



***Management's Discussion and Analysis***

***For the Year Ended  
March 31, 2021***

**DATE OF REPORT: May 27, 2021**

## MANAGEMENT'S DISCUSSION AND ANALYSIS

The following management's discussion and analysis ("MD&A") has been prepared as of May 27, 2021 and should be read in conjunction with the consolidated audited financial statements of Medicenna Therapeutics Corp. ("Medicenna", the "Company", "we", "our", "us" and similar expressions). The audited consolidated financial statements and related notes of Medicenna were prepared in accordance with International Financial Reporting Standards ("IFRS") and all dollar amounts are expressed in Canadian dollars unless otherwise noted.

All references in this MD&A to "the Company", "Medicenna", "we", "us", or "our" and similar expressions refer to Medicenna Therapeutics Corp. and the subsidiaries through which it conducts its business, unless otherwise indicated.

## FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements within the meaning of applicable securities laws. These statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. All statements contained herein that are not clearly historical in nature are forward-looking, and the words such as "plan", "expect", "is expected", "budget", "scheduled", "estimate", "forecast", "contemplate", "intend", "anticipate", or "believe" or variations (including negative variations) of such words and phrases, or statements that certain actions, events or results "may", "could", "would", "might", "shall" or "will" be taken, occur or be achieved and similar expressions 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:

- requirements for, and the ability to obtain, future funding on favourable terms or at all;
- business strategy;
- the potential impact of the COVID-19 pandemic on our business;
- projected financial position and estimated cash burn rate, and the sufficiency of the Company's financial resources to support its activities;
- expected future loss and accumulated deficit levels;
- expectations about the timing of achieving milestones and the cost of the Company's development programs;
- observations and expectations regarding the safety and effectiveness of MDNA55, MDNA11, and other product candidates and the potential benefits to patients;
- impacts of the Phase 1/2 trial of MDNA11, including its design, approval by regulatory agencies, costs, timeline, ability to start enrolment at therapeutic doses, completion of the study, data arising from the study including biomarker results, immunogenicity, safety, tumor response, survival data and ability to secure collaborations with pharma companies for supply of immunotherapies in combination portion of the clinical trial;
- impacts of the Phase 3 trial of MDNA55, including its design, approval by regulatory agencies, reduced number of participants, costs, timeline, survival data and partnership opportunities for MDNA55;
- expectations regarding the progress, and the successful and timely completion, of the various stages of the regulatory approval process;
- ability to initiate, progress, and successful and timely completion, of various preclinical and manufacturing activities associated with future clinical trials;
- expectations about the Company's products' safety and efficacy;
- expectations regarding the Company's ability to arrange for the manufacturing of the Company's products and technologies;
- expectations regarding the filing and approval of various submissions by regulatory agencies regarding the conduct of new clinical trials;

- ability to secure strategic partnerships with larger pharmaceutical and biotechnology companies;
- strategy to acquire and develop new products and technologies and to enhance the safety and efficacy of existing products and technologies;
- plans to market, sell and distribute the Company's products and technologies;
- expectations regarding the acceptance of the Company's products and technologies by the market;
- ability to retain and access appropriate staff, management, and expert advisers;
- 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; and
- strategy with respect to the protection of the Company's intellectual property.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended.

The forward-looking information in this MD&A does not include a full assessment or reflection of the unprecedented impacts of the COVID-19 pandemic and the ongoing and developing indirect global and regional economic impacts. The Company is currently experiencing uncertainty related to the on-going COVID-19 situation. It is anticipated that the spread of COVID-19 and global measures to contain it and its variants, have had and continue to have an impact on the Company, however it is challenging to quantify the potential future magnitude of such impact at this time. The Company is regularly assessing the situation and remains in contact with its partners, clinical sites and investigators, contract research organizations ("CROs"), contract development and manufacturing organizations ("CDMOs") and suppliers to assess any impacts and risks. The Company believes that ongoing COVID-19 restrictions could impact CROs and associated IND-enabling studies of MDNA11, CDMOs and manufacturing timelines for MDNA11, as well as the planned clinical development timelines of the MDNA11 Phase 1/2a clinical trial as patient recruitment for clinical trials is currently being impacted. Medicenna has experienced delays in receiving components and supplies due to worldwide supply chain disruptions. The regulatory submissions to initiate the clinical study is planned for mid-calendar 2021 and it is not possible to predict the potential impact of patient recruitment however we are hopeful that as vaccination rates increase worldwide COVID-19 may not have a significant impact on patient recruitment.

All forward-looking statements reflect the Company's beliefs and assumptions based on information available at the time the assumption was made. In making the forward-looking statements included in this MD&A, the Company has made various material assumptions, including but not limited to (i) securing adequate and timely supply of MDNA11 for clinical trials (ii) obtaining positive results from pre-clinical studies and clinical trials; (iii) obtaining regulatory approvals; (iv) general business and economic conditions; (v) the availability of financing on reasonable terms; (vi) the Company's ability to attract and retain skilled staff; (vii) market competition; (viii) the products and technology offered by the Company's competitors; (ix) the Company's ability to protect patents and proprietary rights; and (x) the effect of COVID-19 on the Company's business and operations. 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. Factors which could cause future outcomes to differ materially from those set forth in the forward-looking statements include, but are not limited to:

- the effect of continuing operating losses on the Company's ability to obtain, on satisfactory terms, or at all, the capital required to maintain the Company as a going concern;
- the ability to obtain sufficient and suitable financing to support operations, preclinical development, manufacturing, clinical trials, and commercialization of products;
- the risks associated with the development of novel compounds at early stages of development in the Company's intellectual property portfolio;
- the risks of reliance on third parties for the planning, conduct and monitoring of clinical trials and for the manufacture of drug products;

- the risks of reliance on third parties for timely completion of ongoing clinical trial activities, conduct of statistical analysis, imaging analysis, preparation of study reports and regulatory submissions;
- the risks associated with the development of the Company's product candidates including the demonstration of efficacy and safety;
- the risks related to clinical trials including potential delays, cost overruns and the failure to demonstrate efficacy and safety;
- the risks of delays and inability to complete clinical trials due to difficulties in securing Institutional Review Board (IRB) or ethics committee approval and enrolling subjects;
- the risks associated with the Company's inability to successfully develop companion diagnostics for the Company's development candidates;
- the risks associated with the Company's inability to successfully access drug delivery technology or materials and components required for drug delivery;
- the risks associated with reliance on third parties for proper storage, packaging and shipment of active ingredients or other components required for preclinical or clinical trials;
- the risks associated with product loss or degradation or failure of manufacturing batches and not meeting specifications for use in preclinical or clinical trials;
- delays or negative outcomes from the regulatory approval process;
- the Company's ability to successfully compete in the Company's targeted markets;
- the Company's ability to attract and retain key personnel, collaborators and advisors;
- the risks relating to the increase in operating costs from expanding existing programs, acquisition of additional development programs and increased staff;
- risk of negative results of clinical trials or adverse safety events by the Company or others related to the Company's product candidates;
- the potential for product liability claims;
- the Company's ability to achieve the Company's forecasted milestones and timelines on schedule;
- the financial risks related to the fluctuation of foreign currency rates and expenses denominated in foreign currencies;
- the Company's ability to adequately protect proprietary information and technology from competitors;
- risks related to changes in patent laws and their interpretations;
- the Company's ability to source and maintain licenses from third-party owners;
- the risk of patent-related litigation and the ability to protect trade secrets;
- the Company's internal computer systems, or those used by its contractors or consultants, may fail or suffer security breaches.

Although the forward-looking statements contained in this MD&A are based upon what the Company's management believes to be reasonable assumptions, the Company cannot assure readers that actual results will be consistent with these forward-looking statements.

Any forward-looking statements represent the Company's estimates only as of the date of this MD&A and should not be relied upon as representing the Company's 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 laws.

## **COMPANY OVERVIEW**

The Company's principal business activity is the development and commercialization of Superkines and Empowered Superkines for the treatment of cancer. Medicenna has five wholly owned subsidiaries, Medicenna Therapeutics Inc. (British Columbia), Medicenna Biopharma Inc. (Delaware), Medicenna Biopharma Inc. (British Columbia), Medicenna Australia PTY Ltd (Australia) ("MAL") and Medicenna Therapeutics UK Limited ("MTU"). On August 2, 2017 Medicenna graduated to the main board of the Toronto Stock Exchange. On November 13, 2017, Medicenna continued under the *Canada Business Corporations Act*. On August 24, 2020, Medicenna began trading on the Nasdaq Capital Market

("NASDAQ") under the symbol "MDNA". On March 30, 2021, the Company set up its wholly owned subsidiary MAL and on April 15, 2021 the Company set up its wholly owned subsidiary MTU.

Medicenna is an immunotherapy company developing novel, highly selective versions of interleukin-2 ("IL-2"), interleukin-4 ("IL-4") and interleukin-13 ("IL-13") tunable cytokines, called "Superkines". These Superkines can be developed either on their own as short or long-acting therapeutics or fused with cell killing proteins in order to generate Empowered Superkines that precisely deliver potent toxins to cancer cells without harming adjacent healthy cells. Superkines can also be fused with a large variety of proteins, antibodies and even other Superkines in order to incorporate two synergistic therapeutic activities into one molecule, creating novel Bi-Functional SuperKine ImmunoTherapies referred by Medicenna as BiSKITs™. Medicenna's mission is to become the leader in the development and commercialization of Superkines, Empowered Superkines and BiSKITs for the treatment of a broad range of cancers and other diseases. The Company seeks to achieve its goals by drawing on its expertise, and that of world-class collaborators and advisors, in order to develop a unique set of therapeutic Superkines. Compared to naturally occurring cytokines – that bind to multiple receptors on many cell types – superkines are engineered with unique specificity toward specific receptor subtypes and defined target cell subsets in order to precisely activate or inhibit relevant signalling pathways or immune cells in order to improve therapeutic efficacy and safety.

Medicenna has completed a Phase 2b clinical trial of MDNA55, Medicenna's Empowered Superkine, for the treatment of recurrent glioblastoma ("rGBM"), the most common and uniformly fatal form of brain cancer. MDNA55 is a fusion of a circularly permuted version of IL-4, fused to a potent fragment of the bacterial toxin, Pseudomonas exotoxin (PE), and is designed to preferentially target tumor cells that over-express the interleukin 4 receptor ("IL-4R"). MDNA55 has been studied in 5 clinical trials in 132 patients, including 112 patients with rGBM, in which it has shown indications of superior efficacy when compared to the current standard of care (SOC). MDNA55 has secured Orphan Drug Status from the United States Food and Drug Administration ("FDA") and the European Medicines Agency ("EMA") as well as Fast Track Designation from the FDA for the treatment of rGBM and other types of high grade glioma. On September 29, 2020, Medicenna had an End of Phase 2 ("EOP2") meeting with the FDA and provided an update on October 15, 2020 announcing that the FDA agreed for Medicenna to conduct an innovative open-label hybrid Phase 3 trial that allows use of a substantial number of patients (two-thirds) from a matched external control arm to support regulatory approval of MDNA55 for rGBM. This hybrid trial design will reduce the overall number of subjects needed to enroll in the study to achieve the primary endpoint, and notably reduce the number of subjects that would be randomized to SOC treatment under a conventional 1:1 randomization. We are currently pursuing a strategic partnership to assist with additional clinical development of MDNA55.

Complementing MDNA55, the Company has built a deep pipeline of promising preclinical Superkine candidates such as IL-2 agonists (MDNA109), IL-2 antagonists (MDNA209), dual IL-4/IL-13 antagonists (MDNA413) and IL-13 Superkine (MDNA132) all in-licensed from Leland Stanford Junior University ("Stanford"). The most advanced of these programs is the MDNA109 platform (MDNA11 and MDNA19), of which MDNA11 is the only genetically engineered IL-2 Superkine designed to specifically target CD122 (IL-2R $\beta$ ) with high affinity without CD25 dependency. Both MDNA11 and MDNA19, which unlike native IL-2 (Proleukin), have superior pharmacokinetic properties, lack CD25 binding in order to improve safety, potently stimulate effector T cells, reverse natural killer ("NK") cell anergy and act with exceptional synergy when combined with checkpoint inhibitors.

MDNA19 and MDNA11 originate from the same base molecule engineered from the MDNA109 platform. This base molecule, MDNA109, has a very short half-life which would require frequent daily dosing and therefore would not be convenient for cancer patients. To address this issue, Medicenna fused both Fc (MDNA19) and albumin (MDNA11) to MDNA109 with the effect of increasing the size of the molecule and its half-life. After completing pilot non-human primate studies with both MDNA19 and MDNA11, it became apparent that MDNA11 was the more promising molecule and has therefore been selected as the lead IL-2 candidate to advance into clinical development over MDNA19. Medicenna is thus working towards submitting an application to regulatory agencies in mid-calendar 2021 in order to start a Phase 1/2a clinical study for MDNA11. Due to similarities in cancer patients that can be treated by MDNA11 and MDNA19, Medicenna is not planning to advance clinical development of MDNA19, which was previously identified as

the Company's lead IL-2 candidate. Nevertheless, MDNA19 remains relevant for Medicenna as it is derived from the same platform as MDNA11 and may be used as part of our BiSKITs™ platform.

Our **BiSKITs™** platform allows us to develop designer Superkines by fusing them to other proteins, antibodies or naked IL-2, IL-4 and IL-13 Superkines in order to combine two distinct and yet synergistic mechanisms of action into one molecule: a **BiSKIT™**. Medicenna is working towards selecting a lead BiSKIT™ candidate to begin IND enabling studies before the end of calendar 2021.

## ACHIEVEMENTS & HIGHLIGHTS

The following are the achievements and highlights for the year ending March 31, 2021 through to the date hereof:

- On April 15, 2020, Medicenna announced the closing of the full over-allotment option to purchase an additional 1,693,548 common shares of Medicenna at a price of \$3.10 per share, in connection with its public offering of common shares initially closed on March 17, 2020 (the "2020 Public Offering"). The total gross proceeds arising from this financing was \$40.25 million.
- On May 29, 2020, Medicenna announced presentation of data from its Phase 2b trial of MDNA55 at the virtual 2020 Annual Meeting of the American Society of Clinical Oncology ("ASCO"). The oral poster discussion focused on additional data supporting the clinical efficacy of MDNA55 in patients with rGBM. These data indicated that MDNA55 has the potential to benefit all rGBM patients treated at the high dose ( $\geq 180 \mu\text{g}$ ) irrespective of IL4R expression. Results of this and earlier clinical trials reflect a favorable safety profile with the high dose (maximum tolerated dose ("MTD") =  $240 \mu\text{g}$ ). Based on these findings Medicenna has determined that a Proposed Population for future clinical development shall comprise of IL4R High (irrespective of dose) as well as IL4R Low patients receiving the high dose as these patients were shown to benefit the most from a single treatment of MDNA55. Median survival and OS-12 in this population ( $n = 32$ ) was 15.8 months and 62% vs 7.0 months and 18%, respectively, when compared to the eligibility matched Synthetic Control Arm ("SCA").
- On May 29, 2020, Medicenna announced presentation of data on MDNA11, one of its candidates from the IL-2 Superkine program, at the virtual 2020 ASCO Annual Meeting. The poster presentation focused on encouraging data in non-human primates ("NHP") for MDNA11, a long-acting IL-2 variant engineered to have enhanced affinity to CD122 with no binding to CD25. We believe this engineering allows MDNA11 to specifically expand cancer fighting naïve CD8 T cells as well as NK cells with minimal stimulation of T regulatory cells ("Tregs") and eosinophils (associated with vascular leak syndrome). As such, the use of MDNA11 circumvents both immune-suppression and toxicity normally observed with Proleukin. In addition, we believe MDNA11 has several advantages over other long-acting IL-2 variants, as it permits enhanced accumulation in the tumor vicinity and can be recycled in vivo due to its albumin content, thus exhibiting prolonged circulation in the blood stream and thereby reducing the frequency of treatment.
- On July 29, 2020 we received approval from Depository Trust Company ("DTC"), making Medicenna's shares DTC eligible and allowing non-Canadian investors to easily trade the Company's shares through the broker of their choice.
- On August 24, 2020, Medicenna began trading on the NASDAQ under the symbol "MDNA".
- On September 30, 2020, Dr. Jack Geltosky, an experienced pharmaceutical licensing executive with a strong research and development background, was elected to Medicenna's Board of Directors.
- On October 15, 2020, we announced positive outcomes following the EOP2 meeting with the FDA. The FDA agreed that we could conduct an innovative open-label hybrid Phase 3 registration trial that allows use of a substantial number of patients (two-thirds) from a matched external control arm to support regulatory approval of MDNA55 for rGBM. The FDA also expressed their willingness to consider interim analysis of the trial if certain criteria are met. Unlike conventional randomized control trials, the hybrid trial design will reduce the overall number of subjects needed to enroll in the study to achieve the primary endpoint, as well as reduce the cost and timelines associated with completing the trial.
- On October 26, 2020, we announced a poster presentation at the 32<sup>nd</sup> ENA Symposium on Molecular Targets and Cancer Therapeutics. The preclinical data, which featured results with MDNA11 as well as data related to a long acting bispecific IL-2/IL-13 Superkine that is designed to simultaneously activate

cancer killing immune cells while reversing anti-inflammatory TME. The results sustained the potent therapeutic efficacy of MDNA11 as a monotherapy agent in multiple tumor models. Medicenna's novel bispecific IL-2/IL-13 Superkines demonstrated the potential of the platform to address a critical unmet need by effectively targeting immunologically "cold" tumors that are often resistant to immunotherapeutic agents.

- On October 26, 2020, we also announced a Late Breaking Abstract poster presentation at the 32<sup>nd</sup> ENA Symposium on Molecular Targets and Cancer Therapeutics. Amongst an all-comer population, a single treatment with MDNA55 resulted in at least 100% increase in both 12-month progression free survival ("PFS-12") (27% versus 2 to 10%) and 2-year survival ("OS-24") (20% vs 5 to 10%) when compared to what is achieved with approved therapies. In a subset of all-comer patients treated with transient low dose bevacizumab, to reduce steroid use, median survival ("mOS") was 21.8 months and OS-24 was 44%.
- On November 4, 2020 Medicenna held a positive Scientific Advice Meeting for MDNA11 (similar to a pre-IND meeting) with the United Kingdom (UK) Medicines and Healthcare products Regulatory Agency (MHRA). It confirmed that our plans for CMC, pre-clinical and Phase 1/2a clinical trial were appropriate for submission of an Investigational Medical Product Dossier ("IMPd") in 2021 in order to commence first in human studies with MDNA11 in the UK.
- On December 9, we presented at an oral session at the 2<sup>nd</sup> Annual Glioblastoma Drug Development Summit. The presentation included updated data from the MDNA55 Phase 2b clinical trial, as well as an overview of the planned MDNA55 Phase 3 registration trial.
- On December 11, 2020, we hosted a key opinion leader ("KOL") call on MDNA55 featuring presentations by KOLs who provided an overview on the current treatment landscape for rGBM, highlighted the results from the MDNA55 Phase 2b clinical trial and addressed the advantages of the hybrid Phase 3 design agreed by the FDA.
- On December 30, 2020, we announced that we entered into a sales agreement (the "ATM Agreement") with SVB Leerink LLC ("SVB Leerink") acting as sales agent, pursuant to which the Company may, from time to time sell, through the at-the-market ("ATM") offering, such number of common shares as would have an aggregate offering price of up to US\$25.0 million (the "ATM Facility"). We plan to use the net proceeds of the ATM offering for general corporate purposes including, but not limited to working capital expenditures, research and development expenditures, and clinical trial expenditures. During the fourth quarter of fiscal 2021, a total of 1,398,357 common shares were sold under the ATM Facility for total gross proceeds of US\$5.8 million (\$7.1 million). As at March 31, 2021, US\$19.2 million (\$24 million) remained available under the ATM Facility.
- On March 25, 2021, Medicenna presented preclinical data from the Company's Superkine platform programs at the virtual Cytokine-Based Cancer Immunotherapies Summit. The presentation included data showing that treatment with MDNA11 alone or in combination with anti-PD-1 therapy led to tumor growth inhibition and complete responses in a murine MC38 tumor model as well as preclinical data demonstrating the ability of MDNA413, an IL-13 super-antagonist, to suppress myeloid derived suppressor cells (MDSC) and M2a polarization of tumor associated macrophages, which are known to accumulate in the tumor micro environment ("TME") and promote cancer growth.
- Subsequent to the year end, on April 12, 2021, we announced new preclinical data demonstrating the potentially potent immune modulatory effects of MDNA19-MDNA413, an IL-2/IL-13 dual specific cytokine derived from the Company's BiSKITs™ platform. The data were featured in an electronic poster presentation at the 2021 American Association for Cancer Research (AACR) Annual Meeting. Data presented in the poster suggest that this molecule simultaneously activates a pro-inflammatory anti-tumor response, due to its highly selective binding and signaling via the intermediate affinity IL-2 receptor (CD122/CD132), while inhibiting pro-tumoral immune pathways by blocking IL4/IL13 signaling via the Type 2 IL-4 receptor (IL-4R/IL-13R1). We believe that MDNA19-MDNA413's ability to mediate both IL-2 and IL-4/IL-13 signaling has the potential to address a significant unmet medical need for effective therapies against immunologically cold tumors which are often resistant to checkpoint inhibitors and other immunotherapeutic agents due to their immunosuppressive TME.
- Subsequent to the year end, on April 21, 2021, we announced the appointment of Kevin Moulder, PhD, as the Company's Chief Scientific Officer (CSO). Dr. Moulder brings over 30 years of experience in drug discovery and development in the fields of protein design, antibody technology, immuno-oncology,

inflammation and autoimmune disease. Kevin holds a first class honors degree in biological sciences and a Ph.D in Immunology from the University of London.

- Subsequent to year end, on May 12, 2021, we announced the appointment of Mann Muhsin, MD, as the Company's Chief Medical Officer (CMO) Dr. Muhsin is an accomplished industry leader with more than 20 years of experience in medical practice and drug development and has a track record of innovation in oncology and immuno-oncology trial design. Dr. Muhsin received his doctorate of medicine MBChB (MD) and internal medicine training from Baghdad University School of Medicine prior to practicing civilian medicine, and at the US Army Medical Corps Combat Support Hospitals (CSH).

## **COVID-19 UPDATE**

In March 2020, the World Health Organization declared the COVID-19 outbreak a global pandemic and the Company continues to evaluate the COVID-19 situation and monitor any impacts or any potential impacts to the business. Medicenna has implemented health and safety measures in accordance with health officials and guidance from local government authorities. Further, the pandemic has an impact on the Company's third-party vendors which could result in the interruption of operations and result in development delays including the ongoing pre-clinical, manufacturing and future clinical activities related to MDNA11. Medicenna has experienced delays in receiving components and supplies due to worldwide supply chain disruptions. The application to regulatory agencies for initiation of the clinical study is planned for mid-calendar 2021. It is not possible to predict the potential impact of patient recruitment in the ensuing months, however, we are hopeful that as vaccination rates increase worldwide COVID-19 will have a reduced impact on patient recruitment. The Company asked all our business partners to engage us by telephone or video conference where possible, minimizing business travel and requiring self-isolation for employees travelling outside of Canada. As the COVID-19 health crisis further develops, the Company will continue to rely on guidance and recommendations from local health authorities, Health Canada and the Centers for Disease Control and Prevention to update the Company's policies.

## **FINANCING UPDATE**

### ***Year ended March 31, 2021***

On April 15, 2020, the Company closed the full over-allotment option to purchase an additional 1,693,548 common shares of Medicenna at a price of \$3.10 per share in connection with its public offering of common shares initially closed on March 17, 2020 (the "2020 Public Offering"). As a result of the exercise of this over-allotment option, Medicenna received additional gross proceeds of \$5.3 million, for total gross proceeds of \$40.25 million, which will be used to fund further development of MDNA11, including preclinical activities, manufacturing and Phase 1/2a clinical trials, as well as for general corporate purposes and working capital.

On December 30, 2020, the Company entered into the ATM agreement with SVB Leerink acting as sales agent, pursuant to which the Company may, from time to time sell, through ATM offerings, on the NASDAQ such number of common shares as would have an aggregate offering price of up to US\$25.0 million. The ATM Facility will remain in place until the earlier of the maximum number of shares being sold, August 28, 2022 or the ATM Agreement being terminated. Costs associated with setting up the ATM Facility were approximately \$0.5 million. Total costs associated with the offering are recorded as a reduction in share capital when common shares are issued, net of gross proceeds received in the same period. During the fourth quarter of fiscal 2021, a total of 1,398,357 shares were sold under the ATM Facility for total gross proceeds of \$7.1 million (US\$5.8 million). As at the date of this report, there is approximately \$24 million (US\$19.2 million) available on the ATM Facility.

During the year ended March 31, 2021, 3,415,266 warrants were exercised for proceeds of \$6.7 million, the details of which are described below:



Number of Warrants	Exercise Price	Proceeds	Expiry Date
	\$	\$	
57,500	1.20	69,000	December 21, 2020
115,000	1.20	138,000	December 21, 2023
139,759	1.30	181,687	October 17, 2021
152,214	1.75	266,375	October 17, 2022
2,812,083	2.00	5,624,166	January 1 & April 5, 2021
138,710	3.10	430,001	March 17, 2022
<b>3,415,266</b>		<b>6,709,229</b>	

### **Year ended March 31, 2020**

On October 17, 2019, Medicenna completed a public offering raising total gross proceeds of \$6,900,000. The Company issued 5,307,693 units at \$1.30, consisting of one common share and one-half common share purchase warrant. Each whole warrant is exercisable at \$1.75 until October 17, 2022. The Company paid commission to the agents totaling \$455,175 and issued 350,134 warrants to the agents exercisable into one common share of the Company at an exercise price of \$1.30 for a period of twenty-four months.

On March 17, 2020, Medicenna completed the 2020 Public Offering of 11,290,323 shares for gross proceeds of \$35,000,001. In the context of the 2020 Public Offering, Medicenna issued 790,323 broker warrants as partial consideration for the services provided by the agents in connection with the 2020 Public Offering. Each broker warrant is exercisable for one common share at a price of \$3.10 per common share until March 17, 2022. The total costs associated with the 2020 Public Offering were \$3,365,487, including an amount of \$456,016 which represents the estimated fair value of the broker warrants.

During the year ended March 31, 2020, 1,623,675 warrants were exercised for proceeds of \$2,372,822.

## **RESEARCH & DEVELOPMENT UPDATE**

### **MDNA55**

MDNA55 has been studied in 5 clinical trials in 132 patients, including 112 patients with rGBM, in which it has shown indications of superior efficacy when compared to the current standard of care (“SOC”). The Company has secured Orphan Drug Status from the FDA and the EMA as well as Fast Track Designation from the FDA.

MDNA55 is delivered locally to the site of the tumor using convection enhanced delivery (“CED”) technology, a drug delivery technique for localized administration of MDNA55 into brain tumors. Medicenna has obtained an exclusive license from the National Institutes of Health (“NIH”) to patents covering CED.

#### **Phase 2b Study Outline for Glioblastoma at First or Second Recurrence or Progression**

The Phase 2b trial with MDNA55 using enhanced CED delivery was a multi-center, open-label, single-arm study in up to 52 patients (at least 46 intent-to-treat (“ITT”) patients evaluable for survival and 35 patients evaluable for response), with first or second recurrence or progression of GBM after surgery or radiotherapy ± adjuvant therapy or other experimental therapies.

The primary endpoint of the study was mOS comparing an expected null survival rate of 8.0 months (based on historical control) with an alternative pursue rate of 11.5 months (1-sided alpha = 0.10 and 80% power for approximately 46 ITT or per protocol subjects). IL4R expression levels in tumor biopsies and their potential impact on survival outcomes following treatment with MDNA55, were retrospectively evaluated.

## ***Phase 2b Study Update***

In April 2017, we treated the first rGBM patient in the Phase 2b clinical trial of MDNA55 and enrolled patients at eight clinical sites across the United States and 1 site in Europe with enrolment in the study (46 ITT patients) completed in April 2019 of which 44 patients met all the protocol eligibility requirements (per protocol population).

On September 28, 2017, we announced that based on encouraging drug distribution and safety data observed we implemented an amended protocol allowing higher doses and volumes of MDNA55 as well as an increase in study size to up to 52 subjects. This protocol amendment was based on a planned safety analysis following a unanimous recommendation from MDNA55's Safety Review Committee.

It was reported on May 2, 2018 that half the patients in the study had been recruited and the data to date demonstrated solid safety results and early signals of efficacy based on the findings of the Safety Review and Clinical Advisory Committees. Following the Safety Review, Medicenna amended the protocol at the recommendation of clinical advisors to further improve the chances for demonstrating increased therapeutic benefit for patients. The amendment allowed the implementation of optimal methodologies including more personalized dosing based on the tumor load, incorporation of advanced imaging modalities to measure treatment responses more reliably, use of sub-therapeutics dose of Avastin® in patients that could not tolerate steroid use to control edema and inflammation and allowing investigators to administer a second dose of MDNA55 where appropriate.

Review of some patients who had been withdrawn from the study, believing that their disease had progressed, found that the apparent increases in tumor volumes, seen on brain scans, were, in fact, due to tissue necrosis, inflammation and edema. This is a known effect of immunotherapeutic agents such as MDNA55, called pseudo-progression, which poses a challenge to patient retention, management and data interpretation. When evaluating images from such patients, using multi-modal imaging, Medicenna found evidence of biological activity of MDNA55 suggesting that these patients were benefiting from the treatment, and in multiple cases following withdrawal from the study, surgical resection showed significant tumor necrosis. This amendment allowed a biopsy and/or advanced multi-modal imaging to more accurately discriminate between necrosis/inflammation and true disease progression. These tools would encourage subjects to remain in the study, where appropriate, giving time for the pseudo-progression to resolve and increase the likelihood of clinical responses.

Following the amended protocol as announced on May 2, 2018 and after receiving the necessary regulatory and site approvals patient enrolment was resumed at higher doses provided that the pre-established MTD of 240 µg was not to be exceeded.

The protocol amendments announced September 28, 2017 and May 2, 2018 resulted in increased timelines for completion of the MDNA55 Phase 2b clinical trial due to an increase in the original number of patients as well as a slowdown of patient recruitment while the necessary regulatory reviews and approvals were completed.

On April 30, 2019, Medicenna announced that enrolment in the study was complete with 46 evaluable patients (ITT population) of which 44 patients were subsequently identified as meeting protocol eligibility requirements without major deviations (per protocol population).

On May 29, 2020, Medicenna announced presentation of data from its Phase 2b trial of MDNA55 in patients with rGBM, at the 2020 ASCO Annual Meeting. The oral poster discussion led by Dr. Ian F. Parney, MD, PhD (Mayo Clinic), and a presentation by Dr. John Sampson, MD, PhD (Robert H. and Gloria Wilkins Distinguished Professor of Surgery, Duke University School of Medicine), focused on additional data demonstrating clinical superiority of MDNA55 in patients with rGBM.

Highlights from the ASCO presentation included:

- Comparison of MDNA55 with an eligibility-matched External Control Arm (“ECA” or also known as Synthetic Control Arm, SCA) using propensity-score weighting (Li et al.), an unbiased approach to select patients that match the baseline characteristics of MDNA55 treated patients based on 11 key baseline prognostic factors, demonstrated an improvement in mOS of 72%. When stratified by IL4R status, IL4R High subjects in the MDNA55 arm demonstrated improved mOS by 116% (Table 1).

**Table 1.**

Propensity-Weighted Groups	N	mOS (months)	Improvement in mOS	HR
MDNA55 All-comers	43	12.4	72%	0.63
ECA All-comers	40.8	7.2		
MDNA55 IL4R High	17	13.2	116%	0.52
ECA IL4R High	16.8	6.1		

Irrespective of IL4R expression, subjects showed a tumor control rate (“TCR”) (tumor shrinkage or stabilization) of 76% based on modified RANO criteria; these subjects demonstrated mPFS of 4.6 months, PFS at six months (“PFS-6”) of 40%, PFS-12 of 33%, mOS of 15.0 months and OS-12 of 57%.

Additional updated results (not presented at ASCO) include the following:

Patients with Low IL4R expression (H-Score  $\leq$  60) had a similar TCR as patients with High IL4R expression (H-Score  $>$  60); TCR of 75% vs. 76%, respectively. However, the majority of the IL4R Low patients (11 of 16) received high doses of MDNA55 (180 – 240  $\mu$ g; median 180  $\mu$ g) whereas only 9 of 21 IL4R High patients received the high dose of MDNA55.

The IL4R Low group receiving high dose also showed improved survival (mOS Not Reached, OS-12 of 53%) when compared to the low dose group (mOS = 8 months, OS-12 = 13%).

The Proposed Population (n=32), comprised of all IL4R High (irrespective of dose) as well as IL4R Low patients receiving the high dose, were shown to benefit the most from a single treatment of MDNA55. Median survival and OS-12 in this population was 15.8 months and 62% vs 7.0 months and 18%, respectively, when compared to the eligibility matched ECA. (Table 2).

**Table 2.**

Eligibility-Matched	N	mOS	Improvement in mOS	HR	OS-12
Proposed Population	32	15.8	126%	0.45	62%
ECA	40	7.0			18%
Propensity-Weighted					
Proposed Population	32	15.7	118%	0.52	NA
ECA	33.9	7.2			NA

TCR in the Proposed Population was 81% based on radiologic assessment by mRANO criteria.

These data indicate that MDNA55 has the potential to benefit all rGBM patients treated at the high dose (180 – 240 µg; median 180 µg) irrespective of IL4R expression. The high dose has already shown an acceptable safety profile in this and earlier clinical trials (MTD = 240 µg).

On October 26, 2020, Dr. John Sampson, MD, PhD (Robert H. and Gloria Wilkins Distinguished Professor of Surgery, Duke University School of Medicine) updated clinical data from the Phase 2b trial of MDNA55 in rGBM as a Late Breaking Abstract poster at the 32nd ENA Symposium on Molecular Targets and Cancer Therapeutics. Highlights from the poster included updated results following a longer follow-up duration and new data based on transient low-dose use of bevacizumab:

- Data from all trial participants show that a single MDNA55 treatment led to a mOS of 11.9 months (expected 6-9 months) which is comparable to earlier reported mOS of 11.6 months, an OS-24 of 20% (expected 0-10%), and a PFS-12 of 27% (expected 2-10%).
- In Medicenna's proposed patient population, mOS was 14.0 months (comparable to mOS of 15 months reported earlier), OS-24 was 20%, and PFS-12 was 24%. The proposed patient population included all MDNA55-treated trial participants with high IL4R expression and participants with low IL4R expression that received a high dose of MDNA55 treatment.
- Unmethylated *MGMT* promoter affects more than 50% of GBM patients and is associated with treatment resistance and poorer survival outcomes. However, *MGMT* status did not negatively affect MDNA55 treatment. In the proposed population (N=17), mOS was 14.9 months with an OS-24 of 22%.
- Following MDNA55 treatment, transient (median of 3 cycles) low dose (5 mg/Kg q2w or 7.5 mg/Kg q3w) administration of Avastin®, used for symptom control and steroid sparing in patients receiving high concentrations of MDNA55, further improved patient survival. Amongst all comers (N=9) and the proposed population (N=8), mOS was 21.8 months and 18.6 months and OS-24 was of 44% and 38%, respectively.

On September 29, 2020, Medicenna had an EOP2 meeting with the FDA to discuss future development and commercialization of MDNA55 for rGBM. On October 15, 2020, we announced positive outcomes following the EOP2 meeting with the FDA. The FDA agreed that we could conduct an innovative open-label hybrid Phase 3 trial that allows use of a substantial number of patients (two-thirds) from a matched external control arm to support regulatory approval of MDNA55 for rGBM. The FDA also expressed their willingness to consider interim analysis of the trial if certain criteria are met. Unlike conventional randomized control trials, the hybrid trial design will reduce the overall number of subjects needed in the study to achieve the primary endpoint as well as reduce the cost and timelines associated with completing the trial.

The proposed Phase 3 clinical trial design includes a concurrent 3:1 randomized cohort (3 subjects receiving MDNA55 for every 1 subject receiving SOC) and an additional matched external control arm. The primary endpoint of overall survival (OS) will be determined by a 1:1 analysis of the MDNA55 arm versus the pooled control arm, which will consist of external controls and subjects randomized to SOC. This hybrid trial design will also reduce the overall number of subjects needed to enroll in the study to achieve the primary endpoint, and notably reduce the number of subjects that would be randomized to SOC treatment under a conventional 1:1 randomization. By reducing the need to enroll control subjects, an ECA can increase efficiency, reduce delays, lower trial costs, and speed lifesaving therapies to market. The Company demonstrated promising results for MDNA55 in a Phase 2b clinical trial when compared to a retrospective and a well-balanced ECA. Medicenna is pursuing strategic partnerships to assist with additional clinical development of MDNA55, as well as preparing the program for commercialization and its subsequent launch in various countries where approval has been granted. In addition to development and regulatory approval of MDNA55, see "Risk and Uncertainties" below.

### **Superkine Platform**

## ***IL-2 Superkines***

IL-2 was one of the first effective immunotherapies developed to treat cancer due to its proficiency at expanding T cells, the central players in cell-mediated immunity. Originally discovered as a growth factor for T cells, IL-2 can also drive the generation of activated immune cells, immune memory cells, and immune tolerance.

In contrast, IL-2 induced overstimulation of immune cells can lead to an imbalance in the ratio of effector and regulatory T cells, resulting in autoimmune diseases. Part of the reason for this is due to the nature of the IL-2 receptor. The IL-2 receptor is composed of three different subunits, IL-2R $\alpha$  (also known as CD25), IL-2R $\beta$  (CD122) and IL-2R $\gamma$  (CD132). The arrangement of these different proteins determines the response to IL-2 signaling.

The IL-2 $\beta$  and IL-2 $\gamma$  components together make a receptor capable of binding IL-2, but only moderately so. When all three components are together, including IL-2R $\alpha$ , the receptor binds IL-2 with a much higher affinity. This complete receptor is usually found on regulatory T cells, which dampens an ongoing immune response. The lower affinity receptor, composed of just the IL-2 $\beta$  and IL-2 $\gamma$  components, is more often found on “naive” immune cells, which are awaiting instructions before seeking out cancer cells.

Altering IL-2's propensity for binding these receptors could encourage greater immune cell activation and/or block the function of regulatory cells. Medicenna's MDNA109 (MDNA11) and MDNA209 platforms take advantage of this dynamic by binding to specific receptors and either activating (MDNA109) or blocking them (MDNA209). The majority of development has been focused on the MDNA109 platform candidates where promising results have been demonstrated in various animal tumour models, as described below.

Like the MDNA109 platform, MDNA209 therapeutics bind with exceptional affinity to IL-2R $\beta$ , but are unable to bind to the common IL-2 $\gamma$  receptor which in turn blocks signaling and activation of NK cells and effector CD8 T cells. MDNA209 platform offers a variety of candidates that are either partial agonists, partial antagonists or complete antagonists, enabling us to dampen the signaling properties of an over-active immune system to an amplitude that elicits desired therapeutic function without causing undesired toxicity. We believe MDNA209 variants can therefore be used to treat a host of autoimmune diseases such as multiple sclerosis and preliminary studies (Mitra et al., 2015) have shown that MDNA209 variants can also mitigate graft versus host disease (GvHD) following transplantation. Limited work on MDNA209 has been initiated but development timelines have not been established at this time.

### **MDNA11**

MDNA109 (a precursor to MDNA19 and MDNA11) is an enhanced version of IL-2 that binds up to 200 times more effectively to IL-2R $\beta$ , thus greatly increasing its ability to activate and proliferate the immune cells needed to fight cancer. Because it preferentially binds IL-2R $\beta$  and not the receptor containing IL-2R $\alpha$ , MDNA109 preferentially drives effector T cell responses over regulatory T cells. Additionally, MDNA109 reverses NK cell anergy and acts with exceptional synergy when combined with checkpoint inhibitors.

One of the development challenges with MDNA109 was its short half-life, similar to native IL-2, which would require frequent dosing. In order to extend the half-life of MDNA109, Medicenna fused inactive protein scaffolds to MDNA109 including Fc-fusions (Fc) and Albumin fusions (Alb) and, on August 2, 2018, we announced preliminary preclinical data on long acting variants of MDNA109, showing that these fusions have better pharmacokinetic properties enabling less frequent dosing without sacrificing its efficacy or safety.

Further modifications were made to MDNA109 in its extended half-life forms to enhance pharmacodynamics and further enhance selectivity in order to reduce binding to CD25 which is associated with the toxic side effect profile of Proleukin. These modifications have provided us with two candidates in development, MDNA19 and MDNA11, Medicenna plans to advance MDNA11 into Phase 1 clinical development, subject to discussions with FDA.

On March 25, 2020, Medicenna announced preclinical data including non-human primate (NHP) data from its IL-2 Superkine program during a conference call and webcast.

The presentation highlighted data from the long-acting variant MDNA19, engineered to have enhanced binding to CD122 without binding to CD25 and included:

- Kinetic studies in NHP showed a dose-dependent upregulation of Ki67 in CD8 T-cells lasting for almost two weeks post-MDNA19 administration, with no apparent side effects.
- When administered to NHP, MDNA19 increases the absolute number of circulating CD8 T-cells in the absence of Treg and eosinophil stimulation (the latter being a major source of IL-5 production which is responsible for triggering vascular leak syndrome and associated toxicity).

On May 29, 2020, Medicenna announced the virtual presentation of data on MDNA11 one of its lead candidates from the IL-2 Superkine program, at the 2020 ASCO Annual Meeting. The poster presentation by Dr. Moutih Rafei, PhD (Associate Professor of Pharmacology and Physiology at the Université de Montréal), focused on new data arising from studies with MDNA11. The poster presentation focused on encouraging data in NHP for MDNA11, a long-acting IL-2 variant engineered to have enhanced affinity to CD122 without binding to CD25. This engineering allows MDNA11 to specifically expand cancer fighting naïve CD8 T cells as well as NK cells with minimal stimulation of Tregs and eosinophils (associated with vascular leak syndrome). As such, the use of MDNA11 circumvents both immune-suppression and toxicity normally observed with Proleukin. In addition, we believe MDNA11 has several advantages over other long-acting IL-2 variants as it permits enhanced accumulation in the tumor vicinity and can be recycled in vivo thus exhibiting prolonged circulation in the blood stream thereby reducing the frequency of treatment. The presentation also demonstrated that MDNA11 had better in-vitro and in-vivo characteristics than MDNA19 and has therefore been selected as the lead candidate to move into clinical development.

On October 26, 2020, we announced a poster presentation at the 32<sup>nd</sup> ENA Symposium on Molecular Targets and Cancer Therapeutics. The presentation of preclinical results featured data on MDNA11 as well as data related to long acting bispecific IL-2/IL-13 Superkine that is designed to simultaneously activate cancer killing immune cells while reversing anti-inflammatory TME. These results support the potent therapeutic efficacy of MDNA11 monotherapy in multiple tumor models. Highlights from the poster and corresponding abstract include:

- Data show that compared to native IL-2, MDNA11 exhibits enhanced potency towards anti-tumor CD8+ T and natural killer (NK) cells, and diminished activity toward pro-tumor T<sub>reg</sub> cells.
- MDNA11 inhibited B16F10 melanoma tumor growth and improved survival as a monotherapy and in combination with a tumor-antigen targeting antibody by inducing a durable increase in tumor infiltrating lymphocytes.
- Treatment with MDNA11 alone or in combination with an immune checkpoint inhibitor resulted in long-term tumor regression and a strong memory response in a preclinical colon cancer model.
- Repeat dosing of non-human primates with MDNA11 did not trigger cytokine release syndrome, anti-drug antibody response nor eosinophilia (associated with vascular leak syndrome).

On November 4, 2020 Medicenna held a positive Scientific Advice Meeting for MDNA11 (similar to a pre-IND meeting) with the UK MHRA. MHRA confirmed that our plans for CMC, pre-clinical and Phase 1/2a clinical trial design would be appropriate for submission of an IMPD in mid-calendar 2021 in order to commence first in human studies with MDNA11 in the UK.

On March 25, 2021, Medicenna presented preclinical data from the Company's Superkine platform programs at the virtual Cytokine-Based Cancer Immunotherapies Summit. The presentation included data showing that treatment with MDNA11 alone or in combination with anti-PD-1 therapy led to tumor growth inhibition and complete responses in a murine MC38 tumor model.

Medicenna is currently in the process of advancing MDNA11 into a Phase 1/2a clinical trial in Australia and the United Kingdom followed by expansion to the United States. We continue to make good progress towards the initiation of the trial, as we wrap-up our IND-enabling studies. We are on track to submit a

Clinical Trial Notification to the Australian Human Research Ethics Committee by the end of June. Additionally, we have chosen CROs for the trial and site selection is already underway in Australia. Initiation of the trial is expected in the third quarter of calendar 2021. The clinical trial encompasses a dose-escalation MDNA11 monotherapy phase, which will then be followed by a dose expansion phase. The dose expansion phase will evaluate both MDNA11 monotherapy as well as MDNA11 in combination with a checkpoint inhibitor.

### **BiSKITs™ (Bi-functional SuperKine ImmunoTherapies) Platform**

Our **BiSKITs™** platform allows us to develop designer Superkines by fusing them to other proteins, antibodies or naked IL-2, IL-4 and IL-13 Superkines in order to combine two distinct and yet synergistic mechanisms of action into one molecule: a **BiSKIT™**. Medicenna is working towards selecting a lead BiSKIT™ candidate to begin IND enabling studies before the end of calendar 2021.

Medicenna's IL-4 and IL-13 Superkines are engineered versions of wild type cytokines which possess enhanced affinity and selectivity for either the Type 1 or Type 2 IL4 receptors or dedicated IL13 receptors such as IL13R $\alpha$ 2. This selectivity is achieved through mutations of the IL-4 or IL-13 proteins to enhance affinity for binding to specific IL4R or IL13R subunits. Additional mutations have also been engineered to modulate their bioactivity, resulting in Superkines with enhanced signaling (super-agonists) or the ability to block signaling (super-antagonists).

One promising IL-13 Superkine antagonist is MDNA413. Compared to wild type IL-13, MDNA413 has been engineered to have 2,000-fold higher selectivity for the Type 2 IL4R and which potently blocks IL-4 and IL-13 signaling (Moraga et al., 2015). Blocking of Type 2 IL4R by MDNA413 may be relevant not only for targeting solid tumors that overexpress this receptor, but also the Th2 biased tumour microenvironment, which shields the cancer from the immune system. As part of our **BiSKITs™** platform, MDNA413 has been fused with MDNA19 (a long acting Fc-IL2 Superkine) and was the basis of data presented at AACR as described below.

On October 26, 2020, we announced a poster presentation at the 32<sup>nd</sup> ENA Symposium on Molecular Targets and Cancer Therapeutics. The presentation of preclinical results featured data on MDNA11 as well as data related to long acting bispecific IL-2/IL-13 Superkine that is designed to simultaneously activate cancer killing immune cells while reversing anti-inflammatory TME. Our bispecific IL-2/IL-13 Superkines are novel and demonstrate the potential of the **BiSKITs™** platform to address a critical unmet need by effectively targeting immunologically "cold" tumors that are often resistant to immunotherapeutic agents. Data included in the poster and corresponding abstract showed that Medicenna's bispecific IL-2/IL13 Superkine induced anti-tumor Th1 immune responses and inhibited pro-tumor IL-4/IL-13 signaling.

Subsequent to the year end, on April 12, 2021, we announced new preclinical data supporting the potent immune modulatory effects of MDNA19-MDNA413, an IL-2/IL-13 dual specific cytokine derived from the Company's **BiSKITs™** platform. The data were featured in an electronic poster presentation at the 2021 American Association for Cancer Research (AACR) Annual Meeting. Data presented in the poster indicate that this molecule simultaneously activates a pro-inflammatory anti-tumor response, due to its highly selective binding and signaling via the intermediate affinity IL-2 receptor (CD122/CD132), while inhibiting pro-tumoral immune pathways by blocking IL4/IL13 signaling via the Type 2 IL-4 receptor (IL-4R/IL-13R1). MDNA19-MDNA413's ability to mediate both IL-2 and IL-4/IL-13 signaling has the potential to address a significant unmet medical need for effective therapies against immunologically cold tumors which are often resistant to checkpoint inhibitors and other immunotherapeutic agents due to their immunosuppressive TME.

Medicenna is currently screening and optimizing a variety of IL-2/IL-4/IL-13 superkines as part of our **BiSKITs™** platform and intends to announce a lead candidate in the second half of calendar 2021.

Another promising IL-13 Superkine is MDNA132. Unlike MDNA413, MDNA132 is an IL-13 ligand that has been engineered to increase affinity for IL13R $\alpha$ 2 overexpressed on certain solid tumors while exhibiting

sharply decreased affinity for IL13R $\alpha$ 1. Medicenna believes MDNA132 has superior targeting compared to other IL-13 variants in development, and is an attractively differentiated targeting domain cell-based immunotherapies such as the CAR-T platform. Development timelines for MDNA132 have yet to be established. MDNA132 is also being evaluated as a potential fusion protein in our BiSKITs™ platform.

## SELECTED FINANCIAL INFORMATION

All tabular amounts below are presented in thousands of Canadian dollars, except for per share amounts.

	2021	2020	2019
	\$	\$	\$
General and administration	6,525	2,375	1,709
Research and development	10,870	5,870	3,018
Net loss	(17,289)	(8,277)	(4,708)
Basic and diluted loss per share	(0.35)	(0.26)	(0.18)
Total assets	42,252	37,996	5,187
Total liabilities	4,107	1,847	2,571

We have not earned revenue in any of the previous fiscal years, other than income from interest earned on our cash and cash equivalents and marketable securities.

For the year ended March 31, 2021, we reported a net loss of \$17.4 million (\$0.35 loss per share), compared to a net loss of \$8.3 million (\$0.26 loss per share), for the year ended March 31, 2020. The increase in net loss for the year ended March 31, 2021 compared with the year ended March 31, 2020 was primarily a result of increased research and development expenditures related to the MDNA11 program as well as costs associated with the NASDAQ listing, in particular directors and officers insurance premiums as well as no reimbursement under the grant from the Cancer Research and Prevention Institute of Texas (“CPRIT”) in the current year.

Cash utilized in operating activities for the year ended March 31, 2021 was \$15.3 million, compared to cash utilized in operating activities for the year ended March 31, 2020 of \$5.4 million. The increase in cash utilized in the current year is primarily the result of increased research and development expenses, an increase in directors and officers liability insurance and other expenses due to the NASDAQ listing and no reimbursement under the CPRIT grant in the current year.

## RESULTS OF OPERATIONS FOR THE YEAR ENDING MARCH 31, 2021

### Research and Development (“R&D”) Expenses

	Year ended March 31, 2021	Year ended March 31, 2020
	\$	\$
Chemistry, manufacturing and controls	2,356	343
Regulatory	801	433
Discovery and pre-clinical	2,896	1,898
Clinical	1,225	1,528
Salaries and benefits	1,413	1,095
Licensing, patent legal fees and royalties	1,620	811
Stock based compensation	391	487
CPRIT grant claimed on eligible expenses	-	(951)



Other research and development expenses	<b>168</b>	226
	<b>10,870</b>	5,870

R&D expenses of \$10.9 million were incurred during the year ended March 31, 2021, compared with \$5.9 million incurred in the year ended March 31, 2020.

The increase in R&D expenses in the current year is primarily attributable to:

- Higher chemistry, manufacturing and controls (CMC) costs associated with GMP manufacturing of MDNA11 for the planned Phase 1/2a clinical trial.
- Increased discovery and pre-clinical expenses associated with GLP compliant MDNA11 IND enabling studies as well as discovery work on the BiSKITs™ platform.
- Increased regulatory costs associated with preparation for the EOP2 meeting for MDNA55 as well as the Scientific Advice Meeting for MDNA11 with the MHRA and preparation for the initiation of a Phase 1/2a clinical trial.
- Higher salary and benefits costs associated with increased headcount necessary to support ongoing activities.
- Increased licensing and patent legal fees related to outsourced business development activities, market research activities and the timing of patent prosecution.
- No reimbursement of expenses with respect to the CPRIT grant in the year ended March 31, 2021, compared with \$1.0 million in the year ended March 31, 2020.

The above increases were partially offset by lower clinical trial costs due to completion and close out of the Phase 2b rGBM clinical study.

#### General and Administrative (“G&A”) Expenses

	<b>Year ended March 31, 2021</b>	Year ended March 31, 2020
	\$	\$
Depreciation expense	<b>40</b>	<b>8</b>
Stock based compensation	<b>614</b>	<b>639</b>
Facilities and operations	<b>304</b>	<b>253</b>
Public company expenses	<b>4,677</b>	<b>1,004</b>
Salaries and benefits	<b>890</b>	<b>596</b>
CPRIT grant claimed on eligible expenses	<b>-</b>	<b>(125)</b>
	<b>6,525</b>	<b>2,375</b>

G&A expenses of \$6.5 million were incurred during the year ended March 31, 2021, compared with \$2.4 million during the year ended March 31, 2020.

The increase in G&A expenditures year over year is primarily attributed to increased directors and officers liability insurance premiums due to our NASDAQ listing as well as higher board fees, legal fees and listing expenses in the current year due to activities associated with our NASDAQ listing, filing a shelf prospectus in both Canada and the United States, qualifying our common shares with the Depository Trust Company (DTC) and other corporate initiatives. Salaries and benefits have also increased in the current year due to increased headcount and bonus payments.

#### SUMMARY OF QUARTERLY FINANCIAL RESULTS

	Mar. 31 2021	Dec. 31 2020	Sept. 30 2020	June 30 2020	Mar. 31 2020	Dec. 31 2019	Sept. 30 2019	June 30 2019
	\$	\$	\$	\$	\$	\$	\$	\$
Revenue	-	-	-	-	-	-	-	-
General and administration	2,009	2,093	1,691	732	529	742	643	462
Research and development	3,701	3,180	2,176	1,813	2,135	1,659	1,246	828
Net loss	(5,813)	(5,338)	(3,786)	(2,352)	(2,689)	(2,389)	(1,904)	(1,295)
Basic and diluted loss per share	(0.11)	(0.11)	(0.08)	(0.05)	(0.07)	(0.07)	(0.07)	(0.05)
Total assets	42,252	36,323	37,640	40,920	37,996	7,316	2,244	3,674
Total liabilities	4,107	2,216	1,656	1,547	1,847	1,993	2,050	1,898

R&D expenses fluctuate quarter over quarter based on the amount of expenditures eligible for CPRIT reimbursement in the period as well as the progression of IND-enabling studies for MDNA11 during the period. Beginning with the quarter ended December 31, 2019, there were no CPRIT expenses eligible for offset vs. the comparable quarters in the prior year where there were eligible expenses resulting in lower expenditures in the prior year. The increased expenditures from the quarter ended September 30, 2020 onwards, is related to activities associated with the MDNA11 program as well as the MDNA55 EOP2 meeting with the US FDA. It is anticipated that R&D expenses will remain higher than prior year quarters due to the planned initiation of the Phase 1/2a clinical trial for MDNA11.

G&A expenses began to increase in the quarter ended September 30, 2020, due to costs associated with completing the NASDAQ listing, associated shelf prospectus filings in Canada and the United States and increased directors and officers insurance premiums. The increased insurance premiums began in July 2021 and as such G&A expenses have increased further in the quarters ended December 31, 2020 and March 31, 2021 for a full 3 months of amortization rather than 2 months amortization in the quarter ended September 30, 2020.

## RESULTS OF OPERATIONS FOR THE THREE MONTHS ENDING MARCH 31, 2021

### Research and Development Expenses

	Three months ended March 31, 2021	Three months ended March 31, 2020
	\$	\$
Chemistry, manufacturing and controls	798	164
Regulatory	202	169
Discovery and pre-clinical	1,322	632
Clinical	226	274
Salaries and benefits	431	278
Licensing, patent legal fees and royalties	540	413
Stock based compensation	108	169
Other research and development expenses	74	36
	<b>3,701</b>	2,135

R&D expenses of \$3.7 million were incurred during the three months ended March 31, 2021, compared with \$2.1 million incurred in the three months ended March 31, 2020.

The increase in R&D expenses in the three months ended March 31, 2021 is primarily attributable to:

- Higher CMC costs associated with GMP manufacturing of MDNA11 for the planned Phase 1/2a clinical trial.
- Increased discovery and pre-clinical expenses associated with GLP compliant MDNA11 IND enabling studies as well as discovery work on the BiSKITs™ platform.
- Higher salary, bonus and benefits costs associated with increased headcount necessary to support ongoing activities.
- Increased licensing and patent legal fees related to outsourced business development activities, market research activities and the timing of patent prosecution.

### General and Administrative Expenses

	Three months ended March 31, 2021	Three months ended March 31, 2020
	\$	\$
Depreciation expense	10	4
Stock based compensation	150	123
Facilities and operations	79	65
Public company expenses	1,263	82
Salaries and benefits	294	149
Corporate communications	213	106
	<b>2,009</b>	<b>529</b>

G&A expenses of \$2.0 million were incurred during the three months ended March 31, 2021, compared with \$0.5 million during the three months ended March 31, 2020.

The increase in G&A expenditures in the current period is primarily attributed to increased directors and officers liability insurance premiums due to our NASDAQ listing as well as higher board fees, legal fees and listing expenses in the current year period due to activities associated with our NASDAQ listing. Salaries and benefits have also increased due to increased headcount, as well as increased executive bonus costs.

### LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company has devoted its resources to funding R&D programs, including securing intellectual property rights and licenses, conducting discovery research, manufacturing drug supplies, initiating preclinical and clinical studies, submitting regulatory dossiers and providing administrative support to R&D activities, which has resulted in an accumulated deficit of \$48.1 million as of March 31, 2021. With current revenues only consisting of interest earned on excess cash, cash equivalents and marketable securities, losses are expected to continue while the Company's R&D programs are advanced.

We currently do not earn any revenues from our drug candidates and are therefore considered to be in the development stage. As required, the Company will continue to finance its operations through the sale of equity or pursue non-dilutive funding sources available to the Company in the future. The continuation of our research and development activities for MDNA55, MDNA11 and the BiSKITs™ platform and the commercialization of MDNA55 is dependent upon our ability to successfully finance and complete our research and development programs through a combination of equity financing and revenues from strategic partners. We have no current sources of revenues from strategic partners.

Management has forecasted that the Company's current level of cash will be sufficient to execute its current planned expenditures for more than the next 12 months without further financing, including proceeds from the ATM Facility, being obtained.

## **CASH POSITION**

At March 31, 2021, we had a cash, cash equivalents and marketable securities balance of \$40.4 million, compared to \$37.7 million at March 31, 2020. We invest cash in excess of current operational requirements in highly rated and liquid instruments. Working capital at March 31, 2021 was \$38.3 million (March 31, 2020 - \$36.0 million).

On December 30, 2020, we announced that we entered into the ATM agreement with SVB Leerink acting as sales agent for our ATM offering of up to US\$25.0 million. We plan to use the net proceeds of the ATM offering for general corporate purposes including, but not limited to working capital expenditures, research and development expenditures, and clinical trial expenditures. During the fourth quarter of fiscal 2021, a total of 1,398,357 common shares have been sold under the ATM Facility for total gross proceeds of \$7.1 million (US\$5.8 million). As at March 31, 2021, \$24.0 million (US\$19.2 million) remained available under the ATM Facility.

We also have up to US\$1.4 million remaining available for reimbursement under the CPRIT grant.

We do not expect to generate positive cash flow from operations for the foreseeable future due to additional R&D expenses, including expenses related to drug discovery, preclinical testing, clinical trials, chemistry, manufacturing and controls and operating expenses associated with supporting these activities. It is expected that negative cash flow from operations will continue until such time, if ever, that we receive regulatory approval to commercialize any of our products under development and/or royalty or milestone revenue from any such products should they exceed our expenses.

## **CONTRACTUAL OBLIGATIONS**

### ***CPRIT Assistance***

In February 2015, the Company received notice that it had been awarded a grant by CPRIT whereby the Company is eligible to receive up to US\$14.1 million on eligible expenditures over a three year period related to the development of the Company's Phase 2b clinical program for MDNA55. In October 2017, the Company was granted a one-year extension to the grant allowing expenses to be claimed over a four-year period ending February 28, 2019. On February 4, 2019 the Company was approved for a further six-month extension ending August 31, 2019, on July 25, 2019 an additional six-month extension was granted to February 28, 2020 and on January 6, 2020 an additional six-month extension was granted to August 28, 2020. The grant expired on August 28, 2020 and as of March 31, 2021 the grant with CPRIT is substantially complete.

Of the US\$14.1 million grant approved by CPRIT, Medicenna has received US\$12.7 million from CPRIT. The Company is eligible to receive the remaining US\$1.4 million upon the achievement of certain criteria as determined by CPRIT, from time to time. There can be no assurances that the balance of such grants will be received from CPRIT.

Ongoing program funding from CPRIT is subject to a number of conditions including the satisfactory achievement of milestones that must be met to release additional CPRIT funding, proof the Company has raised 50% matching funds and maintaining substantial functions of the Company related to the project grant in Texas as well as using Texas-based subcontractor and collaborators wherever possible. There can be no assurances that the Company will continue to meet the necessary CPRIT criteria, satisfactorily achieve milestones, or that CPRIT will continue to advance additional funds to the Company.

If the Company is found to have used any grant proceeds for purposes other than intended, is in violation of the terms of the grant, or relocates its MDNA55 related operations outside of the state of Texas, then the Company is required to repay any grant proceeds received.

Under the terms of the grant, the Company is also required to pay a royalty to CPRIT, comprised of 3-5% of revenues on net sales of MDNA55 until aggregate royalty payments equal 400% of the grant funds received at which time the ongoing royalty will be 0.5%.

During the year ended March 31, 2021, the Company did not receive any funds from CPRIT (March 31, 2020: \$3.5 million).

### **Intellectual Property**

On August 21, 2015, the Company exercised its right to enter into two license agreements with Stanford (the "Stanford License Agreements"). In connection with these licensing agreements, the Company issued 649,999 common shares with a value of \$0.1 million to Stanford and affiliated inventors. The value of these shares has been recorded as an intangible asset that is being amortized over the life of the underlying patents. As at March 31, 2021, the Company's intangible assets have a remaining capitalized net book value of \$0.07 million.

The development milestones under the Stanford License Agreements were updated during the year ended March 31, 2020 to reflect the current stage of development of the Company's programs.

The Company has entered into various license agreements with respect to accessing patented technology. In order to maintain these agreements, the Company is obligated to pay certain costs based on timing or certain milestones within the agreements, the timing of which is uncertain. These costs include ongoing license fees, patent prosecution and maintenance costs, royalty and other milestone payments. As at March 31, 2021, the Company is obligated to pay the following:

- Patent licensing costs due within 12 months totaling \$165 thousand.
- Patent licensing costs, including the above, due within the next five years totaling \$1.6 million.
- Given the current development plans and expected timelines of the Company it is assumed that project milestones of US\$0.3 million will be due in the next five years.
- Project milestone payments, assuming continued success in the development programs, of uncertain timing totaling US\$2.0 million and an additional US\$2 million in sales milestones.
- A liquidity payment of \$328 thousand, is due to the NIH which represents the remaining payments resulting from the Company's liquidity event in March 2017.

As part of these license agreements, the Company has committed to make certain royalty payments based on net sales to the NIH and Stanford.

### **Future commitments**

As of March 31, 2021, we have the following obligations to make future payments, representing contracts and other commitments that are known and committed:

<b>Contractual obligations</b>	<b>Payments Due by Period</b>			
	<b>Less than 1 year</b>	<b>1-3 years</b>	<b>3-5 years</b>	<b>Total</b>
Patent licensing costs, minimum annual royalties per license agreements	\$ 165	\$ 826	\$ 584	\$ 1,575
Lease payments	\$ 35	\$ -	\$ -	\$ 35
Liquidity event payment	\$ 328	\$ -	\$ -	\$ 328

The Company cannot reasonably estimate future royalties which may be due upon the regulatory approval of MDNA55 or MDNA11.

As at the date of this report, we had obligations to make future payments, representing significant research and development and manufacturing contracts and other commitments that are known and committed in the amount of approximately \$9.3 million, of which \$2 million has been paid or accrued at March 31, 2021. Most of these agreements are cancellable by the Company with notice. These commitments include agreements for manufacturing and preclinical studies.

## OFF-BALANCE SHEET ARRANGEMENTS

The Company has no material undisclosed off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on our results of operations, financial condition, revenues or expenses, liquidity, capital expenditures or capital resources that is material to investors.

## TRANSACTIONS WITH RELATED PARTIES

Key management personnel, which consists of the Company's officers (Dr. Fahar Merchant, President and Chief Executive Officer, Ms. Elizabeth Williams, Chief Financial Officer, and Ms. Rosemina Merchant, Chief Development Officer) and directors, received the following compensation for the following periods:

	Year ended March 31,		Three months ended March 31,	
	2021	2020	2021	2020
	\$	\$	\$	\$
Salaries and wages	1,501	892	495	223
Board fees	230	142	59	35
Stock option expense	797	873	162	280
	<b>2,528</b>	1,907	<b>716</b>	538

As at March 31, 2021, the Company had trade and other payables in the normal course of business, owing to directors and officers of \$0.2 million (2020: \$0.2 million) related to accrued bonuses, board fees and accrued vacation.

## CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The significant accounting policies of the Company are described in note 2 of the Annual Financial Statements, and available on SEDAR ([www.sedar.com](http://www.sedar.com)).

Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The determination of estimates requires the exercise of judgement based on various assumptions and other factors such as historical experience and current and expected economic conditions. Actual results could differ from those estimates. Critical judgements in applying the Company's accounting policies are detailed in the Annual Financial Statements, filed on SEDAR ([www.sedar.com](http://www.sedar.com)).

## FINANCIAL INSTRUMENTS

### (a) Fair value

We recognize financial instruments on the consolidated statements of financial position, which consist of cash, cash equivalents, marketable securities, government grant receivable, other receivables, accounts

payable and accrued liabilities, and license fee payable. The fair value of these instruments, approximate their carry values due to their short-term maturity.

#### *Classification of financial instruments*

Financial instruments measured at fair value on the statement of financial position are summarized into the following fair value hierarchy levels:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability

Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

We classify our financial assets and liabilities depending on the purpose for which the financial instruments were acquired, their characteristics, and management intent as outlined below:

Cash, cash equivalents and marketable securities are measured using Level 1 inputs and changes in fair value are recognized through profit or loss, with changes in fair value being recorded in net earnings at each period end.

Other receivables and government grant receivable are measured at amortized cost less impairments.

Accounts payable, accrued liabilities, deferred government grants and license fee payable are measured at amortized cost.

We have exposure to the following risks from our use of financial instruments: credit, interest rate, currency and liquidity risk. We review our risk management framework on a quarterly basis and makes adjustments as necessary.

#### **(b) Financial risk management**

We have exposure to credit risk, liquidity risk and market risk. Our Board of Directors has the overall responsibility for the oversight of these risks and reviews our policies on an ongoing basis to ensure that these risks are appropriately managed.

##### *i. Credit risk*

Credit risk arises from the potential that a counterparty will fail to perform its obligations. The financial instruments that are exposed to concentrations of credit risk consist of cash and cash equivalents and marketable securities.

We attempt to mitigate the risk associated with cash and cash equivalents by dealing only with major Canadian financial institutions with good credit ratings.

##### *ii. Interest rate risk*

Interest rate risk is the risk that the fair values and future cash flows of the Company will fluctuate because of changes in market interest rates. We believe our exposure to interest rate risk is not significant.

##### *iii. Liquidity risk*

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. We currently settle all of our financial obligations out of cash. The ability to do so relies on

maintaining sufficient cash in excess of anticipated needs. As at September 30, 2020, the Company's liabilities consist of trade and other payables that have contracted maturities of less than one year.

*iv. Currency risk*

Currency risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company is exposed to currency risk from employee costs as well as the purchase of goods and services primarily in the United States and the cash balances held in foreign currencies. Fluctuations in the US dollar exchange rate could have a significant impact on the Company's results. Assuming all other variables remain constant, a 10% depreciation or appreciation of the Canadian dollar against the US dollar would result in a \$0.5 million (December 31, 2019 - \$0.1 million) increase or decrease in loss and comprehensive loss for the three months ended December 31, 2020.

Balances in thousands of US dollars are as follows:

	<b>March 31, 2021</b>	March 31, 2020
	<b>US\$</b>	US\$
Cash and cash equivalents	<b>9,593</b>	135
Accounts payable and accrued liabilities	<b>(2,147)</b>	(900)
	<b>7,446</b>	(765)

**(c) Managing Capital**

The Company's objectives, when managing capital, are to safeguard cash, cash equivalents and marketable securities as well as maintain financial liquidity and flexibility in order to preserve its ability to meet financial obligations and deploy capital to grow its businesses.

The Company's financial strategy is designed to maintain a flexible capital structure consistent with the objectives stated above and to respond to business growth opportunities and changes in economic conditions. In order to maintain or adjust its capital structure, the Company may issue shares or issue debt (secured, unsecured, convertible and/or other types of available debt instruments).

There were no changes to the Company's capital management policy during the year. The Company is not subject to any externally imposed capital requirements.

**2020 PUBLIC OFFERING AND USE OF PROCEEDS**

The following table provides an update on the anticipated use of proceeds raised in the 2020 Public Offering along with amounts actually expended. Following completion of the 2020 Public Offering, Medicenna selected MDNA11 as its lead IL-2 candidate over MDNA19 to progress to the clinic and, as such, proceeds from the 2020 Public Offering, which were initially allocated to the development of MDNA19, have been re-directed to the development of MDNA11 in the same proportions. As of March 31, 2021, the following expenditures have been incurred (in thousands of Canadian dollars):

<b>Item</b>	<b>Amount to Spend</b>	<b>Spent to Date</b>	<b>Adjustments</b>	<b>Remaining to Spend</b>
Preclinical development	\$ 3,300	\$ 3,064	–	\$ 236
Manufacturing of clinical batch	\$ 4,400	\$ 1,985	–	\$ 2,415
Clinical development	\$ 13,150	\$ 536	–	\$ 12,614



General corporate and working capital purposes	\$ 11,350	\$ 5,871	–	\$ 5,479
<b>Total</b>	<b>\$ 32,200</b>	<b>\$ 11,456</b>	<b>\$ –</b>	<b>\$ 20,744</b>

## ATM FACILITY

On December 30, 2020, the Company entered into the ATM agreement with SVB Leerink acting as sales agent, pursuant to which the Company may, from time to time sell, through ATM offerings, on the NASDAQ such number of common shares as would have an aggregate offering price of up to US\$25.0 million. During the year ended March 31, 2021, a total of 1,398,357 shares were sold under the ATM Facility for total gross proceeds of US\$5.8 million (\$7.1 million). As at the date of this report, there is approximately US\$19.2 million (\$24 million) available on the ATM Facility.

## RISKS AND UNCERTAINTIES

*An investment in the Company's common shares (the "Common Shares") involves a high degree of risk and should be considered speculative. An investment in the Common Shares should only be undertaken by those persons who can afford the total loss of their investment. Investors should carefully consider the risks and uncertainties set forth below, as well as other information described elsewhere in this MD&A. The risks and uncertainties below are not the only ones the Company faces. Additional risks and uncertainties not presently known to Medicenna or that Medicenna believes to be immaterial may also adversely affect Medicenna's business. If any of the following risks occur, Medicenna's business, financial condition and results of operations could be seriously harmed and you could lose all or part of your investment. Further, if Medicenna fails to meet the expectations of the public market in any given period, the market price of the Common Shares could decline. Medicenna operates in a highly competitive environment that involves significant risks and uncertainties, some of which are outside of Medicenna's control.*

### **Risks Related to the Company's Business and the Company's Industry**

*The Company has no sources of product revenue and will not be able to maintain operations and research and development without sufficient funding.*

The Company has no sources of product revenue and cannot predict when or if it will generate product revenue. The Company's ability to generate product revenue and ultimately become profitable depends upon its ability, alone or with partners, to successfully develop the product candidates, obtain regulatory approval, and commercialize products, including any of the current product candidates, or other product candidates that may be developed, in-licensed or acquired in the future. The Company does not anticipate generating revenue from the sale of products for the foreseeable future. The Company expects research and development expenses to increase in connection with ongoing activities, particularly as MDNA55 is advanced through clinical trials and the MDNA109 platform (MDNA19 or MDNA11) is advanced towards the clinic.

The Company will require significant additional capital resources to expand its business, in particular the further development of its proposed products. Advancing its product candidates or acquisition and development of any new products or product candidates will require considerable resources and additional access to capital markets. In addition, the Company's future cash requirements may vary materially from those now expected.

The Company can potentially seek additional funding through corporate collaborations and licensing arrangements, through public or private equity or debt financing, or through other transactions. However, if clinical trial results are neutral or unfavourable, or if capital market conditions in general, or with respect to life sciences companies such as Medicenna, are unfavourable, the Company's ability to obtain significant additional funding on acceptable terms, if at all, will be negatively affected. Additional financing that it may pursue may involve the sale of the Common Shares or financial instruments that are exchangeable for, or

convertible into, the Common Shares, which could result in significant dilution to its shareholders. If sufficient capital is not available, the Company may be required to delay the implementation of its business strategy, which could have a material adverse effect on its business, financial condition, prospects or results of operations.

*The Company is highly dependent upon certain key personnel and their loss could adversely affect its ability to achieve its business objective.*

The loss of Dr. Fahar Merchant, the President and Chief Executive Officer, Rosemina Merchant, the Chief Development Officer, or other key members of the scientific and operating staff could harm the Company. Employment agreements exist with Dr. Merchant and Ms. Merchant, although such employment agreements do not guarantee their retention. The Company also depends on scientific and clinical collaborators and advisors, all of whom have outside commitments that may limit their availability. In addition, the Company believes that future success will depend in large part upon its ability to attract and retain highly skilled scientific, managerial, medical, clinical and regulatory personnel. Agreements have been entered into with scientific and clinical collaborators and advisors, key opinion leaders and academic partners in the ordinary course of business as well as with physicians and institutions who recruited patients into the MDNA55 clinical trial and will recruit patients into future clinical trials. Notwithstanding these arrangements, there is significant competition for these types of personnel from other companies, research and academic institutions, government entities and other organizations. The loss of the services of any of the executive officers or other key personnel could potentially harm the Company's business, operating results or financial condition.

*If the Company breaches any of the agreements under which it licenses rights to product candidates or technology from third parties, it can lose license rights that are important to its business. The Company's current license agreements may not provide an adequate remedy for breach by the licensor.*

The Company is developing MDNA55, the MDNA109 platform (MDNA19 and MDNA11) and other earlier stage preclinical and discovery drug candidates pursuant to license agreements with NIH and Stanford (collectively, the "Licensors"). The Company is subject to a number of risks associated with its collaboration with the Licensors, including the risk that the Licensors may terminate the license agreement upon the occurrence of certain specified events. The license agreement requires, among other things, that the Company makes certain payments and use reasonable commercial efforts to meet certain clinical and regulatory milestones. If the Company fails to comply with any of these obligations or otherwise breach this or similar agreements, the Licensors or any future licensors may have the right to terminate the license in whole. The Company can also suffer the consequences of non-compliance or breaches by Licensors in connection with the license agreements. Such non-compliance or breaches by such third parties can in turn result in breaches or defaults under the Company's agreements with other collaboration partners, and the Company can be found liable for damages or lose certain rights, including rights to develop and/or commercialize a product or product candidate. Loss of the Company's rights to the licensed intellectual property or any similar license granted to it in the future, or the exclusivity rights provided therein, can harm the Company's financial condition and operating results.

*Clinical drug development involves a lengthy and expensive process with an uncertain outcome, results of earlier studies and trials may not be predictive of future trial results, and the Company's product candidates may not have favourable results in later trials or in the commercial setting.*

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials may not be predictive of the results of later-stage clinical trials. In the case of MDNA55, the promising results seen in the Phase 2b clinical study may not be replicated in a randomized, controlled Phase 3 clinical study. Success in preclinical or animal studies and early clinical trials does not ensure that later large-scale efficacy trials will be successful nor does it predict final results. This is applicable to the MDNA109 platform (MDNA19 and MDNA11) as the promising preclinical data may not be replicated in a clinical setting. Favourable results in early trials may not be repeated in later trials. There is no assurance the FDA, the EMA or other similar government bodies will view the results as the Company does or that

any future trials of its proposed products for other indications will achieve positive results. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials.

The Company will be required to demonstrate through larger-scale clinical trials that any potential future product is safe and effective for use in a diverse population before it can seek regulatory approvals for commercial sale of its product. There is typically an extremely high rate of attrition from the failure of product candidates proceeding through clinical and post-approval trials. If MDNA55 and other product candidates fail to demonstrate sufficient safety and efficacy in future clinical trials, the Company's operations and financial condition will be adversely impacted.

*If the Company's competitors develop and market products that are more effective than the Company's existing product candidates or any products it may develop, or if they obtain marketing approval before it does, the Company's products may be rendered obsolete or uncompetitive.*

Technological competition from pharmaceutical companies, biotechnology companies and universities is intense and is expected to increase. Many of the Company's competitors and potential competitors have substantially greater product development capabilities and financial, scientific, marketing and human resources than the Company does. Our future success depends in part on our ability to maintain a competitive position, including our ability to further progress MDNA55 and the MDNA109 platform (MDNA19 and MDNA11) through the necessary preclinical and clinical trials towards regulatory approval for sale and commercialization. Other companies may succeed in commercializing products earlier than we are able to commercialize our products or they may succeed in developing products that are more effective than our products. While the Company will seek to expand its technological capabilities in order to remain competitive, there can be no assurance that developments by others will not render its products non-competitive or that the Company or its licensors will be able to keep pace with technological developments. Competitors have developed technologies that could be the basis for competitive products. Some of those products may have an entirely different approach or means of accomplishing the desired therapeutic effect than the Company's products and may be more effective or less costly than its products. In addition, other forms of medical treatment may offer competition to the products. The success of the Company's competitors and their products and technologies relative to its technological capabilities and competitiveness could have a material adverse effect on the future preclinical and clinical trials of its products, including its ability to obtain the necessary regulatory approvals for the conduct of such trials.

*The Company is subject to the restrictions and conditions of the CPRIT agreement. Failure to comply with the CPRIT agreement may adversely affect the Company's financial condition and results of operations.*

The Company has obtained a grant from CPRIT to fund a portion of its operations to date. The CPRIT grant is subject to the Company's compliance with the scope of work outlined in the CPRIT agreement and demonstration of its progress towards achievement of the milestones set forth in the CPRIT agreement. If the Company fails to comply with the terms of the CPRIT agreement, it may not receive the remaining US\$1.4 million tranche of the CPRIT grant or it may be required to reimburse some or the entire CPRIT grant. Further, the CPRIT grant may only be applied to a limited number of allowable expenses. Failure to obtain the remaining tranche of the CPRIT grant or being required to reimburse all or a portion of the CPRIT grant may cause a halt or delay in ongoing operations, which may adversely affect the Company's financial condition and operating results.

*The Company relies and will continue to rely on third parties to plan, conduct and monitor preclinical studies and clinical trials, and their failure to perform as required could cause substantial harm to the Company's business.*

The Company relies and will continue to rely on third parties to conduct a significant portion of clinical development and planned preclinical activities. Preclinical activities include *in vivo* studies providing access to specific disease models, pharmacology and toxicology studies, and assay development. Clinical development activities include trial design, regulatory submissions, clinical patient recruitment, clinical trial monitoring, clinical data management and analysis, safety monitoring and project management. If there is

any dispute or disruption in the Company's relationship with third parties, or if the third party is unable to provide quality services in a timely manner and at a reasonable cost, any active development programs could face delays. Further, if any of these third parties fails to perform as expected or if their work fails to meet regulatory requirements, testing could be delayed, cancelled or rendered ineffective.

*The Company relies on contract manufacturers over whom the Company has limited control. If the Company is subject to quality, cost or delivery issues with the preclinical and clinical grade materials supplied by contract manufacturers, business operations could suffer significant harm.*

The Company has limited manufacturing experience and relies on contract development and manufacturing organizations ("CDMOs"), to manufacture MDNA55 for clinical trials and the MDNA109 platform (MDNA19 and MDNA11) for preclinical development. The Company relies on CDMOs for manufacturing, filling, packaging, storing and shipping of drug product in compliance with cGMP, regulations applicable to its products. The FDA ensures the quality of drug products by carefully monitoring drug manufacturers' compliance with cGMP regulations. The cGMP regulations for drugs contain minimum requirements for the methods, facilities and controls used in manufacturing, processing and packing of a drug product.

There can be no assurances that the CDMOs selected will be able to meet future timetables and requirements. If the Company is unable to arrange for alternative third-party manufacturing sources on commercially reasonable terms or in a timely manner, it may delay the development of the product candidates. Further, contract manufacturers must operate in compliance with cGMP and failure to do so could result in, among other things, the disruption of product supplies. The Company's dependence upon third parties for the manufacture of its products may adversely affect profit margins and ability to develop and deliver products on a timely and competitive basis.

*The Company's future success is dependent primarily on the regulatory approval of a single product.*

The Company does not have any products that have gained regulatory approval. Currently, its only clinical product candidate is MDNA55. As a result, the Company's near-term prospects, including its ability to finance its operations and generate revenue, are substantially dependent on its ability to obtain regulatory approval for, and, if approved, to successfully commercialize MDNA55 in a timely manner. The Company cannot commercialize MDNA55 or other future product candidates in the United States without first obtaining regulatory approval for the product from the FDA; similarly, it cannot commercialize MDNA55 or other future product candidates outside of the United States without obtaining regulatory approval from comparable foreign regulatory authorities. Although MDNA55 has received Orphan Drug (FDA, EMA) and Fast Track (FDA) designations, there can be no assurance regulatory approval will be granted. Before obtaining regulatory approvals for the commercial sale of MDNA55 or other future product candidates for a target indication, the Company must demonstrate with substantial evidence gathered in preclinical and clinical studies to the satisfaction of the relevant regulatory authorities, that the product candidate is safe and effective for use for that target indication and that the manufacturing facilities, processes and controls are adequate. Many of these factors are beyond the Company's control. If the Company, or its potential commercialization collaborators, are unable to successfully commercialize MDNA55, the Company may not be able to earn sufficient revenues to continue its business.

*The Company may not achieve its publicly announced milestones according to schedule, or at all.*

From time to time, the Company may announce the timing of certain events expected to occur, such as the anticipated timing of results from clinical trials. These statements are forward-looking and are based on the best estimates of management at the time relating to the occurrence of such events. However, the actual timing of such events may differ from what has been publicly disclosed. The timing of events such as initiation or completion of a clinical trial, filing of an application to obtain regulatory approval, or announcement of additional clinical trials for a product candidate may ultimately vary from what is publicly disclosed. These variations in timing may occur as a result of different events, including the ability to recruit patients in a clinical trial in a timely manner, the nature of results obtained during a clinical trial or during a research phase, problems with a CDMO or a contract research organization ("CRO"), or any other event having the effect of delaying the publicly announced timeline. The Company undertakes no obligation to

update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as otherwise required by law. Any variation in the timing of previously announced milestones could have a material adverse effect on the business plan, financial condition or operating results and the trading price of the Common Shares.

*MDNA55 is in the mid stages of clinical development and the MDNA109 platform (MDNA19 and MDNA11) in preclinical development and, as a result, the Company will be unable to predict whether it will be able to profitably commercialize its product candidates.*

The Company has not received regulatory approval for the sale of MDNA55 in any market. Accordingly, the Company has not generated any revenues from product sales. A substantial commitment of resources to conduct clinical trials and for additional product development will be required to commercialize all of our product candidates. There can be no assurance that MDNA55, the MDNA109 platform (MDNA19 and MDNA11) or any of our other product candidates will meet applicable regulatory standards, be capable of being produced in commercial quantities at reasonable cost or be successfully marketed, or that the investment made by the Company in the commercialization of the products will be recovered through sales, license fees or related royalties.

*The Company is subject to extensive government regulation that will increase the cost and uncertainty associated with gaining final regulatory approval of its product candidates.*

Securing final regulatory approval for the manufacture and sale of human therapeutic products in the United States, Canada and other markets is a long and costly process that is controlled by that particular country's national regulatory agency. Approval in the United States, Canada or Europe does not assure approval by other national regulatory agencies, although often test results from one country may be used in applications for regulatory approval in another country. Other national regulatory agencies have similar regulatory approval processes, but each is different.

Prior to obtaining final regulatory approval to market a drug product, every national regulatory agency has a variety of statutes and regulations which govern the principal development activities. These laws require controlled research and testing of products, government review and approval of a submission containing preclinical and clinical data establishing the safety and efficacy of the product for each use sought, approval of manufacturing facilities including adherence to cGMP during production and storage and control of marketing activities, including advertising and labelling. There can be no assurance that MDNA55 or the MDNA109 platform (MDNA19 and MDNA11) will be successfully commercialized in any given country. There can be no assurance that the Company's licensed products will prove to be safe and effective in clinical trials under the standards of the regulations in the various jurisdictions or receive applicable regulatory approvals from applicable regulatory bodies.

*Negative results from clinical trials or studies of third parties and adverse safety events involving the targets of the Company's products may have an adverse impact on future commercialization efforts.*

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

*The Company faces the risk of product liability claims, which could exceed its insurance coverage and produce recalls, each of which could deplete cash resources.*

The Company is exposed to the risk of product liability claims alleging that use of its product candidate MDNA55, and in the future, the MDNA109 platform (MDNA19 and MDNA11), caused an injury or harm.

These claims can arise at any point in the development, testing, manufacture, marketing or sale of product candidates and may be made directly by patients involved in clinical trials of product candidates, by consumers or healthcare providers or by individuals, organizations or companies selling the products. Product liability claims can be expensive to defend, even if the product or product candidate did not actually cause the alleged injury or harm.

Insurance covering product liability claims becomes increasingly expensive as a product candidate moves through the development pipeline to commercialization. Currently the Company maintains clinical trial liability insurance coverage of \$5 million. However, there can be no assurance that such insurance coverage is or will continue to be adequate or available at a cost acceptable to the Company or at all. The Company may choose or find it necessary under its collaborative agreements to increase the insurance coverage in the future but may not be able to secure greater or broader product liability insurance coverage on acceptable terms or at reasonable costs when needed. Any liability for damages resulting from a product liability claim could exceed the amount of the coverage, require payment of a substantial monetary award from the Company's cash resources and have a material adverse effect on the business, financial condition and results of operations. Moreover, a product recall, if required, could generate substantial negative publicity about the products and business, inhibit or prevent commercialization of other products and product candidates or negatively impact existing or future collaborations.

*Changes in government regulations, although beyond the Company's control, could have an adverse effect on the Company's business.*

The Company depends upon the validity of its licenses and access to the data for the timely completion of clinical research. Any changes in the drug development regulatory environment or shifts in political attitudes of a government are beyond the Company's control and may adversely affect its business. The Company's business may also be affected in varying degrees by such factors as government regulations with respect to intellectual property, regulation or export controls. Such changes remain beyond the Company's control and the effect of any such changes cannot be predicted. These factors could have a material adverse effect on the Company's ability to further develop its licensed products.

*The Company's significant shareholders may have material influence over its governance and operations.*

Dr. Fahar Merchant and Ms. Rosemina Merchant (collectively, the "Merchants"), hold a significant interest in the Company's outstanding Common Shares on a fully diluted basis. For as long as the Merchants maintain a significant interest in the Company, they may be in a position to affect the Company's governance and operations. In addition, the Merchants may have significant influence over the passage of any resolution of the Company's shareholders (such as those that would be required to amend the constating documents or take certain other corporate actions) and may, for all practical purposes, be able to ensure the passage of any such resolution by voting for it or prevent the passage of any such resolution by voting against it. The effect of this influence may be to limit the price that investors are willing to pay for the Common Shares. In addition, the potential that the Merchants may sell their Common Shares in the public market (commonly referred to as "market overhang"), as well as any actual sales of such Common Shares in the public market, could adversely affect the market price of the Common Shares.

*If the Company is unable to enroll subjects in clinical trials, it will be unable to complete these trials on a timely basis.*

It is anticipated that the COVID-19 pandemic crisis may continue to impact ongoing trial activities across the industry due to the pressure placed on the healthcare system as well as governmental and institutional restrictions. The Company is not currently enrolling patients in a clinical study and does not plan to enroll additional patients until mid-2021. As the roll-out of vaccines in Canada, the United States, the United Kingdom and Australia progresses it is anticipated that the COVID-19 pandemic will become more manageable and will not have a significant impact on our ability to recruit patients to our clinical trials. On an ongoing basis our clinical team will need to work closely with each clinical site and a CRO to ensure that patient safety and the integrity of data is maintained despite any pandemic related impacts. It is noted that

some clinical sites have paused or slowed enrollment in clinical trials, while other sites, less impacted, are continuing activities as planned.

Patient enrollment, a significant factor in the timing of clinical trials, is affected by many factors including the size and nature of the patient population, the proximity of subjects to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, ability to obtain and maintain patient consents, risk that enrolled subjects will drop out before completion, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies, including any new drugs that may be approved for the indications the Company is investigating. Furthermore, the Company relies on CROs and clinical trial sites to ensure the proper and timely conduct of its clinical trials, and while it has agreements governing their committed activities, the Company has limited influence over their actual performance.

If the Company experiences delays in the completion or termination of any clinical trial of its proposed products or any future product candidates, the commercial prospects of its product candidates will be harmed and its ability to generate product revenues from any of these product candidates will be delayed. In addition, any delays in completing clinical trials will increase costs, slow down product candidate development and approval process and can shorten any periods during which the Company may have the exclusive right to commercialize its product candidates or allow its competitors to bring products to market before it does. Delays can further jeopardize the Company's ability to commence product sales, which will impair its ability to generate revenues and may harm the business, results of operations, financial condition and cash flows and future prospects. In addition, many of the factors that can cause a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of its proposed products or its future product candidates.

*The Company's discovery and development processes involve use of hazardous and radioactive materials which may result in potential environmental exposure.*

The Company's discovery and development processes involve the controlled use of hazardous and radioactive materials. The Company is subject to federal, provincial, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. Although the Company believes that the current safety procedures for handling and disposing of such materials comply with the standards prescribed by such laws and regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, the Company could be held liable for any damages that result and any such liability could exceed the Company's resources. The Company is not specifically insured with respect to this liability. Although the Company believes that the Company is in compliance in all material respects with applicable environmental laws and regulations and currently does not expect to make material capital expenditures for environmental control facilities in the near term, there can be no assurance that the Company will not be required to incur significant costs to comply with environmental laws and regulations in the future, or that the operations, business or assets will not be materially adversely affected by current or future environmental laws or regulations.

*If the Company is unable to successfully develop companion diagnostics for its therapeutic product candidates, or experience significant delays in doing so, the Company may not achieve marketing approval or realize the full commercial potential of its therapeutic product candidates.*

The Company plans to develop companion diagnostics for its therapeutic product candidates. It is expected that, at least in some cases, regulatory authorities may require the development and regulatory approval of a companion diagnostic as a condition to approving a therapeutic product candidate. The Company has limited experience and capabilities in developing or commercializing diagnostics and plans to rely in large part on third parties to perform these functions. The Company does not currently have any agreement in place with any third party to develop or commercialize companion diagnostics for any of its therapeutic product candidates.

Companion diagnostics are subject to regulation by the FDA, Health Canada and comparable foreign regulatory authorities as medical devices and may require separate regulatory approval or clearance prior to commercialization. If the Company, or any third parties that the Company engages to assist, are unable to successfully develop companion diagnostics for the Company's therapeutic product candidates, or experience delays in doing so, the Company's business may be substantially harmed.

Significant disruption in availability of key components for ongoing clinical studies could considerably delay completion of potential clinical trials, product testing and regulatory approval of potential product candidates.

The Company relies on third parties to supply ingredients and excipients for the manufacture and formulation of its drugs, compatible infusion systems for drug delivery, catheters required to deliver the drug to the brain as well as imaging software to accurately place catheters in the tumor ("Components"). Each of the suppliers of these Components in turn need to comply with regulatory requirements. Any significant disruption in supplier relationships could harm the Company's business, including the potential impact of COVID-19 which continues to cause supply chain instability. Any significant delay in the supply of a Component, for a potential ongoing clinical study could considerably delay initiation or completion of potential clinical trials, drug manufacturing, drug testing and regulatory approval of potential product candidates. If the Company or its suppliers are unable to purchase these Components after regulatory approval has been obtained for the product candidates, or the suppliers decide not to manufacture these Components or provide support for any of the Components, clinical trials or the commercial launch of that product candidate would be delayed or there would be a shortage in supply, which would impair the ability to generate revenues from the sale of the product candidates. It may take several years to establish an alternative source of supply for such Components and to have any such new source approved by the FDA and other regulatory agencies.

Even if any product candidates we develop receive marketing approval, they may fail to achieve the degree of market acceptance by physicians, patients, healthcare payors, and others in the medical community necessary for commercial success.

The commercial success of any of our product candidates will depend upon its degree of market acceptance by physicians, patients, third party payors, and others in the medical community. Even if any product candidates we may develop receive marketing approval, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, healthcare payors, and others in the medical community. The degree of market acceptance of any product candidates we may develop, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of such product candidates as demonstrated in pivotal clinical trials and published in peer-reviewed journals;
- the potential and perceived advantages compared to alternative treatments;
- the ability to offer our products for sale at competitive prices;
- the ability to offer appropriate patient access programs, such as co-pay assistance;
- the extent to which physicians recommend our products to their patients;
- convenience and ease of dosing and administration compared to alternative treatments;
- the clinical indications for which the product candidate is approved by the FDA, EMA or other comparable foreign regulatory agencies;



- product labeling or product insert requirements of the FDA, EMA or other comparable foreign regulatory authorities, including any limitations, contraindications or warnings contained in a product's approved labeling;
- restrictions on how the product is distributed;
- the timing of market introduction of competitive products;
- publicity concerning our products or competing products and treatments;
- the effectiveness of marketing and distribution efforts by us and other licensees and distributors;
- sufficient governmental and third party coverage or reimbursement; and
- the prevalence and severity of any side effects.

If any product candidates we develop do not achieve an adequate level of acceptance by physicians, healthcare payors, patients and the medical community, we will not be able to generate significant revenue, and we may not become or remain profitable. The failure of any of our product candidates to find market acceptance would harm our business prospects.

### ***Risks Related to Intellectual Property and Litigation***

*The Company's success depends upon its ability to protect its intellectual property and its proprietary technology.*

The Company's success depends, in part, on its ability and its licensors' ability to obtain patents, maintain trade secrets protection and operate without infringing on the proprietary rights of third parties or having third parties circumvent its rights. Certain licensors and the institutions that they represent, and in certain cases, have filed and are actively pursuing certain applications for Canadian and foreign patents. The patent position of pharmaceutical and biotechnology firms is uncertain and involves complex legal and financial questions for which, in some cases, certain important legal principles remain unresolved. There can be no assurance that the patent applications made in respect of the owned or licensed products will result in the issuance of patents, that the term of a patent will be extendable after it expires in due course, that the licensors or the institutions that they represent will develop additional proprietary products that are patentable, that any patent issued to the licensors or the Company will provide it with any competitive advantages, that patents of others will not impede its ability to do business or that third parties will not be able to circumvent or successfully challenge the patents obtained in respect of the licensed products. The cost of obtaining and maintaining patents is high and may affect the Company's financial condition. Furthermore, there can be no assurance that others will not independently develop competitor products which duplicate any of the owned/licensed products under pending patent protection or, if patents are issued to such owned/licensed products, will not design around such patents. There can be no assurance that the Company's processes or products or those of its licensors do not or will not infringe upon the patents of third parties or that the scope of its patents or those of its licensors will successfully prevent third parties from developing similar and competitive products.

Much of the Company's know-how and technology may not be patentable, though it may constitute trade secrets. There can be no assurance, however, that the Company will be able to meaningfully protect its trade secrets. To help protect its intellectual property rights and proprietary technology, the Company requires employees, consultants, advisors and collaborators to enter into confidentiality agreements. There can be no assurance that these agreements will provide meaningful protection for its intellectual property rights or other proprietary information in the event of any unauthorized use or disclosure.

*The Company's potential involvement in intellectual property litigation could negatively affect its business.*

The Company's future success and competitive position depends in part upon its ability to maintain the 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 successfully challenged. The Company's ability to establish and maintain a competitive position may require in part successfully prosecuting claims against others who it believes are infringing its rights and successfully defending claims brought by others who believe that the Company is infringing their rights. In addition, enforcement of its patents in foreign jurisdictions will depend on the legal procedures in those jurisdictions. Even if the company is successful in intellectual property litigation, the Company's involvement in such litigation could have a material adverse effect on its ability to out-license any products that are the subject of such litigation. In addition, its involvement in intellectual property litigation could result in significant expense, which could materially adversely affect the use or licensing of related intellectual property and divert the efforts of its valuable technical and management personnel from their principal responsibilities, whether or not such litigation is resolved in its favour.

*The Company's reliance on third parties requires it to share its trade secrets, which increases the possibility that a competitor will discover them.*

Because the Company relies on third parties to develop its products, it must share trade secrets with them. The Company seeks to protect its proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, collaborative research agreements, consulting agreements or other similar agreements with its collaborators, advisors, employees and consultants prior to beginning research or disclosing proprietary information. These agreements typically restrict the ability of the Company's collaborators, advisors, employees and consultants to publish data potentially relating to the Company's trade secrets. The Company's academic collaborators typically have rights to publish data, provided that the Company is notified in advance and may delay publication for a specified time in order to secure its intellectual property rights arising from the collaboration. In other cases, publication rights are controlled exclusively by the Company, although in some cases it may share these rights with other parties. The Company also conducts joint research and development programs which may require it to share trade secrets under the terms of research and development collaboration or similar agreements. Despite the Company's efforts to protect its trade secrets, its competitors may discover its trade secrets, either through breach of these agreements, independent development or publication of information including its trade secrets in cases where the Company does not have proprietary or otherwise protected rights at the time of publication. A competitor's discovery of the Company's trade secrets may impair its competitive position and could have a material adverse effect on its business and financial condition.

*Product liability claims are an inherent risk of the Company's business, and if the Company's clinical trial and product liability insurance prove inadequate, product liability claims may harm its business.*

Human therapeutic products involve an inherent risk of product liability claims and associated adverse publicity. There can be no assurance that the Company will be able to obtain or maintain product liability insurance on acceptable terms or with adequate coverage against potential liabilities. Such insurance is expensive, difficult to obtain and may not be available in the future on acceptable terms, or at all. An inability to obtain sufficient insurance coverage on reasonable terms or to otherwise protect against potential product liability claims could have a material adverse effect on the Company's business by preventing or inhibiting the commercialization of its products, licensed and owned, if a product is withdrawn or a product liability claim is brought against the Company.

*Generally, a litigation risk exists for any company that may compromise its ability to conduct the Company's business.*

All industries are subject to legal claims, with and without merit. Defense and settlement costs can be substantial, even with respect to claims that have no merit. Due to the inherent uncertainty of the litigation process, the resolution of any particular legal proceeding could have a material adverse effect on the Company's business, prospects, financial condition and results of operations.

## **Other Risks**

### *Our Common Share price has been volatile in recent years and may continue to be volatile.*

The market prices for securities of biotechnology companies, including ours, have historically been volatile. In the year ended March 31, 2021, our Common Shares traded on the TSX at a high of \$7.25 and a low of \$2.15 per share and on the NASDAQ at a high of US\$6.84 and a low of US\$3.34 per share. A number of factors could influence the volatility in the trading price of our Common Shares, including changes in the economy or in the financial markets, industry related developments, the results of product development and commercialization, changes in government regulations, and developments concerning proprietary rights, litigation and cash flow. Our quarterly losses may vary because of the timing of costs for clinical trials, manufacturing and preclinical studies. Also, the reporting of clinical data or the lack thereof, adverse safety events involving our products and public rumors about such events could cause our share price to decline or experience periods of volatility. Each of these factors could lead to increased volatility in the market price of our Common Shares. In addition, changes in the market prices of the securities of our competitors may also lead to fluctuations in the trading price of our Common Shares.

### *Future sales or issuances of equity securities or the conversion of securities into Common Shares could decrease the value of the Common Shares, dilute investors' voting power, and reduce earnings per share.*

The Company may sell additional equity securities in future offerings, including through the sale of securities convertible into equity securities, to finance operations, acquisitions or projects, and issue additional Common Shares if outstanding securities are converted into Common Shares, which may result in dilution.

The Company's board of directors will have the authority to authorize certain offers and sales of additional securities without the vote of, or prior notice to, shareholders. Based on the need for additional capital to fund expected expenditures and growth, it is likely that the Company will issue additional securities to provide such capital.

Sales of substantial amounts of securities, or the availability of such securities for sale, as well as the issuance of substantial amounts of Common Shares upon conversion or exchange of outstanding convertible or exchangeable securities, could adversely affect the prevailing market prices for securities and dilute investors' earnings per share. A decline in the future market prices of the Company's securities could impair its ability to raise additional capital through the sale of securities should it desire to do so.

In the past, following periods of volatility in the market price of a company's securities, shareholders have instituted class action securities litigation against those companies. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm the Company's profitability and reputation.

The market price for the Common Shares may also be affected by the Company's ability to meet or exceed expectations of analysts or investors. Any failure to meet these expectations, even if minor, may have a material adverse effect on the market price of the Common Shares.

### *The Company is subject to foreign exchange risk relating to the relative value of the United States dollar.*

A material portion of the Company's expenses are denominated in United States dollars. As a result, the Company is subject to foreign exchange risks relating to the relative value of the Canadian dollar as compared to the United States dollar. A decline in the Canadian dollar would result in an increase in the actual amount of its expenses and adversely impact financial performance.

### *The Company's disclosure controls and procedures may not prevent or detect all errors or acts of fraud.*

The Company's disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by the Company in reports it files or submits under applicable securities laws is

accumulated and communicated to management, recorded, processed, summarized and reported within the time periods specified under applicable securities laws. The Company believes that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in the Company's control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

*Any failure to maintain an effective system of internal controls may result in material misstatements of the Company's consolidated financial statements or cause the Company to fail to meet the reporting obligations or fail to prevent fraud; and in that case, shareholders could lose confidence in the Company's financial reporting, which would harm the business and could negatively impact the price of the Common Shares.*

Effective internal controls are necessary to provide reliable financial reports and prevent fraud. If there is a failure to maintain an effective system of internal controls, the Company might not be able to report financial results accurately or prevent fraud; and in that case, shareholders could lose confidence in the Company's financial reporting, which would harm the business and could negatively impact the price of the Common Shares. While the Company believes that it will have sufficient personnel and review procedures to maintain an effective system of internal controls, no assurance can be provided that potential material weaknesses in internal control could arise. Even if it is concluded that the internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with IFRS, as issued by the International Accounting Standards Board (IASB), because of its inherent limitations, internal control over financial reporting may not prevent or detect fraud or misstatements. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm results of operations or cause a failure to meet future reporting obligations.

*Our internal computer systems, or those used by our contractors or consultants, may fail or suffer security breaches.*

Despite the implementation of security measures, our internal computer systems, and those of our third parties on which we rely, are vulnerable to damage from cyber-attacks, computer viruses, malware, natural disasters, terrorism, war, telecommunication and electrical failures. The risk of a security breach or disruption, particularly through cyber-attacks, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions have increased. If such an event were to occur and cause interruptions in our operations or those of our third parties, it could result in a material disruption of our product development programs and our business operations. For example, the loss of clinical trial data from completed or ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. In some cases, data cannot be reproduced. Likewise, we rely on third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach results in a loss of or damage to our data, or inappropriate disclosure of confidential or proprietary information, we could incur significant liability and damage to our reputation and the further development and commercialization of our future product candidates could be delayed. Our insurance coverage may not be adequate to cover all the costs related to such breaches or attacks.

In addition, the unauthorized dissemination of sensitive personal information could expose us or other third parties to regulatory fines or penalties, litigation and potential liability, or otherwise harm our business.

Failure to comply with the U.S. Foreign Corrupt Practices Act (“FCPA”), the Canadian Corruption of Foreign Public Officials Act (“CFPOA”), and other global anti-corruption and anti-bribery laws could subject the Company to penalties and other adverse consequences.

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

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

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

If we fail to comply with healthcare laws, we could face substantial penalties and our business, operations and financial conditions could be adversely affected.

Healthcare providers, physicians and payors play a primary role in the recommendation and prescription of any product candidates for which we may obtain marketing approval. Our future arrangements with payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute any product candidates for which we may obtain marketing approval. Even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid or other third party payors, federal and state healthcare laws and regulations pertaining to fraud and abuse and patients’ rights are and will be applicable to our business. Restrictions under applicable federal, state and foreign healthcare laws and regulations may affect our ability to operate and expose us to areas of risk, including:

- federal civil and criminal false claims laws and civil monetary penalty laws, including the False Claims Act, which impose criminal and civil penalties, including through civil “qui tam” or “whistleblower” actions, against individuals or entities from knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other third party payors that are false or fraudulent or knowingly making a false statement to improperly avoid, decrease or conceal an obligation to pay money to the federal government. A person or entity does not need to have actual knowledge of these statutes or specific intent to violate them in order to have committed a violation;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a

material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization;
- the federal Physician Payments Sunshine Act, created under the ACA, and its implementing regulations, which require manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program to report annually to the U.S. Department of Health and Human Services under the Open Payments Program, information related to payments or other transfers of value made to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members, as well as other state and foreign laws regulating marketing activities;
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and
- analogous state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection and unfair competition laws which may apply to pharmaceutical business practices, including, but not limited to, research, distribution, sales and marketing arrangements as well as submitting claims involving healthcare items or services reimbursed by any third party payer, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government that otherwise restricts payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to file reports with states regarding pricing and marketing information, such as the tracking and reporting of gifts, compensations and other remuneration and items of value provided to healthcare professionals and entities; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could, despite our efforts to comply, be subject to challenge under one or more of such laws. Efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

*Any future profits will likely be used for the continued growth of the business and products and will not be used to pay dividends on the issued and outstanding shares.*

The Company will not pay dividends on the issued and outstanding Common Shares in the foreseeable future. If the Company generates any future earnings, such cash resources will be retained to finance further growth and current operations. The board of directors will determine if and when dividends should be declared and paid in the future based on the Company's financial position and other factors relevant at the particular time. Until the Company pays dividends, which it may never do, a shareholder will not be able to receive a return on his or her investment in the Common Shares unless such Common Shares are sold.

In such event, a shareholder may only be able to sell his, her or its Common Shares at a price less than the price such shareholder originally paid for them, which could result in a significant loss of such shareholder's investment.

*The Company may pursue other business opportunities in order to develop its business and/or products.*

From time to time, the Company may pursue opportunities for further research and development of other products. The Company's success in these activities will depend on its ability to identify suitable technical experts, market needs, and effectively execute any such research and development opportunities. Any research and development would be accompanied by risks as a result of the use of business efforts and funds. In the event that the Company chooses to raise debt capital to finance any such research or development opportunities, its leverage will be increased. There can be no assurance that the Company would be successful in overcoming these risks or any other problems encountered in connection with any research or development opportunities.

*The Company may acquire businesses or products, or form strategic alliances, in the future, and the Company may not realize the benefits of such acquisitions.*

The Company may acquire additional businesses or products, form strategic alliances or create joint ventures with third parties that the Company believes will complement or augment its existing business. If the Company acquires businesses with promising products or technologies, the Company may not be able to realize the benefit of acquiring such businesses if the Company is unable to successfully integrate them with its existing operations and company culture. The Company may encounter numerous difficulties in developing, manufacturing and marketing any new products resulting from a strategic alliance or acquisition that delay or prevent it from realizing their expected benefits or enhancing the Company's business. The Company cannot assure investors that, following any such acquisition, it will achieve the expected synergies to justify the transaction.

*The Company's success depends on its ability to effectively manage its growth.*

The Company may be subject to growth-related risks including pressure on its internal systems and controls. The Company's ability to manage its growth effectively will require the Company to continue to implement and improve its operational and financial systems and to expand, train and manage its employee base. Inability to deal with this growth could have a material adverse impact on its business, operations and prospects. The Company may experience growth in the number of its employees and the scope of its operating and financial systems, resulting in increased responsibilities for its personnel, the hiring of additional personnel and, in general, higher levels of operating expenses. In order to manage its current operations and any future growth effectively, the Company will also need to continue to implement and improve its operational, financial and management information systems and to hire, train, motivate, manage and retain its employees. There can be no assurance that the Company will be able to manage such growth effectively, that its management, personnel or systems will be adequate to support its operations or that the Company will be able to achieve the increased levels of revenue commensurate with the increased levels of operating expenses associated with this growth.

*If the Company is treated as a passive foreign investment company, United States shareholders may be subject to adverse U.S. federal income tax consequences*

Under the U.S. Internal Revenue Code of 1986, as amended (the "Code"), the Company will be classified as a passive foreign investment company ("PFIC") in respect of any taxable year in which either (i) 75% or more of its gross income consists of certain types of "passive income" or (ii) 50% or more of the average quarterly value of its assets is attributable to "passive assets" (assets that produce or are held for the production of passive income). For purposes of these tests, passive income includes dividends, interest, gains from the sale or exchange of investment property and certain rents and royalties. In addition, for purposes of the above calculations, if the Company directly or indirectly owns at least 25% by value of the shares of another corporation, the Company will be treated as if it held its proportionate share of the assets and received directly its proportionate share of the income of such other corporation. PFIC status is a factual

determination that needs to be made annually after the close of each taxable year, on the basis of the composition of the Company's income, the relative value of its active and passive assets, and its market capitalization. For this purpose, the Company's PFIC status depends in part on the application of complex rules, which may be subject to differing interpretations, relating to the classification of the Company's income and assets. Based on our interpretation of the law, the Company's recent financial statements, and considering expectations about the Company's income, assets and activities, the Company believes that it was a PFIC for the taxable year ended March 31, 2021 and expects that it will be a PFIC for the current taxable year.

If the Company is a PFIC for any taxable year during which a United States shareholder holds the Common Shares, the Company will continue to be treated as a PFIC with respect to such United States shareholder in all succeeding years during which the United States shareholder owns the Common Shares, regardless of whether the Company continues to meet the PFIC test described above, unless the United States shareholder makes a specified election once the Company ceases to be a PFIC. If the Company is classified as a PFIC for any taxable year during which a United States shareholder holds the Common Shares, the United States shareholder may be subject to adverse tax consequences regardless of whether the Company continues to qualify as a PFIC, including ineligibility for any preferred tax rates on capital gains or on actual or deemed dividends, interest charges on certain taxes treated as deferred, and additional reporting requirements. In certain circumstances, a United States shareholder may alleviate some of the adverse tax consequences attributable to PFIC status by making either a "qualified electing fund," ("QEF") election or a mark-to-market election (if the Common Shares constitute "marketable" securities under the Code). If the Company determines that it is a PFIC for this year or any future taxable year, the Company currently expects that it would provide the information necessary for United States shareholders to make a QEF election.

Each United States shareholder should consult its own tax advisors regarding the PFIC rules and the United States federal income tax consequences of the acquisition, ownership and disposition of the Common Shares.

*The Company's operations could be adversely affected by events outside of its control, such as natural disasters, wars or health epidemics*

The Company may be impacted by business interruptions resulting from pandemics and public health emergencies, including those related to COVID-19 coronavirus, geopolitical actions, including war and terrorism or natural disasters including earthquakes, typhoons, floods and fires. An outbreak of infectious disease, a pandemic or a similar public health threat, such as the recent outbreak of the novel coronavirus known as COVID-19, or a fear of any of the foregoing, could adversely impact the Company by causing operating, manufacturing supply chain, clinical trial and project development delays and disruptions, labour shortages, travel and shipping disruption and shutdowns (including as a result of government regulation and prevention measures). The Company has been impacted by supply chain delays with respect to both the GMP manufacturing and IND enabling studies and it is unknown whether and how the Company may further be affected if such an epidemic persists for an extended period of time. The Company may incur expenses or delays relating to such events outside of its control, which could have a material adverse impact on its business, operating results and financial condition.

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

The Company is a corporation existing under the federal laws of Canada. Most of the Company's directors and officers, and several of the experts, are residents of Canada, and all or a substantial portion of their assets, and a substantial portion of the Company's assets, are located outside the United States. Consequently, it may be difficult for holders of the Company's securities who reside in the United States to effect service of process within the United States upon those directors, officers and experts who are not residents of the United States. It may also be difficult for holders of the Company's securities who reside in the United States to realize in the United States upon judgments of courts of the United States predicated upon the Company's civil liability and the civil liability of the Company's directors, officers and experts under



the United States federal securities laws. Investors should not assume that Canadian courts (i) would enforce judgments of United States courts obtained in actions against the Company or such directors, officers or experts predicated upon the civil liability provisions of the United States federal securities laws or the securities or “blue sky” laws of any state or jurisdiction of the United States or (ii) would enforce, in original actions, liabilities against the Company or such directors, officers or experts predicated upon the United States federal securities laws or any securities or “blue sky” laws of any state or jurisdiction of the United States. In addition, the protections afforded by Canadian securities laws may not be available to investors in the United States.

*As a Foreign Private Issuer, the Company is subject to different U.S. securities laws and rules than a domestic U.S. issuer, which may limit the information publicly available to its U.S. shareholders.*

The Company is a foreign private issuer under applicable U.S. federal securities laws and, therefore, is not required to comply with all of the periodic disclosure and current reporting requirements of the U.S. Securities Exchange Act of 1934, as amended (the “Exchange Act”), and related rules and regulations. As a result, the Company does not file the same reports that a U.S. domestic issuer would file with the United States Securities and Exchange Commission (the “SEC”), although it is required to file with or furnish to the SEC the continuous disclosure documents that the Company is required to file in Canada under Canadian securities laws. In addition, the Company’s officers, directors and principal shareholders are exempt from the reporting and “short swing” profit recovery provisions of Section 16 of the Exchange Act. Therefore, the Company’s shareholders may not know on as timely a basis when its officers, directors and principal shareholders purchase or sell securities of the Company as the reporting periods under the corresponding Canadian insider reporting requirements are longer. In addition, as a foreign private issuer, the Company is exempt from the proxy rules under the Exchange Act.

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

The Company may in the future lose foreign private issuer status if a majority of the Common Shares are held in the United States and the Company fails to meet the additional requirements necessary to avoid loss of foreign private issuer status, such as if: (i) a majority of the Company’s directors or executive officers are U.S. citizens or residents; (ii) a majority of the Company’s assets are located in the United States; or (iii) the Company’s business is administered principally in the United States. The regulatory and compliance costs to the Company under U.S. securities laws as a U.S. domestic issuer may be significantly more than the costs incurred as a foreign private issuer.

## **DISCLOSURE CONTROLS AND INTERNAL CONTROL OVER FINANCIAL REPORTING**

The Company has implemented a system of internal controls that it believes adequately protects the assets of the Company and is appropriate for the nature of its business and the size of its operations. The internal control system was designed to provide reasonable assurance that all transactions are accurately recorded, that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that our assets are safeguarded.

These internal controls include disclosure controls and procedures designed to ensure that information required to be disclosed by the Company is accumulated and communicated as appropriate to allow timely decisions regarding required disclosure.

Internal control over financial reporting means a process designed by or under the supervision of the Chief Executive Officer and the Chief Financial Officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS as issued by the IASB.

The internal controls are not expected to prevent and detect all misstatements due to error or fraud. There were no changes in our internal control over financial reporting that occurred during the year ended

March 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

As of March 31, 2021, the Company's management has assessed the effectiveness of our internal control over financial reporting and disclosure controls and procedures using the Committee of Sponsoring Organizations of the Treadway Commission's 2013 framework. Based on their evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that these controls and procedures are effective.

## **OTHER MD&A REQUIREMENTS**

### **Outstanding Share Data**

As at the date of this report, the Company has the following securities outstanding:

	<b>Number</b>
Common shares	53,551,555
Warrants	3,997,147
Stock options	4,525,084
<b>Total</b>	<b>62,073,786</b>

For a detailed summary of the outstanding securities convertible into, exercisable or exchangeable for voting or equity securities of Medicenna as at March 31, 2021, refer to notes 9, 10, and 11 in the audited 2021 Annual Financial Statements of the Company.

Additional information relating to the Company, including the Company's annual information form in respect of fiscal year 2021, is available under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com) and EDGAR at [www.sec.gov](http://www.sec.gov).