 21, 2018, the Company announced that it has discovered certain cannabinoids (molecules from the Cannabis plant) that enhance the immunogenicity of tumour cells, rendering them more susceptible to recognition by the immune system. This discovery is important because the leading class of new cancer fighting agents, termed "checkpoint inhibitors", activate the immune system to destroy cancer cells thus offering the potential to employ checkpoint inhibitors in tandem with selected cannabinoid molecules for cancer treatment. The Company has expanded its cannabinoid program by screening 400 different cannabinoid compounds in an effort to translate the results into clinical studies.

Prior to the year ending November 30, 2018, the Company returned three patents to the University of British Columbia (UBC). Two of these patents ("HAT acetylation and promoters and uses of composition thereof in promoting immunogenicity" and "Curcuphenol compounds for increasing MHC-I expression") are focused on the discovery of compounds that make tumor cells visible to the immune system. The Company recognizes the importance of these initial technology applications and has continued to expand this program to include cannabinoids. The company has strengthened its intellectual property with the filing of a new provisional application in January 2018 (please also refer to "Intangible Assets" below). In January 2019, this provisional patent application was converted into an international patent application covered by the Patent Cooperation Treaty that includes 151 countries and covers all major pharmaceutical markets worldwide. A third patent, "Compositions and methods of modulating an immune response", supported the CD74 program and was also returned to UBC. With the Company's focus on cancer, the Company's management decided to return the CD74 program which was focused on infectious disease with technologies discovered at UBC.

On October 30, 2018, the Company announced that it entered into an exclusive license agreement with the University of Washington ("UW") in Seattle to develop a cannabinoid-based product for the treatment of glioblastoma multiforme and brain metastases. The program, developed in the lab of renowned Cannabis researcher Dr. Nephi Stella, founder and co-director of the UW Center for Cannabis Research, includes a lead therapeutic, ST-403. The ST compounds utilize a unique mechanism of action to kill cancer cells that may prove synergistic when used in combination with other chemotherapeutics. In a mouse model of glioblastoma, ST compounds synergized with radiation or temozolomide—the standard of care for human glioblastoma patients—to reduce tumour size and extended life. These ST compounds also demonstrated a favourable safety profile. Pascal is continuing development efforts to begin clinical trials with ST-403 as soon as possible.

On January 24, 2019, the Company announced that testing of cannabinoids would be undertaken in human subjects to push forward its immune stimulatory program in cancer. The Company also announced that it has filed an international patent application to protect this work for future therapeutic indications.

On March 18, 2019, the Company announced that it had entered into a partnership with Mitacs (Canada) for a multi-year cancer research project at UBC. Mitacs, a not-for-profit organization that fosters growth and innovation for Canadian

companies and academic laboratories, will provide equal funding for research efforts at UBC that will directly support the Company's PAS-393 program.

Kevin Egan, VP Business Development, presented a corporate overview presentation highlighting the Company's therapeutic pipeline at BIO International in Philadelphia on June 4, 2019.

Please refer to "*Core Technologies*" below for updates on the Company's research and development.

Share Capital

On November 3, 2017, the Company extended the exercise date of 1,333,332 share purchase warrants (which originally had been exercisable until November 18, 2017) to May 18, 2018.

On January 29, 2018, the Company granted an aggregate of 250,000 stock options to directors of the Company, exercisable at a price of \$0.29 per optioned share for a period of five years, vesting quarterly over one year.

On February 22, 2018, 200,000 stock options were exercised at a price of \$0.23 per share for gross proceeds of \$46,000.

On March 12, 2018, the Company closed a non-brokered private placement of 12,875,000 units at a price of \$0.40 per unit for gross proceeds of \$5,150,000. Each unit consists of one common share and one common share purchase warrant to purchase one additional common share at a price of \$0.60 per share for a period of 12 months up to and including March 12, 2019, subject to an acceleration clause. Under the exercise acceleration clause, if the Company's shares are trading at or above a volume weighted average price of \$0.80 for 10 consecutive trading days, the warrants will expire upon 30 days from the date the Company provides notice in writing to the Warrant holders via a news release. On February 25, 2019, the Company extended the exercise date of the warrants until June 12, 2019. The private placement closed on March 8, 2018. The Company incurred \$440,403 in share issuance costs and issued 994,600 finders' warrants. Each finders' warrant entitles the holder to purchase one common share of the Company at a price of \$0.60 per share for a period of twelve months up to and including March 12, 2019, subject to an exercise option clause. The fair value of the warrants granted was estimated using the Black-Scholes option-pricing model with the following weighted average assumptions: risk-free interest rate of 1.81%, expected dividend rate of 0%; expected volatility of 102%; and forfeiture rate of 0%. The fair value of the warrants was calculated at \$211,044.

On March 12, 2018, the Company also closed a private placement of 387,594 units at a price of \$0.32 per unit for gross proceeds of \$124,030. Each unit consists of one common share and one full common share purchase warrant. Each warrant entitles the holder to purchase one additional common share of the Company at a price of \$0.40 per share for a period of twenty four months, expiring March 12, 2020, subject to an exercise acceleration clause. Under the exercise acceleration clause, if the Company's shares are trading at or above a volume weighted average price of \$0.50 for 10 consecutive trading days, the warrants will expire upon 30 days from the date the Company provides notice in writing to the warrant holders via a news release.

On April 23, 2018, 999,999 warrants were exercised at a price of \$0.40 for gross proceeds of \$400,000.

On May 18, 2018, 161,717 warrants were exercised at a price of \$0.40 for gross proceeds of \$64,687.

On June 18, 2018, 375,000 stock options were exercised at a price of \$0.23 per share for gross proceeds of \$86,250.

On September 24, 2018, 150,000 stock options were exercised at a price of \$0.20 for gross proceeds of \$30,000.

On November 7, 2018, 100,000 stock options were exercised at a price of \$0.30 for gross proceeds of \$30,000.

On May 28, 2019, the Company granted 198,000 stock options to consultants of the Company. The stock options are exercisable at a price of \$0.195 per optioned share for a period of three years, vesting quarterly over three years.

On June 12, 2019 9,380,000 warrants expired, unexercised.

Management

On December 5, 2017, the Company appointed Dr. Graeme I. Bell to its Board of Directors. Dr. Bell received his BSc and MSc degrees from the University of Calgary, Alberta and his PhD from the University of California, San Francisco. He is currently the Kovler Family Distinguished Service Professor in Medicine and Human Genetics at the University of Chicago. Dr. Bell is a

member of the National Academy of Medicine and the American Academy of Arts and Sciences. For his pioneering work on the genetics of diabetes, he was awarded the 2013 Banting Medal for Scientific Achievement, the highest scientific honor from the American Diabetes Association. This prize is awarded annually in memory of the Canadian medical scientist Sir Frederick Banting, Nobel laureate, who was one of the key investigators who discovered insulin.

On March 16, 2018, Reinhard Gabathuler resigned from the Board of Directors.

On July 16, 2018, the Company appointed Julie Eastland to its Board of Directors. Ms. Eastland is a seasoned strategic and financial executive with more than 25 years of experience in public and private biotechnology companies. Most recently she was Chief Business Officer and Chief Financial Officer of Cascadian Therapeutics, where she negotiated and managed its \$810 M acquisition by Seattle Genetics in March 2018.

On November 28, 2018, the Company strengthened its leadership team with the appointments of seasoned executives in therapeutic and business development. Kevin M. Egan, MBA was appointed Vice President Business Development; Thomas Deckwerth, PhD was appointed Vice President Therapeutic Development; and Larry W. Tjoelker was appointed Vice President Research.

On April 1, 2019, the Company announced the appointment of Carl Weissman acting President. Mr. Weissman is a veteran of the biotechnology industry, with more than two decades of experience that spans investing, founding and managing emerging biotech companies. On July 4, 2019, the Company announced that Mr. Weissman stepped down from the position of acting President.

On May 8, 2019, the Company announced the formation of a clinical advisory board of preeminent neuro-oncology experts to guide the PAS-403 therapeutic program. Members include:

- Chair: Dr. Darell Bigner – E.L. and Lucille F. Jones Cancer Research Professor, Duke University School of Medicine

Dr. Bigner is founding Director of the Preston Robert Tisch Brain Tumor Center. His research has involved the investigation of the causes, mechanism of transformation, altered growth control, and development of new methods of therapy for primary brain tumors and those metastasizing to the brain. Dr. Bigner has over 600 scientific publications and received the Lifetime Achievement Award from the Society of Neuro-Oncology in 2014.

- Dr. Mitchell Berger – Professor and Chair, Neurological Surgery, University of California, San Francisco

Dr. Berger is an internationally recognized expert in treating brain and spinal cord tumors in adults and children. He is co-director of the Adult Brain Tumor Surgery Program, director of the Brain Tumor Research Center and director of the Center for Neurological Injury and Repair. Dr. Berger is a past-president of the Society for Neuro-Oncology (1997-1999), has received the Victor Levin Award in Neuro-oncology Research from the Society for Neuro-Oncology in 2015, was named on the Blue Ribbon Panel of scientific experts for the National Cancer Moonshot Initiative, and has also served as president of the American Association of Neurological Surgeons.

- Dr. Timothy Cloughesy – Professor of Neurology, University of California, Los Angeles

Dr. Cloughesy is Director of the UCLA Neuro-Oncology program. Dr. Cloughesy's research focuses on clinical trials in brain cancer using targeted molecular therapies with novel clinical trial design. He has developed a brain cancer bioinformatics database which combines clinical outcomes, imaging and molecular analysis to enhance translational research. For more than a decade, he has been recognized as both a Top Doctor and Top Doctor for Cancer by U.S. News.

- Dr. Patrick Wen – Professor of Neurology, Harvard Medical School

Dr. Wen is Director of the Center for Neuro-Oncology, Dana Farber Cancer Research Institute and Director of the Division of Cancer Neurology at Brigham and Women's Hospital. Dr. Wen's research is focused on novel treatments of brain tumors, especially targeted molecular agents, and optimizing response assessment and clinical trial endpoints in neuro-oncology. He currently serves as President of the Society for Neuro-Oncology, the premier North American organization for health care professionals focusing on central nervous system tumors in children and adults.

- Dr. Andrew Sloan – Professor, Departments of Neurological Surgery and of Pathology, School of Medicine, Case Western Reserve University

Dr. Sloan serves as Director of the Brain Tumor and Neuro-Oncology Center at the Seidman Cancer Center and is also Vice Chairman of Neurosurgery at University Hospitals Cleveland Medical Center. His clinical and research interests focus on the biology and treatment of tumors of the brain and spine. He has been recognized by his peers as one of the “Best Doctors in America” since 2003, and as one of the “Top Surgeons in America” since 2007. In 2014, he was elected President of the Ohio State Neurosurgical Society.

Financial Position

The condensed consolidated interim statements of financial position as of May 31, 2019 indicates a cash position of \$1,578,309 (November 30, 2018: \$3,644,582). Other current assets are comprised of prepaid expenses of \$61,141 (November 30, 2018: \$109,912) and accounts receivable of \$23,349 (November 30, 2018: \$13,723). Non-current assets at May 31, 2019 are comprised of computer and lab equipment of \$44,532 (November 30, 2018: \$49,870).

Current liabilities at May 31, 2019 total \$170,442 (November 30, 2018: \$226,698) and are comprised of accounting and audit fees of \$43,583 (November 30, 2018: \$36,292), research and development fees of \$65,448 (November 30, 2018: \$100,780), legal fees of \$1,424 (November 30, 2018: \$44,405), consulting fees of \$37,362 (November 30, 2018: \$23,760), insurance of \$680 (November 30, 2018: \$nil), payroll income taxes and CPP of \$4,924 (November 30, 2018: \$4,923), transfer agent, filing and listing fees of \$1,049 (November 30, 2018: \$1,759), marketing of \$14,173 (November 30, 2018: \$11,873), travel of \$1,731 (November 30, 2018: \$nil) and general administrative expenses of \$68 (November 30, 2018: \$2,906).

Shareholders’ equity is comprised of share capital of \$11,805,621 (November 30, 2018: \$10,805,621), reserves of \$1,286,620 (November 30, 2018: \$1,161,341) and an accumulated deficit of \$11,555,352 (November 30, 2018: \$9,375,573).

As at May 31, 2019, the Company had working capital of \$1,492,357 (November 30, 2018: \$3,541,519).

The weighted average number of common shares outstanding, basic and diluted, as at May 31, 2019 was 52,647,396 (November 30, 2018: 48,045,853).

Intangible Assets

Cost	\$
Balance, November 30, 2017	1,172,516
Additions	-
Impairment for the year	(1,172,516)
Balance, November 30, 2018 and May 31, 2019	-
Accumulated Amortization	\$
Balance, November 30, 2017	387,863
Impairment for the year	(387,863)
Balance, November 30, 2018	-
Carrying Value	\$
Balance, November 30, 2017	784,653
Impairment for the year	(784,653)
Balance, November 30, 2018 and May 31, 2019	-

Pursuant to the terms of the October 2012 patent assignment agreement with the University of British Columbia (“UBC”), the Company paid UBC an assignment fee of \$300,000 related to three technologies in the cancer protein projects of research. On May 24, 2013, the Company acquired BAT and the difference between the purchase consideration and the fair values of BAT’s net assets has been assigned to intangible assets for a total of \$854,827.

The assets have finite lives and are amortized over their estimated useful lives using the straight-line method. From the date of acquisition of the above patents, the estimated useful life is 13.7 years.

Prior to the year ending November 30, 2018, the Company returned three patents to the University of British Columbia (UBC). Two of these patents (“HAT acetylation and promoters and uses of composition thereof in promoting immunogenicity” and “Curcuphenol compounds for increasing MHC-I expression”) are focused on the discovery of compounds that make tumor cells visible to the immune system. The Company recognizes the importance of these initial technology applications and has continued to expand this program to include cannabinoids. The company has strengthened its intellectual property with the filing of a new provisional application in January 2018 (please also refer to “Core Technologies” below). In January 2019, this provisional patent application was converted into an international patent application covered by the Patent Cooperation Treaty that includes 151 countries and covers all major pharmaceutical markets worldwide. A third patent, “Compositions and methods of modulating an immune response”, supported the CD74 program and was also returned to UBC. With the Company's focus on cancer, the Company's management decided to return the CD74 program which was focused on infectious disease with technologies discovered at UBC. With the return of the patents, indicators of impairment existed resulting in an assessment of recoverable amount of the capitalized intangible assets, and ultimately the recognition of an impairment loss of \$698,853.

Core Technologies

1. **Novel natural compounds** that are able to increase antigen expression on the surface of tumour cells, making them more visible to the immune system. These molecules will be useful as cancer therapeutics by increasing the ability of the immune system to attack and eliminate cancers.

Many cancer cells, including those that are metastatic, escape immune recognition and elimination after selection by immune editing whereby tumour antigens are not properly displayed on the cell surface. These escape variants do not express sufficient Major Histocompatibility Complex I (“MHC-I”) molecules and their associated tumour antigen peptides at the cell surface. Thus, these tumour cells evade recognition by host immune surveillance mechanisms, making them resistant to most immunotherapeutic approaches for elimination of cancer. In February 2014, the Company entered into an agreement with UBC whereby UBC conducted research to identify compounds that increase the expression of the Transporter of Antigen Processing (“TAP1”) protein, a part of the APP critical for MHC-I expression. The research revealed that several identified compounds restored the presentation of tumour antigens at the cancer cell surface. By developing a high-throughput screening assay applied to extracts from deep-sea sponges, the Company has identified several unique molecules that induce antigen presentation in metastatic prostate and lung carcinomas.

From these extracts, new chemical structures that exhibit efficient restoration MHC-I expression were identified. Subsequently, screening of additional extracts and purified compounds was performed and several more active compounds were identified. One compound, curcuphenol, was initially identified.

Searching of the chemical structure of curcuphenol against large chemical databases revealed that some structural elements of curcuphenol are found in certain cannabinoids, compounds found in extracts of the *Cannabis sativa* plant. 400 cannabinoids have been tested for their ability to induce MHC-I expression in human cancer cell lines. Several distinct cannabinoids registered positive in this assay, with the best inducing MHC-I expression levels to approximately half of the levels induced by interferon gamma, a natural powerful physiologic inducer of MHC-1. Pascal has identified a natural cannabinoid with good potency and pharmacologic properties, Pascal intends to develop this cannabinoid as a therapeutic compound that will render cancer cells more visible to immune surveillance. Such a molecule has the potential to increase cancer cell recognition thus dramatically increasing the efficacy of checkpoint inhibitors, which release the cancer killing effects of cytolytic T cells.

During fiscal 2014, the Company paid UBC an aggregate of \$130,000 to cover the cost of the research under the agreement, which terminated on January 31, 2015. On August 12, 2015, the Company entered into a new collaborative research agreement with UBC to further this research and advanced UBC \$50,000 to cover the scope of this research. On December 21, 2015, the Company amended the collaborative research agreement to continue the research and advanced a further \$50,000 to UBC in March, 2016. In September, 2016, the Company and UBC extended the agreement to March 31, 2018 under which the Company paid UBC an additional \$132,000 to continue the research.

2. **Cannabinoid-based therapeutic for glioblastoma:** Glioblastoma is a devastating disease due to its high rate of recurrence, limited treatment options and aggressive nature. Glioblastoma strikes about 15,000 patients a year in North America and the median survival time is only 14 months. Therapies for glioblastoma are limited to surgery, radiation, and the chemotherapeutic temozolomide. PAS-403 is a mitosis inhibitor that blocks cell division. Several mitotic inhibitors

approved for cancer treatment show substantial benefit in reducing solid tumours when combined with other chemotherapeutics. However, unlike PAS-403, none of these drugs cross the blood-brain barrier, and therefore have no activity on glioblastoma. PAS-403 kills cultured glioblastoma cells from patients and is very effective in a mouse model of glioblastoma. Since temozolomide has a different mechanism of action compared to PAS-403, the two drugs should synergize with each other and will hopefully provide a superior method of treatment.

3. Monoclonal antibody regulation of selected calcium channel activity: Application to regulation of immune system activity involved in allergy, autoimmunity and cancer.

In January 2014, the Company entered into an agreement with UBC whereby UBC conducted research to derive monoclonal antibodies (“mAbs”) that modulate the activation of specific calcium channels which are associated with the proliferation and induction of cells of the immune system. These antibodies were selected for their ability to modulate the function of specialized white blood cells (lymphocytes) that are involved in a variety of human autoimmune diseases, cancer and in transplantation of tissues and organs. The calcium channels on lymphocytes are a multi-member family comprised of more than 10 different proteins. The activity of these channels is regulated to control intracellular concentrations of calcium which determines the proliferation and activity of cells involved in immune responses. Antibodies generated against different forms of the calcium channels may act as new calcium channel regulators and, in some cases, have been shown to inhibit the proliferation and functional differentiation of lymphocytes. Such antibodies may allow modulation of the immune system to combat cancers and infections and to control autoimmune diseases, allergy and transplantation responses. The Company (through UBC) derived a large number of mAbs against specific external domains of voltage-dependent calcium channel isoforms Cav1-1, Cav1-2, Cav1-3, and Cav1-4. These mAbs were evaluated for binding to human T lymphocyte leukemia (“Jurkat”) cells and several were found to inhibit Jurkat cell growth *in vitro*. Our early studies showed that one of the Cav1-4 antibodies slows growth of murine P388 cells in a mouse model of leukemia.

During fiscal 2014, the Company paid UBC \$130,000 to cover the scope of this research. In June 2015, an additional service agreement was finalized with UBC. The Company paid a total of \$100,000 to UBC to continue research to identify anti-Cav1-4 mAbs for use in the treatment of leukemias and for the modulation of the immune reaction in autoimmune disorders. In June, 2015, \$50,000 was paid to UBC and in January 2016, a final payment of \$50,000 was made. In September, 2016, the Company and UBC amended the agreement, extending it to March 31, 2018 and paid UBC an additional \$132,000 to continue the research.

4. VpreB antibody for the treatment of acute lymphoblastic leukemia and other leukemias and lymphomas.

In September 2017, the Company executed an exclusive, worldwide license option agreement with STC.UNM (“STC”), the University of New Mexico’s (“UNM”) technology transfer and economic development organization, to acquire a therapeutic monoclonal antibody for potential treatment of Acute Lymphoblastic Leukemia (“ALL”).

ALL is the most common childhood cancer, with the incidence peaking at approximately two to five years of age. In addition, ALL also affects some older individuals, and about 45% of ALL patients are above age twenty. On an annual basis, more than 6,500 people in the North America, and approximately 40 cases per 1,000,000 people worldwide present with the disease. Current treatment practices utilize harsh chemotherapy regimens. While effective in many patients, the near and long-term consequences of chemotherapy can be disabling. Therefore, there is a need for new strategies to address relapsed disease and ultimately replace chemotherapy as a frontline treatment.

ALL is caused by genetic lesions that arise during the earliest stages of B lymphocyte development. Pascal has isolated monoclonal antibodies that are specific to these stages and not expressed during subsequent stages of B cell development. Therefore, Pascal’s antibodies against VpreB should only deplete the earliest stages of the developing B cell, leaving the more mature B cells available to combat infection by secretion of antibodies.

Careful examination of large gene expression databases and the scientific literature revealed the unexpected expression of VpreB mRNA by tumour cells of subsets of acute myelogenous leukemia (“AML”) and non-Hodgkin lymphoma (“NHL”) patients. Experiments to screen cancer cells from large panels of these patients by immunocytochemistry using the VpreB antibody are planned. If the molecular data are confirmed at the protein level, a VpreB biomarker assay will be developed for identifying AML and NHL patients that may also benefit from VpreB antibody treatment.

In February, 2019, the Company cancelled the license agreement with UNM and is now developing its own antibodies for VpreB,

Core Technologies Update

On July 1, 2018, the Company and UBC signed a new Collaborative Research Agreement on research and development projects covering the three core technologies above (novel natural compounds, monoclonal antibody regulation of calcium channels and monoclonal antibody for B-cell precursor acute lymphoblastic leukaemia ("BCP-ALL"). The contract period commenced on the effective date and will end 12 months after the start date. As part of the new agreement, the Company agreed to pay UBC \$140,000 for research, of which \$70,000 was paid in August 2018 and the balance of \$70,000 was paid in January, 2019.

In March, 2018, the Company entered into a multi-year partnership with Mitacs, a non-profit organization that fosters growth and innovation in business and research, will provide equal funding for research efforts at UBC that will directly support the Company's cancer development programs.

Patents

Intellectual property and other proprietary rights are essential to the Company's business model. The Company has filed patent applications to protect technology, inventions, and improvements of inventions that are important for the development of the business. In June 2016, the Company was awarded its first patent for the use of "Monoclonal antibodies that modulate voltage gated calcium channels in immune cells", from China for a period of 20 years, with expiry in 2036. In March 2018, the Company was awarded its second patent: "Compositions and methods of modulating an immune response", from Australia for a period of 20 years from filing, with expiry in 2032.

In January 2018, the Company filed a Provisional Patent Application ("PPA"), "Cannabinoids and derivatives for promoting immunogenicity of tumour and other infected cells", covering cannabinoid-like compounds that restore immune recognition of cancer cells and increasing their subsequent destruction. The non-provisional application was filed January 21, 2019 and the Company is continuing to pursue the application.

Pursuant to the terms of the license agreement with the University of Washington in October 2018, the Company has retained the patent portfolio to develop a cannabinoid-based product for the treatment of glioblastoma multiform and brain metastases. The patent "Composition and methods for treating glioblastoma" filed in August 2011 by the University of Washington was granted by the United States Patent and Trademark Office in May 2015 with expiry in November 2031.

In August 2018, the University of Washington filed a provisional patent titled "Modified Carbazoles Destabilize Microtubules and Kill Glioblastoma Multiform Cells and BRAF Mutant Cancers," covering the cannabinoid-based compounds in glioblastoma and brain metastases. Within one year of the filing date, the Company will file a regular non-provisional patent application for patent protection. Pascal intends to convert this application to a non-provisional in August 2019.

Results of Operations

During the six months ended May 31, 2019, the Company reported a net loss of \$2,179,779 (\$0.04 basic and diluted loss per share) compared to a net loss of \$879,591 (\$0.02 basic and diluted loss per share for the same period in Fiscal 2018). The increased net loss is due to an increase in R+D activities, specifically additional salaries for personnel, consultant expenses, and preclinical efforts for PAS-403.

Summary of Quarterly Results

The following table presents selected quarterly financial information of the Company for the eight most recently completed quarters of operation prepared in accordance with IFRS and expressed in Canadian Dollars.

	2019		2018				2017	
	Q2	Q1	Q4	Q3	Q2	Q1	Q2	Q3
	\$	\$	\$	\$	\$	\$	\$	\$
Revenue	-	-	-	-	-	-	-	-
Net and comprehensive loss	937,058	1,256,014	1,794,306	568,773	473,054	408,053	463,839	443,079
Basic and diluted Loss per share	0.02	0.02	0.04	0.01	0.01	0.01	0.01	0.01

Share-based payments impacts expenses and net and comprehensive loss as follows: Q2 2019: 45,437, Q1 2019: \$79,826, Q4 2018: \$272,177, Q3 2018: \$19,967: Q2 2018: \$70,660, Q1 2018: \$23,047, Q4 2017: \$61,182, Q3 2017: \$31,805, Q2 2017: \$35,957, Q1 2017: \$71,716. During Q4 2018, share-based compensation included an additional \$138,005 for stock options granted in August 2018, vesting during the quarter. Also, during Q4 of 2018, the Company recognized an impairment loss of \$698,853 (please refer to “Intangible Assets” above).

The Company’s significant accounting policies are set out in Note 3 of the audited annual consolidated financial statements as at and for the year ended November 30, 2018.

Analysis of Quarterly Results

	Notes	Six Months Ended May 31,		Three Months Ended May 31,	
		2019	2018	2019	2018
		\$	\$	\$	\$
General and administrative expenses					
Accounting and audit fees	a)	38,166	17,580	28,476	2,580
Administrative and general office	b)	46,681	30,677	19,931	16,995
Amortization	c)	6,847	48,956	3,514	24,511
Bank charges and interest		4,966	2,759	1,761	1,414
Consulting fees	d)	212,184	110,500	133,818	52,250
Salaries and benefits	e)	834,526	345,660	433,378	173,159
Foreign exchange loss	f)	64,015	10,417	(74,627)	14,423
Insurance	g)	16,087	6,083	680	3,028
Investor relations and marketing	h)	26,117	10,813	12,933	10,813
Legal fees	i)	(14,677)	85,424	(34,857)	46,316
Research and development	j)	759,702	107,933	318,141	65,529
Share-based payments	k)	125,263	70,660	45,437	47,613
Transfer agent, listing and filing fees	l)	17,301	9,998	10,732	6,814
Travel and entertainment	m)	57,026	29,946	37,741	13,907

- a) Accounting and audit fees – Increase year over year is due to additional fees incurred as a result of increased activity year over year in Pascal Biosciences US, Inc.,
- b) Administrative and general office – Increase year over year is primarily due to Pascal US rent increase of \$10,720 and shipping and deliveries of \$1,400 (F2018: \$100),
- c) Amortization/depreciation – In Fiscal 2018, the Company returned its previously capitalized assets to UBC and Dr. Jefferies, eliminating amortization of the patents.
- d) Consulting fees – During February, 2019, the Company retained Carl Weissman as a consultant (see *Commitments* below).
- e) Salaries and benefits – Year over year, Pascal US added three employees to work in the laboratory. The remaining variance is due to salary increases implemented in August, 2018.
- f) Foreign exchange – Increase year over year is due to increased expenditures by Pascal US as well as market fluctuations. Current period fluctuation is a result of reallocation of foreign exchange.
- g) Insurance - Commencing August, 2018, the Company was required to increase D&O insurance due to the Company’s new focus on cannabinoid research, increasing quarterly expense by \$12,000.
- h) Investor relations and marketing – Primary increase is due to website design and maintenance.

- i) Legal fees – Year over year reduction due to reallocation of patent related legal fees (\$55,978) to research and development.
- j) Research and development – Year over year, the increase is attributed to: \$274,981 for preclinical efforts for PAS-403, increased Mitacs fees of \$20,725, increased UBC costs of \$27,435 and Pascal US increased research and development costs of \$317,860. During the current period, the Company also paid \$10,000 for a patent assignment from UBC.
- k) Share-based payments - the increase year over year is due to options becoming fully vested during the current year.
- l) Transfer agent, listing and filing fees – The increase year over year is due to filing fees paid during the current period for its Annual Information Form.
- m) Travel and entertainment – The increase is due to additional activities related to investor discussions, potential partnership meetings and scientific conferences. During the current period, these meetings were conducted by additional executive personnel compared to 2018.

Liquidity & Capital Resources

The Company has financed its operations to date through the issuance of common shares.

	May 31, 2019	May 31, 2018
Working capital	\$ 1,492,357	\$ 4,715,753
Deficit	\$ 11,555,352	\$ 7,010,494

During the six months ended May 31, 2019, net cash used in operating activities was \$2,064,012 (2018: \$685,137), comprised of a loss of \$2,179,779 (2018: \$879,591) net of amortization expense of \$7,599 (2018: \$48,956) and share-based payments of \$125,279 (2018: \$70,660), an decrease in prepaid expenses of \$48,771 (2018: \$57,991), an increase in accounts receivable of \$9,626 (2018: a decrease of \$9,212) and a decrease in accounts payable and accrued liabilities of \$56,256 (2018: an increase of \$7,635).

Cash used in investing activities was \$2,157 (2018: \$nil).

Cash from financing activities was \$nil (2018: \$5,356,744).

The Company does not expect its current capital resources to be sufficient to cover its operating costs and future research and development expenditures through the next twelve months. As such, the Company will seek to raise additional capital and believes it will be able to do so, but recognizes the uncertainty attached thereto. In March 2018, the Company completed private placement of 13,262,594 units for gross proceeds of \$5,274,030. If the Company is unable to obtain additional financing, management may be required to further curtail certain discretionary expenses. Funding requirements may vary from those planned due to a number of factors, including the progress on research and development initiatives.

Off-Balance Sheet Arrangements

The Company has no off-balance sheet arrangements that would potentially affect current or future operations or the financial condition of the Company.

Related Party Transactions

The following is a summary of related party transactions that occurred during the six months ended May 31, 2019 and 2018.

Key management compensation:

Services provided by:		2019	2018
		\$	\$
Dr. Patrick Gray	(a)	133,480	60,000
Judi Dalling	(b)	32,500	32,500
Jens Biertumpel	(c)	40,509	30,000
Kevin Egan	(d)	146,828	-
Larry Tjoelker	(e)	121,743	-
Tom Deckwerth	(f)	146,828	-
Carl Weissman	(g)	67,650	-
Share-based payments		120,621	39,272
Benefits		80,325	-
		890,484	161,772

- a) Dr. Patrick Gray, President and CEO of the Company, provided services in his role as President and CEO (note 10).
- b) Judi Dalling, the CFO of the Company, provided administrative and accounting services to the Company (note 10).
- c) Jens Biertumpel, a director of the Company, provided corporate financial consulting services to the Company.
- d) Kevin Egan, Vice President of Business Development, Pascal US, provided business development services to the Company.
- e) Larry Tjoelker, Vice President of Research, Pascal US, provided scientific services to the Company.
- f) Tom Deckwerth, Vice President of Therapeutic Development, Pascal US, provided scientific services to the Company.
- g) Carl Weissman, acting President, provided services in his role in that capacity.

Included in accounts payable is \$27,054 payable to directors and officers of the Company for consulting fees during the period.

Commitments

Commitments over the next five fiscal years are as follows:

	\$
2019	214,885
2020	117,820
2021	75,870
2022	52,807
2023	33,750
	495,132

The Company has entered into consulting agreements as follows:

- a) Consulting agreement with Judi Dalling, CFO of the Company, to provide financial and administrative services to the Company for an annual fee of \$65,000;
- b) Consulting agreement with Mo Mousa to provide bookkeeping services to Pascal US for an annual fee of USD \$24,000; and
- c) Consulting agreement with Carl Weissman to provide business development services to the Company for an annual fee of USD \$300,000. Effective April 1, 2019, Mr. Weissman became acting President.

The Company has also entered into the following agreements:

- a) University of Washington: On October 9, 2018, the Company entered into an exclusive license agreement with the University of Washington (“UW”) to develop a cannabinoid-based product for the treatment of glioblastoma multiform and brain metastases. Under the terms of the agreement, the Company will pay annual fees (US Dollars) as follow:

October 9, 2020	\$ 5,000
October 9, 2021	\$ 10,000
Every year thereafter until first sale	\$ 25,000

- b) University of British Columbia: On July 1, 2018, the Company and UBC signed a new Collaborative Research Agreement on research and development projects covering the three core technologies above (novel natural compounds, monoclonal antibody regulation of calcium channels, and monoclonal antibody BCP-ALL. The contract period commenced on the effective date and will end 12 months after the start date. As part of the new agreement, the Company agreed to pay UBC \$140,000 for research, of which \$70,000 was paid in August 2018 and the balance of \$70,000 was paid in January, 2019.
- c) Lease agreement between the Company and University of Washington Co-Motion Labs, commencing in May, 2017 for a period of five years at an annual rate of USD \$46,200.

Financial Instruments & Other Instruments

- (a) Fair values

Financial instruments recognized at fair value on the consolidated statements of financial position must be classified in one of the following three fair value hierarchy levels:

Level 1 – measurement based on quoted prices (unadjusted) observed in active markets for identical assets or liabilities;

Level 2 – measurement based on inputs other than quoted prices included in Level 1 that are observable for the asset or liability; or

Level 3 – measurement based on inputs that are not observable (supported by little or no market activity) for the asset or liability.

As at May 31, 2019, the Company’s financial instruments are comprised of cash and cash equivalents and accounts payable and accrued liabilities. With the exception of cash and cash equivalents and accounts receivables, all financial instruments held by the Company are measured at amortized cost.

- (b) Credit risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist primarily of cash and cash equivalents and short-term investments. The Company limits its exposure to credit loss by placing its cash and cash equivalents and short-term investments with high credit quality financial institutions. The carrying amount of financial assets represents the maximum credit exposure.

- (c) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they become due. The Company's approach to managing liquidity is to ensure that it will have sufficient funds to meet its liabilities when due.

At May 31, 2019, the Company had cash and cash equivalents of \$2,425,764 (November 30, 2018: \$3,644,582) available to apply against short-term business requirements and current liabilities of \$155,298 (November 30, 2018: \$226,698). All of the liabilities presented as accounts payable and accrued liabilities are due within 90 days of May 31, 2019.

(d) Currency risk

The Company is exposed to currency risk to the extent expenditures incurred or funds received and balances maintained by the Company are denominated in currencies other than the Canadian dollar. The Company does not manage currency risks through hedging or other currency management tools.

As at May 31, 2019 and 2018, the Company's net exposure to foreign currency risk is as follows:

US dollars	2019	2018
	\$	\$
Cash	87,561	106,141
Accounts payable	(63,964)	(41,986)
Net exposure to foreign currency risk	23,597	64,155
Canadian dollar equivalent	31,920	76,277

Based on the above net foreign currency exposure, and assuming all other variables remain constant, a 7% weakening or strengthening of the Canadian dollar against the US dollar would not have a material effect on the Company's net loss and comprehensive loss.

(e) Other price risk

Other price risk is the risk that future cash flows of a financial instrument will fluctuate due to changes in market prices, other than those arising from interest rate risk or foreign currency risk. The Company is not exposed to significant other price risk.

Changes in Accounting Policies

The Company has not made any changes to accounting policies during the six months ended May 31, 2019. Refer to note 3 in the audited consolidated financial statements for the year ended November 30, 2018 for the Company's significant accounting policies. New standards, amendments and interpretations not yet effective:

Certain new accounting standards, amendments to standards and interpretations have been issued. These standards have been assessed to not have a significant impact on the Company's consolidated financial statements.

IFRS 9 Financial Instruments

IFRS 9 will replace IAS 39 *Financial Instruments: Recognition and Measurement* and IFRIC 9 *Reassessment of Embedded Derivatives*. The final version of this new standard supersedes the requirements of earlier versions of IFRS 9.

The main features introduced by this new standard compared with predecessor IFRS are as follows:

- **Classification and measurement of financial assets:**
Debt instruments are classified and measured on the basis of the entity's business model for managing the asset and its contractual cash flow characteristics as either: "amortized cost", "fair value through other comprehensive income", or "fair value through profit or loss" (default). Equity instruments are classified and measured as "fair value through profit or loss" unless upon initial recognition elected to be classified as "fair value through other comprehensive income".
- **Classification and measurement of financial liabilities:**
When an entity elects to measure a financial liability at fair value, gains or losses due to changes in the entity's own credit risk is recognized in other comprehensive income (as opposed to previously profit or loss). This change may be adopted early in isolation of the remainder of IFRS 9.
- **Impairment of financial assets:**
An expected credit loss impairment model replaced the incurred loss model and is applied to financial assets at "amortized cost" or "fair value through other comprehensive income", lease receivables, contract assets or loan commitments and financial guarantee contracts. An entity recognizes twelve-month expected credit losses if the credit risk of a financial instrument has not increased significantly since initial recognition and lifetime expected credit losses otherwise.

- *Hedge accounting:*
Hedge accounting remains a choice, however, is now available for a broader range of hedging strategies. Voluntary termination of a hedging relationship is no longer permitted. Effectiveness testing now needs to be performed prospectively only. Entities may elect to continue applying IAS 39 hedge accounting on adoption of IFRS 9 (until the IASB has completed its separate project on the accounting for open portfolios and macro hedging).

This standard is effective for the Company's annual period beginning on December 1, 2018. The Company has initially assessed that there will be no material reporting changes as a result of adopting IFRS 9 however, enhanced disclosure requirements are expected.

IFRS 16 Leases

This new standard sets out the principles for the recognition, measurement, presentation and disclosure of leases for both the lessee and the lessor. The new standard introduces a single lessee accounting model that requires the recognition of all assets and liabilities arising from a lease.

The main features of the new standard are as follows:

- An entity identifies as a lease a contract that conveys the right to control the use of an identified asset for a period of time in exchange for consideration.
- A lessee recognizes an asset representing the right to use the leased asset, and a liability for its obligation to make lease payments. Exceptions are permitted for short-term leases and leases of low-value assets.
- A lease asset is initially measured at cost, and is then depreciated similarly to property, plant and equipment. A lease liability is initially measured at the present value of the unpaid lease payments.
- A lessee presents interest expense on a lease liability separately from depreciation of a lease asset in the statement of profit or loss and other comprehensive income.
- A lessor continues to classify its leases as operating leases or finance leases, and to account for them accordingly.
- A lessor provides enhanced disclosures about its risk exposure, particularly exposure to residual-value risk.

The new standard is effective for the Company's annual periods beginning December 1, 2019. The Company is currently assessing the impact of IFRS 16 on the consolidated financial statements.

The Company has not made any changes to accounting policies during the year ended November 30, 2018. Refer to note 3 in the audited consolidated financial statements for the year ended November 30, 2018 for the Company's significant accounting policies. Certain pronouncements were issued by the IASB that are mandatory for annual years beginning after December 1, 2018. The changes have not been early adopted are being evaluated to determine if there will be an impact on the Company.

Risks and Uncertainties

Overview

An investment in the Company's shares should be considered highly speculative due to the nature of the Company's business and the present stage of its development. In evaluating the company and its business, shareholders should carefully consider, in addition to the other information contained in this management discussion and analysis, the following risk factors. These risk factors are not a definitive list of all risk factors associated with the Company. It is believed that these are the factors that could cause actual results to be different from expected and historical results. Investors should not rely upon forward-looking statements as a prediction of future results.

Competition

The market for the Company's technology is highly competitive. The Company competes with other research teams who are also examining potential therapeutics with regards to autoimmune diseases and disorders. Many of its competitors have greater financial and operational resources and more experience in research and development than the Company. These and other companies may have developed or could in the future develop new technologies that compete with the Company's technologies or even render its technologies obsolete.

Competition in the Company's markets is primarily driven by:

- timing of technological introductions;
- ability to develop, maintain and protect proprietary products and technologies; and
- expertise of research and development team.

Litigation to Protect Company's Intellectual Property

The Company's future success and competitive position depends in part upon its ability to maintain its intellectual property portfolio. There can be no assurance that any patents will be issued on any existing or future patent applications. Even if such patents are issued, there can be no assurance that any patents issued or licensed to the Company will not be challenged. The Company's ability to establish and maintain a competitive position may be achieved in part by prosecuting claims against others who it believes to be infringing its rights. In addition, enforcement of the Company's patents in foreign jurisdictions will depend on the legal procedures in those jurisdictions. Even if such claims are found to be invalid, the Company's involvement in intellectual property litigation could have a material adverse effect on its ability to distribute any products that are the subject of such litigation. In addition, the Company's involvement in intellectual property litigation could result in significant expense, which could materially adversely affect the use responsibilities, whether or not such litigation is resolved in the Company's favour.

Clinical testing and Regulatory approval

Since the Company's success is dependent on the successful completion of a third party pre-clinical trials, regulatory approval and introduction of its technology into the market and since the Company has completed none of the tasks at this time, the Company does not know if it will be able to complete them.

The timing of these events can vary dramatically due to factors such as delays or failures in the Company's clinical trials and the uncertainties inherent in the regulatory approval process. The Company might not be able to obtain the necessary results from its pre-clinical trials or to gain regulatory approval necessary for licensing its technology. The Company's failure to achieve these objectives will mean that an investor will not be able to recoup their investment or to receive a profit on their investment.

Intellectual Property

The Company's success depends to a significant degree upon its ability to develop, maintain and protect proprietary products and technologies. The Company files patent applications in the United States, Canada, Europe, and selectively in other foreign countries as part of its strategy to protect its proprietary products and technologies. However, patents provide only limited protection of the Company's intellectual property. The assertion of patent protection involves complex legal and factual determinations and is therefore uncertain and expensive. The Company cannot provide assurances that patents will be granted with respect to any of its pending patent applications, that the scope of any of its patents will be sufficiently broad to offer meaningful protection, or that it will develop additional proprietary technologies that are patentable. The Company's current patents could be successfully challenged, invalidated or circumvented. This could result in the Company's patent rights failing to create an effective competitive barrier. Losing a significant patent or failing to get a patent to issue from a pending patent application that the Company considers significant could have a material adverse effect on its business. The laws governing the scope of patent coverage in various countries continue to evolve. The laws of some foreign countries may not protect the Company's intellectual property rights to the same extent as the laws of Canada and the United States. The Company holds patents only in selected countries. Therefore, third parties may be able to replicate technologies covered by the Company's patents in countries in which it does not have patent protection.

Legal Proceedings

In the course of the Company's business, the Company may from time to time have access to confidential or proprietary information of third parties, and these parties could bring a claim against the Company asserting that it has misappropriated their technologies and had improperly incorporated such technologies into its products. Due to these factors, there remains a constant risk of intellectual property litigation affecting the Company's business. In the future, the Company may be made a party to litigation involving intellectual property matters and such actions, if determined adversely, could have a material adverse effect on the Company.

Dependence upon Management

Although the Company Issuer is expected to have experienced senior management and personnel, it will be substantially dependent upon the services of a few key personnel, particularly Drs. Patrick Gray and Wilfred Jefferies, for the successful operation of its business. The loss of the services of any of these personnel could have a material adverse effect on the business of the Company. The Company may not be able to attract and retain personnel on acceptable terms given the

intense competition for such personnel among high technology enterprises, including biotechnology, and healthcare companies, universities and non-profit research institutions. If it loses any of these persons, or is unable to attract and retain qualified personnel, its business, financial condition and results of operations may be materially and adversely affected.

Going Concern

The ability of the Company to continue as a going concern is dependent on its ability to generate future profitable operations and to obtain additional debt or equity financing. There can be no assurance that the Company's operations will achieve profitability in the future or that the Company will be able to successfully obtain financing on commercially reasonable terms or at all.

Substantial Capital Requirements and Liquidity

Substantial additional funds for the Company's research and development programs will be required. No assurances can be given that the Company will be able to raise the additional funding that may be required for such activities. To meet such funding requirements, the Company may be required to undertake additional equity financing, which would be dilutive to shareholders. Debt financing, if available, may also involve restrictions on financing and operating activities. There is no assurance that additional financing will be available on terms acceptable to the Company or at all. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations, or even cease its operations.

Reliance on Third Parties

The Company is relying on a third party to assist it in conducting both pre-clinical and clinical trials. If this third party does not successfully carry out their contractual duties or meet expected deadlines, the Company may not be able to obtain regulatory approval for or commercialize its technology.

Unproven market

The Company believes that there will be many different applications for its technologies and that the anticipated market for these technologies will continue to expand. However, no assurance can be given that these beliefs will be correct owing, in particular, to competition from existing technologies or new technologies and the yet to be established replication of the Company's pre-clinical results.

Limited Operating History

The Company has neither a history of earnings nor has it paid any dividends and it is unlikely to pay dividends or enjoy earnings in the immediate or foreseeable future.

Conflicts of Interest

Certain of the directors and officers of the Company are engaged in, and will continue to engage in, other business activities on their own behalf and on behalf of other companies (including research and development companies) and, as a result of these and other activities, such directors and officers may become subject to conflicts of interest. The *Business Corporations Act*, (British Columbia) ("BCBCA") provides that in the event that a director has a material interest in a contract or proposed contract or agreement that is material to an issuer, the director shall disclose his interest in such contract or agreement and shall refrain from voting on any matter in respect of such contract or agreement, subject to and in accordance with the BCBCA. To the extent that conflicts of interest arise, such conflicts will be resolved in accordance with the provisions of the BCBCA.

Market risk

The Company's securities trade on public markets and the trading value thereof is determined by the evaluations, perceptions and sentiments of both individual investors and the investment community taken as a whole. Such evaluations, perceptions and sentiments are subject to change, both in short term time horizons and longer term time horizons. An adverse change in investor evaluations, perceptions and sentiments could have a material adverse outcome on the Company and its securities.

Share Price Volatility and Price Fluctuations

In recent years, the securities markets in Canada have experienced a high level of price and volume volatility, and the market prices of securities of many companies have experienced wide fluctuations which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that these price fluctuations and volatility will not continue to occur.

Other MD&A requirements

Information available on SEDAR

As specified by National Instrument 51-102, the Company advises readers of this MD&A that important additional information about the Company is available on the SEDAR website – www.sedar.com.

Disclosure by venture issuer

An analysis of the material components of the Company's general and administrative expenses is disclosed in the financial statements to which this MD&A relates.

Outstanding share data

Common shares issued and outstanding as at May 31, 2019 are described in detail in Note 7 to the condensed consolidated interim financial statements for the six months ended May 31, 2019.

As at the date of this document, July 26, 2019, the Company had the following number of securities outstanding:

	Number of shares	\$	Number of options	Exercise price	Expiry date
Issued and outstanding	52,647,396	11,805,621			
			650,000	\$0.31	August 4, 2020
			820,000	\$0.35	April 1, 2021
			392,000	\$0.72	October 3, 2021
			640,000	\$0.33	June 26, 2022
			250,000	\$0.29	January 28, 2023
			2,100,000	\$0.35	August 3, 2023
			198,000	\$0.20	May 28, 2022
			Number of share purchase warrants		
			387,594	\$0.40	June 12, 2020