



Management's Discussion and Analysis

***For the Three Months Ended
June 30, 2021***

DATE OF REPORT: Aug 12, 2021

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following management's discussion and analysis ("MD&A") has been prepared as at August 12, 2021 for the three months ended June 30, 2021 and should be read in conjunction with the unaudited interim condensed consolidated financial statements of Medicenna Therapeutics Corp. for the three months ended June 30, 2021 and 2020, and the annual audited consolidated financial statements and accompanying notes for the years ended March 31, 2021 and 2020 (the "Annual Financial Statements"), which have been prepared by management in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). Our IFRS accounting policies are set out in note 2 of the Annual Financial Statements 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 potential 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, acceptance and approval, if required 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;
- ability to secure strategic partnerships with larger pharmaceutical and biotechnology companies;
- impacts of the Phase 3 trial of MDNA55, including its design, acceptance and approval, if required 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 and clearance processes;
- ability to initiate, progress, and successfully and timely complete various preclinical and manufacturing activities associated with future clinical trials;
- expectations about the Company's product candidates' potential 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 acceptance and approval, if required of various submissions by regulatory agencies regarding the conduct of new clinical trials;
- 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, if granted marketing authorization;
- expectations regarding the acceptance of the Company's products and technologies by the market, if granted marketing authorization;
- 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. The spread of COVID-19 and global measures to contain it and its variants, have had, and are anticipated to 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 the planned clinical development timelines of the MDNA11 Phase 1/2a clinical trial including patient recruitment although it is not aware of any delays at this time.

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 its products candidates, including MDNA11, for clinical trials (ii) obtaining positive results from pre-clinical studies and clinical trials; (iii) obtaining regulatory approvals and clearances; (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 our product candidates;

- 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 or develop 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 and clearance processes;
- 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, inflammation and immune-mediated diseases. 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 payloads 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 Revolutionary Medicines using Evolutionary Superkines. Compared to naturally occurring cytokines – that bind to multiple receptors on many cell types – Superkines are engineered with unique selectivity 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 built a deep pipeline of promising 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 which is the only genetically engineered IL-2 Superkine designed to specifically bind to CD122 (IL-2R β) with high affinity. To further enhance its selectivity, 2 additional mutations (FEAA) were incorporated in MDNA109 to abolish binding to CD25. However, as in the case of recombinant human IL-2 (rhIL-2), marketed as Proleukin®, MDNA109 has a similar size and therefore is associated with poor pharmacokinetic (PK) properties resulting in a short half-life which would require an inconvenient daily dosing regimen for cancer patients. To address this issue, Medicenna fused MDNA109 variants to inactive protein scaffolds such as Fc (MDNA19) or human albumin (MDNA11), effectively increasing the size of the Superkine and improving its half-life.

Thus unlike Proleukin®, both MDNA11 and MDNA19, have superior PK properties, lack CD25 binding in order to improve safety and reduce immune suppression, potently stimulate effector T cells, reverse natural killer (“NK”) cell exhaustion and act with exceptional synergy when combined with checkpoint inhibitors.

Although MDNA19 was initially identified as the Company’s lead IL-2 candidate, a pilot non-human primate (NHP) study comparing MDNA11 with MDNA19 demonstrated that the former had better PK and pharmacodynamic (PD) features. Medicenna is therefore advancing MDNA11 towards clinical development as it is a more promising molecule and has been selected as the lead IL-2 Superkine candidate. Medicenna is projected to initiate the Phase 1/2 ABILITY Study (A Beta-only IL-2 ImmunoTherapY Study) with MDNA11 in calendar Q3 2021. MDNA19 remains relevant for Medicenna as it provides unique design features in the development of our BiSKITs™ platform.

Our BiSKITs™ platform allows us to develop designer Superkines by fusing them to other proteins, antibodies, cytokines or other Superkines in order to combine two distinct functions in order to leverage synergistic mechanisms into one molecule: a BiSKIT™. Medicenna is working towards selecting a lead BiSKIT™ candidate before the end of calendar 2021.

Complementing our Superkine platform is 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, the results of which support our belief that it has 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. We are currently pursuing a strategic partnership to pursue a Phase 3 registration trial and commercialization of MDNA55.

ACHIVEMENTS & HIGHLIGHTS

The following are the achievements and highlights for the three months ending June 30, 2021 through to the date hereof:

- On April 12, 2021, we announced new preclinical data demonstrating the 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 a 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 α /IL-13R α 1). We believe that MDNA19-MDNA413’s ability to simultaneously facilitate IL-2 activity while blocking 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 tumour micro-environment (TME).
- 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.
- 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.
- On June 23, 2021, we announced submission of a clinical trial application to a Human Research Ethics Committee (HREC) in Australia to initiate a Phase 1/2 ABILITY Study (A Beta-only IL-2 ImmunoTherapY Study) of MDNA11, the Company’s selective, long-acting and novel IL-2 super-agonist. Subject to approval by the HREC and acceptance of the Clinical Trial Notification (CTN) by Australia’s Therapeutics Goods Administration (TGA), we expect to initiate this study in the third quarter of calendar 2021. Additionally, pending successful patient recruitment, the Company intends to provide a preliminary update on safety, pharmacokinetic (PK), pharmacodynamic (PD), and biomarker data by calendar year end.
- On July 27, 2021, Medicenna announced that following discussions with Australian clinicians, Investigators, contract research organizations, and clinical trial sites participating in the MDNA11 ABILITY study, the Company expects to initiate the clinical trial in the third quarter of 2021, as previously disclosed, despite COVID-19-related government restrictions in Australia. The reasons include: the treatment of medical conditions is currently exempt for COVID-19-related travel restrictions, prior government-mandated lockdowns have had minimal impact on enrollment in Phase 1 oncology trials; and enrollment in Phase 1 oncology trials at sites participating in Medicenna’s ABILITY Study has continued with no effect on enrollment amid the COVID-19-related restrictions currently in place in some Australian states.
- On June 30, 2021, Medicenna received US\$0.9 million as a grant from the Cancer Prevention Research Institute of Texas (“CPRIT”), the remaining US\$0.5 million was received in August 2021. The grant is now fully received.
- Subsequent to the quarter end, Medicenna announced the peer-reviewed publication of preclinical data on MDNA109, our IL-2 Superkine platform that forms the basis for MDNA11. The paper, which was published in *Frontiers in Immunology*, was independently authored by researchers at the University of Helsinki (Finland) and other institutions. Preclinical studies presented in the paper evaluated oncolytic adenoviruses that were unarmed or armed to code for MDNA109 (MDNA109-virus) or wild-type IL-2 (wt-IL-2-virus) in a hamster pancreatic tumor model. Key findings from the paper support our belief that

treatment with MDNA109-virus will lead to superior tumor growth inhibition. Results showed a clear tendency towards complete tumor regression and improved survival. These results highlight the prospective therapeutic potential of the MDNA109-virus for the treatment of immunosuppressive tumors such as pancreatic cancer.

- On May 7, 2021, Medicenna announced the peer-reviewed publication of clinical data from the MDNA55 Phase 2b recurrent glioblastoma (rGBM) trial in Clinical Cancer Research. The paper, entitled “Modified RANO, Immunotherapy RANO, and Standard RANO Response to Convection-enhanced Delivery of IL4R-targeted Immunotoxin MDNA55 in Recurrent Glioblastoma,” was published in collaboration with researchers at several prestigious institutions including University of California Los Angeles and Duke University.

FINANCING UPDATE

Three months ended June 30, 2021

On December 30, 2020, the Company entered into an at-the-market (“ATM”) agreement with SVB Leerink acting as sales agent (the “ATM Agreement”), 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”). 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. 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 first quarter of fiscal 2022, no shares were sold under the ATM Facility. As at the date of this report, there is approximately \$24 million (US\$19.2 million) available to use under the ATM Facility.

During the three months ended June 30, 2021, 169,236 warrants were exercised for proceeds of \$0.3 million, the details of which are described below:

Number of Warrants	Exercise Price	Proceeds	Expiry Date
	\$	\$	
50,000	1.20	60,000	December 21, 2023
119,236	1.75	208,663	October 17, 2022
169,236		268,663	

Three months ended June 30, 2020

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 is being 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.

During the three months ended June 30, 2020, 283,184 warrants were exercised for proceeds of \$544,580.

RESEARCH & DEVELOPMENT UPDATE

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 α (also known as CD25), IL-2R β (CD122) and IL-2R γ (CD132). The arrangement of these different proteins determines the response to IL-2 signaling.

The IL-2 β and IL-2 γ components together make a receptor capable of binding IL-2, but only moderately so. When all three components are together, including IL-2R α , 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 β and IL-2 γ 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 β , but are unable to bind to the common IL-2 γ 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 β , thus greatly increasing its ability to activate and proliferate the immune cells needed to fight cancer. Because it preferentially binds IL-2R β and not the receptor containing IL-2R α , 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 of which MDNA11 has been selected as the lead candidate for clinical development.

On June 23, 2021, we announced that we had submitted a clinical trial application to a Human Research Ethics Committee (HREC) in Australia to initiate a Phase 1/2 clinical study of MDNA11. Subject to approval by the HREC and acceptance of the Clinical Trial Notification (CTN) by Australia's Therapeutics Goods Administration (TGA), we expect to initiate this study in the third quarter of calendar 2021.

Medicenna's Phase 1/2 ABILITY Study (A Beta-only IL-2 ImmunoTherapY Study) of MDNA11 is designed to assess the safety, pharmacokinetics (PK), pharmacodynamics (PD), and anti-tumor activity of various doses MDNA11 administered intravenously every 2 weeks, in patients with advanced solid tumors. The basket, dose finding study will include a dose escalation phase followed by a dose expansion phase with both an MDNA11 monotherapy arm as well as a combination arm designed to evaluate MDNA11 with a checkpoint inhibitor. The study will include patients with melanoma and renal cell carcinoma where Proleukin® is known to have clinical activity, as well as cluster of other tumor types in order to fully explore the pan-tumor potential of MDNA11. The study will also permit alternative dosing schedules, as well as options for intra-patient dose escalation.

In addition to enrolling patients in Australia, the Phase 1/2 ABILITY Study plans to expand enrolment to clinical sites in the United States, United Kingdom and Canada. These plans are subject to submission of the required regulatory applications and obtaining agreement with the respective regulatory agencies. We intend to submit the required applications and hope to obtain agreement this calendar year.

Subsequent to the quarter end, Medicenna announced the peer-reviewed publication of preclinical data on MDNA109, our IL-2 Superkine platform that forms the basis for MDNA11. The paper, which was published in *Frontiers in Immunology*, was independently authored by researchers at the University of Helsinki (Finland) and other institutions. Preclinical studies presented in the paper evaluated oncolytic adenoviruses that were unarmed or armed to code for MDNA109 (MDNA109-virus) or wild-type IL-2 (wt-IL-2-virus) in a hamster pancreatic tumor model. Key findings from the paper support our belief that treatment with MDNA109-virus will lead to superior tumor growth inhibition. Results showed a clear tendency towards complete tumor regression and improved survival. These results highlight the prospective therapeutic potential of the MDNA109-virus for the treatment of immunosuppressive tumors such as pancreatic cancer.

BiSKITs™ (Bi-functional SuperKine ImmunoTherapies) Platform

Our BiSKITs™ platform allows us to develop designer Superkines by fusing them to other proteins, antibodies, cytokines or other Superkines in order to combine two distinct functions in order to leverage synergistic mechanisms into one molecule: a BiSKIT™. Medicenna is working towards selecting a lead BiSKIT™ candidate 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 α 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 April 12, 2021, we announced new preclinical data demonstrating the 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 a poster presentation at the 2021 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 α /IL-13R α 1). We believe that MDNA19-MDNA413's ability to simultaneously facilitate IL-2 activity while blocking 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 before the end of calendar 2021.

MDNA55

MDNA55 has been studied in 5 clinical trials in 132 patients, including 112 patients with rGBM, suggesting potentially superior efficacy when compared to the current 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.

A Phase 2b clinical trial with MDNA55 was completed in a multi-center, open-label, single-arm study in patients with first or second recurrence or progression of GBM after surgery or radiotherapy \pm adjuvant therapy or other experimental therapies.

On September 29, 2020, Medicenna had an End of Phase 2 (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 (ECA) to support marketing authorization of MDNA55 for rGBM. 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 ECA. 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 ECA 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 marketing authorization has been granted. In addition to development and marketing authorization of MDNA55, see “Risk and Uncertainties” below.

On May 7, 2021, Medicenna announced the peer-reviewed publication of clinical data from the MDNA55 Phase 2b recurrent glioblastoma (rGBM) trial in Clinical Cancer Research. The paper, entitled “Modified RANO, Immunotherapy RANO, and Standard RANO Response to Convection-enhanced Delivery of IL4R-targeted Immunotoxin MDNA55 in Recurrent Glioblastoma,” was published in collaboration with researchers at several prestigious institutions including University of California Los Angeles and Duke University.

Results presented in the peer-reviewed paper show that the median overall survival (OS) of radiographically evaluable patients in the trial irrespective of dose or IL4R expression was 11.8 months, which is longer than what would be expected from currently approved drugs. Notably, the data also show a potential link between patients experiencing radiographic progression and those exhibiting insufficient MDNA55 penetration into the

tumor, suggesting that at least a portion of patients who did not respond well to MDNA55 may have benefited from higher drug concentrations.

These analyses supplement previously presented findings observed in Medicenna’s proposed patient population showing an 81% tumor control rate (26/32) based on mRANO and a median OS of 15.7 months, which represents a >100% improvement compared to an external control arm (median OS of 7.2 months). 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.

SELECTED FINANCIAL INFORMATION

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

	Three months ended June 30, 2021	Three months ended June 30, 2020
	\$	\$
General and administration	1,867	732
Research and development	4,349	1,813
Net loss	(6,386)	(2,352)
Basic and diluted loss per share	(0.12)	(0.05)
Total assets	37,336	40,920
Total liabilities	4,958	1,547

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 three months ended June 30, 2021, we reported a net loss of \$6.4 million (\$0.12 loss per share), compared to a net loss of \$2.4 million (\$0.05 loss per share), for the three months ended June 30, 2020. The increase in net loss for the period ended June 30, 2021 compared with the period ended June 30, 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 in the current period. There was a reimbursement of \$1.8 million under the grant from the Cancer Research and Prevention Institute of Texas (“CPRIT”) in the current period (2020 - \$nil).

Cash utilized in operating activities for the three months ended June 30, 2021 was \$4.6 million, compared to cash utilized in operating activities for the three months ended June 30, 2020 of \$2.5 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, offset by the receipt of \$1.8 million on the grant from CPRIT.

RESULTS OF OPERATIONS FOR THE THREE MONTHS ENDING JUNE 30, 2021

Research and Development (“R&D”) Expenses

	Three months ended June 30, 2021	Three months ended June 30, 2020
	\$	\$
Chemistry, manufacturing and controls	3,392	476
Regulatory	214	143
Discovery and pre-clinical	688	297

Clinical	650	348
Salaries and benefits	654	271
Licensing, patent legal fees and royalties	222	185
Stock based compensation	193	91
CPRIT grant claimed on eligible expenses	(1,753)	-
Other research and development expenses	89	2
	4,349	1,813

R&D expenses of \$4.3 million were incurred during the three months ended June 30, 2021, compared with \$1.8 million incurred in the three months ended June 30, 2020.

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

- Higher chemistry, manufacturing and controls (CMC) costs associated with GLP and GMP manufacturing of MDNA11 for the Phase 1/2 ABILITY 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 clinical and regulatory costs due to activities in preparation for initiation of the MDNA11 Phase 1/2 ABILITY study.
- Higher salary and benefits costs associated with increased headcount necessary to support increased activities.

The above increases were partially offset by reimbursement of expenses with respect to the CPRIT grant of \$1.8 million in the three month period ended June 30, 2021, compared with \$nil in the three month period ended June 30, 2020.

General and Administrative (“G&A”) Expenses

	Three months ended June 30, 2021	Three months ended June 30, 2020
	\$	\$
Depreciation expense	10	10
Stock based compensation	161	96
Facilities and operations	80	71
Public company expenses	1,422	422
Salaries and benefits	194	133
	1,867	732

G&A expenses of \$1.9 million were incurred during the three months ended June 30, 2021, compared with \$0.7 million during the three month period ended June 30, 2020.

The increase in G&A expenditures period over 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 due to activities associated with our NASDAQ listing.

SUMMARY OF QUARTERLY FINANCIAL RESULTS

	Jun. 30 2021	Mar. 31 2021	Dec. 31 2020	Sept. 30 2020	June 30 2020	Mar. 31 2020	Dec. 31 2019	Sept. 30 2019
	\$	\$	\$	\$	\$	\$	\$	\$
Revenue	-	-	-	-	-	-	-	-
General and administration	1,867	2,009	2,093	1,691	732	529	742	643
Research and development	4,349	3,701	3,180	2,176	1,813	2,135	1,659	1,246
Net loss	(6,386)	(5,813)	(5,338)	(3,786)	(2,352)	(2,689)	(2,389)	(1,904)
Basic and diluted loss per share	(0.12)	(0.11)	(0.11)	(0.08)	(0.05)	(0.07)	(0.07)	(0.07)
Total assets	37,336	42,252	36,323	37,640	40,920	37,996	7,316	2,244
Total liabilities	4,958	4,107	2,216	1,656	1,547	1,847	1,993	2,050

R&D expenses fluctuate quarter over quarter based on activities ongoing during that period. During the quarter ended June 30, 2021 there was a \$1.8 million reimbursement received from CPRIT which offset increased R&D expenses, primarily due to manufacturing costs associated with MDNA11. The increased expenditures from the quarter ended September 30, 2020 onwards, is primarily related to activities associated with the MDNA11 program and establishment of the BiSKITs™ program. It is anticipated that R&D expenses will remain higher than prior year quarters due to the planned initiation of the Phase 1/2 clinical trial for MDNA11 in the quarter ending September 30, 2021.

G&A expenses began to increase in the quarter ended September 30, 2020, due to costs associated with completing the NASDAQ listing and an associated increase in directors and officers insurance premiums. The increased insurance premiums began in Q2 2020 and as such G&A expenses increased further in the subsequent quarters for a full 3 months of amortization rather than 2 months amortization in the quarter ended September 30, 2020.

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 \$54.7 million as of June 30, 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 product 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 June 30, 2021, we had a cash, cash equivalents and marketable securities balance of \$35.9 million, compared to \$40.4 million at March 31, 2021. We invest cash in excess of current operational requirements

in highly rated and liquid instruments. Working capital at June 30, 2021 was \$32.3 million (March 31, 2021 - \$38.0 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 Facility for general corporate purposes including, but not limited to working capital expenditures, research and development expenditures, and clinical trial expenditures. As of June 30, 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 the date of this report, approximately \$24.0 million (US\$19.2 million) remained available under the ATM Facility.

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 marketing authorization 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 June 30, 2021 the grant with CPRIT was substantially complete.

Of the US\$14.1 million grant approved by CPRIT, Medicenna has received US\$13.6 million from CPRIT, of which US\$0.9 million was received in the quarter ended June 30, 2021. The Company received the remaining US\$0.5 million subsequent to the quarter end and recorded it as a receivable as at June 30, 2021. The US\$1.4 million (C\$1.8 million) was recorded as a reduction in research and development expenses in the quarter ended June 30, 2021.

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%. At this time the royalty is not probable and therefore no liability has been recorded. In addition, the Company must maintain a presence in Texas for three years following completion of the grant.

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 June 30, 2021, the Company's intangible assets have a remaining capitalized net book value of \$0.07 million.

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 June 30, 2021, the Company is obligated to pay the following:

- Patent licensing costs due within 12 months totaling \$161 thousand.
- Patent licensing costs, including the above, due within the next five years totaling \$1.5 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\$2.0 million in sales milestones.
- A liquidity payment of \$323 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 June 30, 2021, we have the following obligations to make future payments, representing contracts and other commitments that are known and committed:

Contractual obligations	Payments Due by Period			
	Less than 1 year	1-3 years	3-5 years	Total
Patent licensing costs, minimum annual royalties per license agreements	\$ 161	\$ 805	\$ 570	\$ 1,536
Lease payments	\$ 23	\$ -	\$ -	\$ 23
Liquidity event payment	\$ 323	\$ -	\$ -	\$ 323

The Company cannot reasonably estimate future royalties which may be due upon the marketing authorization 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 \$9.6 million, of which \$5.8 million has been paid or accrued at June 30, 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, Ms. Rosemina Merchant, Chief Development Officer, Dr. Mann Muhsin, Chief Medical Officer, and Dr. Kevin Moulder, Chief Scientific Officer) and directors, received the following compensation for the following periods:

	Three months ended June 30, 2021	Three months ended June 30, 2020
	\$	\$
Salaries and wages	253	223
Board fees	72	29
Stock option expense	207	158
	532	410

As at June 30, 2021, the Company had trade and other payables in the normal course of business, owing to directors and officers of \$0.2 million (2020: \$0.1 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 audited consolidated financial statements for the year ended March 31, 2021 and available on SEDAR (www.sedar.com) and EDGAR at www.sec.gov.

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) and EDGAR at www.sec.gov.

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 June 30, 2021, 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 (June 30, 2020 - \$0.4 million) increase or decrease in loss and comprehensive loss for the three months ended June 30, 2021.

Balances in thousands of US dollars are as follows:

	June 30, 2021	March 31, 2021
	US\$	US\$
Cash and cash equivalents	7,897	9,593
Accounts payable and accrued liabilities	(3,516)	(2,147)
	4,381	7,446

(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 June 30, 2021, the following expenditures have been incurred (in thousands of Canadian dollars):

Item	Amount to Spend	Spent to Date	Adjustments	Remaining to Spend
Preclinical development	\$ 3,300	\$ 3,300	–	–
Manufacturing of clinical batch	\$ 4,400	\$ 4,400	–	–
Clinical development	\$ 13,150	\$ 1,186	–	\$ 11,964
General corporate and working capital purposes	\$ 11,350	\$ 7,567	–	\$ 3,783
Total	\$ 32,200	\$ 16,453	\$ –	\$ 15,747

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 three month period ended June 30, 2021, no shares were sold under the ATM Facility. As at the date of this report, there is approximately US\$19.2 million (\$24 million) available to use 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.

Please refer to our MD&A and annual information form for the year ended March 31, 2021 for a complete discussion of risks and uncertainties.

- We have no sources of product revenue and will not be able to maintain operations and research and development without sufficient funding.
- We are highly dependent upon certain key personnel and their loss could adversely affect our ability to achieve our business objective.
- If we breach any of the agreements under which we license rights to product candidates or technology from third parties, we can lose license rights that are important to our business. Our current license agreements may not provide an adequate remedy for breach by the licensor.
- Clinical drug development involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results and our product candidates may not have favourable results in later trials or in the commercial setting.
- There is no guarantee that FDA will grant 510(k) clearance or pre-market approval of a delivery device needed to administer MDNA55.
- We are subject to the restrictions and conditions of the CPRIT agreement. Failure to comply with the CPRIT agreement may adversely affect our financial condition and results of operations.
- If our competitors develop and market products that are more effective than our existing product candidates or any products that we may develop, or obtain marketing approval before we do, our products may be rendered obsolete or uncompetitive.
- We rely 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 our business.
- We rely on contract manufacturers over whom we have limited control. If we are subject to quality, cost or delivery issues with the preclinical and clinical grade materials supplied by contract manufacturers, business operations could suffer significant harm.
- Our future success is dependent primarily on the marketing authorization of a single product. MDNA55 is in the mid stages of clinical development and MDNA11 in pre-clinical development and, as a result, we will be unable to predict whether we will be able to profitably commercialize our product.
- We will be subject to extensive government regulation that will increase the cost and uncertainty associated with gaining marketing authorization of its product candidates.
- Negative results from clinical trials or studies of third parties and adverse safety events involving the targets of our products may have an adverse impact on future commercialization efforts.
- If we are unable to enroll subjects in clinical trials, we will be unable to complete these trials on a timely basis.
- We face the risk of product liability claims, which could exceed our insurance coverage and produce recalls, each of which could deplete cash resources.
- We may not achieve our publicly announced milestones according to schedule, or at all.
- Changes in government regulations, although beyond our control, could have an adverse effect on our business.
- Our significant shareholders may have material influence over our governance and operations.
- Our discovery and development processes involve use of hazardous and radioactive materials which may result in potential environmental exposure.
- If we are unable to successfully develop companion diagnostics for our therapeutic product candidates, or experience significant delays in doing so, we may not achieve marketing approval or realize the full commercial potential of our therapeutic product candidates.

- 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.
- 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.
- Our success depends upon our ability to protect our intellectual property and its proprietary technology.
- Our potential involvement in intellectual property litigation could negatively affect our business.
- Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them.
- Product liability claims are an inherent risk of our business, and if our clinical trial and product liability insurance prove inadequate, product liability claims may harm our business.
- Our common share price has been volatile in recent years, and may continue to be volatile.
- 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.
- We are subject to foreign exchange risk relating to the relative value of the United States dollar.
- Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.
- Any failure to maintain an effective system of internal controls may result in material misstatements of our consolidated financial statements or cause us to fail to meet the reporting obligations or fail to prevent fraud; and in that case, shareholders could lose confidence in our financial reporting, which would harm the business and could negatively impact the price of the Common Shares.
- Our internal computer systems, or those used by our contractors or consultants, may fail or suffer security breaches.
- Failure to comply with the U.S. Foreign Corrupt Practices Act, the Canadian Corruption of Foreign Public Officials Act, and other global anti-corruption and anti-bribery laws could subject us to penalties and other adverse consequences.
- If we fail to comply with healthcare laws, we could face substantial penalties and our business, operations and financial conditions could be adversely affected.
- 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.
- We may pursue other business opportunities in order to develop our business and/or products.
- We may acquire businesses or products, or form strategic alliances, in the future, and we may not realize the benefits of such acquisitions.
- Generally, a litigation risk exists for any company that may compromise our ability to conduct our business.
- Our success depends on our ability to effectively manage our growth.
- If we are treated as a passive foreign investment company, United States shareholders may be subject to adverse U.S. federal income tax consequences.
- Our operations could be adversely affected by events outside of our control, such as natural disasters, wars or health epidemics.
- It may be difficult for non-Canadian investors to obtain and enforce judgments against us because of our Canadian incorporation and presence.
- As a foreign private issuer under U.S. securities laws, we are subject to different U.S. securities laws and rules than a domestic U.S. issuer, which may limit the information publicly available to our U.S. shareholders.
- We may lose foreign private issuer status in the future, which could result in significant additional costs and expenses.

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 three months ended June 30, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

As of June 30, 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:

	Number
Common shares	53,742,255
Warrants	3,806,457
Stock options	4,462,604
Total	62,011,316

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 and EDGAR at www.sec.gov.