# ANNUAL INFORMATION FORM

## FOR THE YEAR ENDED MARCH 31, 2022

Unless otherwise indicated, all information in the Annual Information Form is presented as at and for the year ended March 31, 2022

**June 21, 2022**

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## INTRODUCTION AND FORWARD-LOOKING STATEMENTS

The information contained in this Annual Information Form (this "AIF") is stated as at March 31, 2022, unless otherwise indicated.

All references in this AIF 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.

All amounts are in Canadian dollars, unless otherwise indicated.

This AIF contains forward-looking statements within the meaning of applicable securities laws. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on current beliefs, expectations or assumptions regarding the future of the business, future plans and strategies, operational results and other future conditions of the Company. 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 other than statements of historical fact regarding the prospects of the Company's industry or its prospects, plans, financial position or business strategy may constitute forward-looking statements and can generally be identified by the use of forward-looking 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.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that predictions, forecasts, projections and other forward-looking statements will not be achieved. The Company cautions readers not to place undue reliance on these statements as a number of important factors could cause the actual results to differ materially from the beliefs, plans, objectives, expectations, anticipations, estimates and intentions expressed in such forward-looking statements. Risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company, as applicable, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information and statements include, but are not limited to, the risks described under the heading "Risk Factors" in this AIF.

Forward-looking statements in this AIF include, but are not limited to, statements with respect to:

- the lack of product revenue and inability to continue operations and research and development without sufficient funding;
- the Company's requirements for, and its ability to obtain, future funding on favourable terms or at all;
- the Company's history of losses and expectations of future losses;
- the Company's inability to complete development of or the inability to commercialize the Company's product candidates, which are in the early stages of development;
- the expense, length, and uncertainty of clinical drug development programs;
- the inability to achieve publicly announced milestones according to schedule, or at all;

- the risk that competitors may develop and market products that are more effective that the Company's product candidates or that the products developed by competitors may render the Company's product candidates obsolete or uncompetitive;
- the Company's inability to secure a partnership for MDNA55;
- the costs and uncertainty associated with extensive government regulation;
- the potential negative results from clinical trials or studies, or adverse safety events involving the targets of the Company's products;
- the risk of product liability claims;
- the Company's inability to enroll subjects in clinical trials or complete clinical trials on a timely basis
- the failure of our product candidates to receive the marketing approval or market acceptance necessary for commercial success;
- the potential for environmental exposure to hazardous or radioactive materials that are used in the Company's discovery and development process;
- the disruption in the availability of key components for ongoing clinical studies that could delay clinical studies, product testing, and regulatory approval of the Company's product candidates
- the Company's reliance on third parties for the planning, conduct, and monitoring of preclinical and clinical trials;
- the Company's reliance on contract manufacturers over whom the Company has limited control;
- the loss of license rights due to breach of license agreements;
- the conditions and restrictions of the Cancer Prevention Research Institute of Texas agreement;
- the ability to protect the Company's intellectual property and proprietary technology;
- the potential involvement in intellectual property litigation;
- the risk that third-parties to whom we rely for product development may not adequately protect the Company's trade secrets;
- the risk of product liability claims;
- the limitations surrounding intellectual property rights
- the volatility in the price of our Common Shares
- the dilution of investor's voting power and reductions in earnings per share owing to future issuances of equity or the conversion of securities into Common Shares;
- the fact that future profits will likely be used for the continued growth of the Company's business and not for the payment of dividends
- the Company's treatment as a passive foreign investment company and potential adverse U.S. federal income tax consequences associated with such treatment;
- the difficulty United States investors may face in bringing actions against the Company for violations of U.S. federal or state securities laws and challenges in enforcing the judgments of U.S. courts against the Company and its directors and executive officers;
- the Company's status as a foreign private issuer under applicable U.S. securities laws;
- the Company could lose its s status as a foreign private issuer;
- changes in government regulations that could impact our business and operations;
- failure to comply with the U.S. Foreign Corrupt Practices Act, the Canadian Corruption of Foreign Public Officials Act and other global corruption and anti-bribery laws;
- a failure to comply with healthcare laws;
- the ability of the Company's significant shareholders to assert a material influence over the Company's operations and governance;

- the adverse impact of factors outside our control, such as global health pandemics, natural disasters, geopolitical conflict and macroeconomic challenges;
- the Company's ability to successfully manage its growth;
- the failure of any acquired business, product, service, or alliance to yield expected benefits
- the Company's dependence upon certain key personnel, the loss of whom could adversely affect our ability to achieve our business objectives;
- foreign currency exchange risks relating to the relative value of the United States dollar;
- the failure of our disclosure controls and procedures to detect all errors or prevent all incidences of fraud;
- the failure to maintain an effective system of internal controls;
- the vulnerability of the computer and information systems of the Company, its consultants and contractors, and third-parties on which the Company relies, to security breaches or failure; and
- the pursuit of opportunities for further research and development or additional business opportunities.

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 AIF does not include a full assessment or reflection of the potential continuing and future impacts of the COVID-19 pandemic and the efforts to mitigate it and the ongoing and developing indirect global and regional economic impacts. The Company continues to experience uncertainty related to the on-going COVID-19 pandemic. 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, contract development and manufacturing organizations and suppliers to assess any impacts and risks. The Company believes that ongoing or new COVID-19 restrictions could impact the planned clinical development timelines of the MDNA11 Phase 1/2a clinical trial including patient recruitment, although the Company 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.

Although the forward-looking statements contained in this AIF 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 AIF 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.

## CORPORATE STRUCTURE

### *Corporate Information*

Medicenna Therapeutics Corp., formerly A2 Acquisition Corp. ("A2"), is the resulting issuer following a "three-cornered" amalgamation involving A2, 1102209 B.C. Ltd., a wholly owned subsidiary of A2 incorporated pursuant to the *Business Corporations Act* (British Columbia) ("BCBCA"), and Medicenna Therapeutics Inc. ("MTI"), completed on March 1, 2017.

A2 was formed by articles of incorporation under the *Business Corporations Act* (Alberta) on February 2, 2015, and following its initial public offering, was a capital pool company ("CPC") listed on the TSX Venture Exchange ("TSXV"). As a CPC, A2 had no assets other than cash and did not carry on any operations other than identifying and evaluating opportunities for the acquisition of an interest in assets or businesses for the completion of a qualifying transaction.

On March 1, 2017, A2 completed its qualifying transaction in accordance with the policies of the TSXV by way of reverse takeover of A2 by the shareholders of MTI (the "Qualifying Transaction"). In addition, on March 1, 2017 and prior to the completion of the Qualifying Transaction, the Company amended its articles as a result of (a) implementing a consolidation (the "Consolidation") of its pre-Qualifying Transaction common shares (the "A2 Shares") on the basis of one new common share of the Company (each, a "Common Share") for every fourteen A2 Shares (1:14) and (b) changing its name to Medicenna Therapeutics Corp.

On August 2, 2017 Medicenna graduated to the main board of the Toronto Stock Exchange ("TSX"). On November 13, 2017, Medicenna continued under the *Canada Business Corporations Act* ("CBCA").

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 Medicenna Australia PTY Ltd (Australia).

On April 15, 2021, the Company set up a wholly owned subsidiary Medicenna Therapeutics UK Limited (United Kingdom), which was dissolved on March 8, 2022.

Medicenna's head and registered office is located at 2 Bloor Street W, 7th Floor, Toronto, Ontario, M4W 3E2.

### *Intercorporate Relationships*

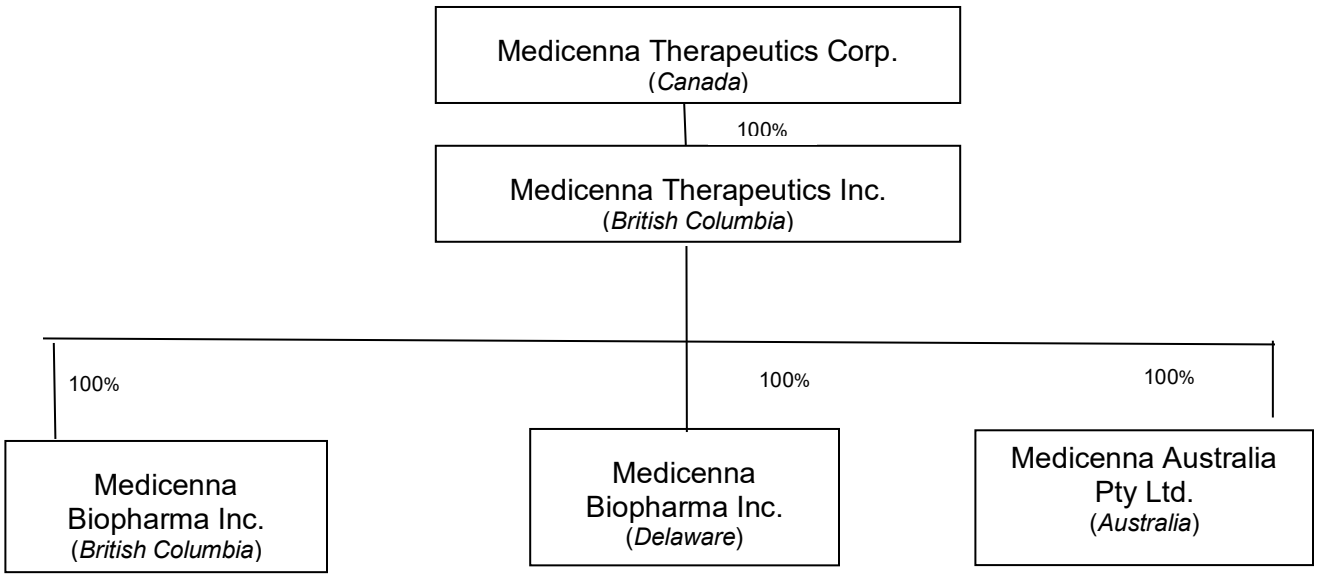
MTI is a wholly owned subsidiary of Medicenna and was incorporated pursuant to the provisions of the BCBCA on October 31, 2011. MTI has three wholly owned subsidiaries: Medicenna Biopharma Inc. (British Columbia), Medicenna Biopharma Inc. (Delaware) and Medicenna Australia PTY Ltd (Australia). MTI's head and registered office is located at 2 Bloor Street W, 7th Floor, Toronto, Ontario, M4W 3E2.

Medicenna Biopharma Inc. (British Columbia) was incorporated under the BCBCA on October 5, 2012. Its head and registered office is located 2 Bloor Street W, 7th Floor, Toronto, Ontario, M4W 3E2.

Medicenna Biopharma Inc. (Delaware) was incorporated in the State of Delaware on July 1, 2014. Its registered office is located at 1209 Orange Street, Wilmington, New Castle County, Delaware 19801 and its head office is at 1700 Post Oak Blvd, Suite 600, Houston, Texas 77056.

Medicenna Australia Pty Ltd. was incorporated in Adelaide, South Australia on March 30, 2021. Its registered office is located at Level 5, 63 Pirie Street, Adelaide, SA, 5000.

The following organizational chart demonstrates the corporate structure of the Company:




***Overview of the Business***

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 to 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 diverse platform, each comprised of a pipeline of Superkine candidates in-licensed from Leland Stanford Junior University ("Stanford"). These include the MDNA109, MDNA209, MDNA413 and MDNA132 platforms that consist of IL-2 agonists, IL-2 antagonists,

dual IL-4/IL-13 antagonists and IL-13Ralpha2 selective superkines, respectively. Additional assets from Stanford also include partial agonists of IL-2 and several super-agonists of IL-4 and IL-13.

The most advanced of these programs is the MDNA109 platform which is a genetically engineered IL-2 Superkine designed to specifically bind to CD122 (IL-2Rβ) with high affinity. To further enhance its selectivity, 2 additional mutations (FEAA) were incorporated in MDNA109 to abolish binding to CD25. To improve the pharmacokinetic ("PK") properties of the highly selective version of MDNA109 (MDNA109FEAA), it was genetically fused to inactive protein scaffolds such as the Fc domain of IgG1 (MDNA19) or human albumin (MDNA11) effectively increasing the size of the Superkine and improving its half-life in order to avoid frequent daily dosing required for Proleukin®.

We believe that, 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 the clinical development of MDNA11 as it is a more promising molecule and has been selected as the lead IL-2 Superkine candidate. Medicenna initiated the Phase 1/2 ABILITY Study (A Beta-only IL-2 ImmunoTherapY Study) with MDNA11 (the "ABILITY Study") in the third calendar quarter of 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 incorporate two distinct but synergistic functions into one molecule: a BiSKIT™.

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 continue to pursue a strategic partnership to facilitate MDNA55's further development and commercialization.

## GENERAL DEVELOPMENT OF THE BUSINESS

*Year ended March 31, 2020*

On April 30, 2019, the Company announced completion of enrolment in the MDNA55 Phase 2b clinical study for the treatment of rGBM.

On May 1, 2019, Medicenna received US$0.8 million from the Cancer Prevention Research Institute of Texas for reimbursement of past expenses.

On June 3, 2019, a poster entitled “MDNA55: A Locally Administered IL4 Guided Toxin as a Targeted Treatment for Recurrent Glioblastoma” was presented at the 55th Annual Meeting of the American Society of Clinical Oncology (“ASCO”) held in Chicago, IL. The presentation by Dr. Dina Randazzo, of Duke University School of Medicine and a Principal Investigator, focused on the development of a new biomarker test for the IL4R that may enable better selection and superior treatment outcomes for patients with rGBM.

On June 18, 2019, Dr. Fahar Merchant presented results from the Phase 2b MDNA55 clinical trial for rGBM at the Inaugural Immuno-Oncology Pharma Congress in Boston, MA. These data were subsequently updated as described below.

On June 20, 2019, Medicenna presented a poster entitled “Engineering a long-acting CD122 biased IL-2 superkine displaying potent anti-tumoral responses”. The presentation highlighted pre-clinical data demonstrating that MDNA109-LA (a precursor of MDNA11) when combined with checkpoint inhibitors (a) demonstrated durable tumor control with strong memory response; (b) enhancing activation of naive CD8 T cells and NK cells (responsible for attacking tumor cells) and (c) attained long term tumor control with fewer treatment cycles and a less frequent dosing regimen.

On June 26, 2019, the Company reported preclinical data on MDNA55 which showed promising results in ovarian cancer models.

On July 9, 2019, Medicenna announced the receipt of US$1.9 million from the Cancer Prevention Research Institute of Texas reimbursement of past expenses.

On September 24, 2019, Medicenna announced the appointment of Ms. Karen Dawes to our board of directors. Ms. Dawes is an experienced and highly regarded leader in the life sciences industry with extensive strategic expertise and considerable commercial background.

On September 25, 2019, the Company presented updated efficacy results from the Phase 2b clinical trial of MDNA55 in the first 33 rGBM patients enrolled in the study which were subsequently updated as described below.

On September 26, 2019, Medicenna announced the publication of a peer-reviewed article in the August 2019 edition of *Nature Communications*, presenting results of a study by independent third-party researchers supporting the potential efficacy of Medicenna’s IL-2 Superkine platform, MDNA109.

On September 30, 2019, the Company announced the presentation of new preclinical data from its IL-2 Superkine program to support the differentiating characteristics of long-acting MDNA109 variants and their potency *in vitro* and *in vivo* from other long-acting IL-2 programs.

On October 17, 2019, Medicenna completed a public offering raising total gross proceeds of $6.9 million. The Company issued 5,307,693 units at a price of $1.30 per unit, each such unit consisting of one Common Share and one-half common share purchase warrant. Each such whole warrant is exercisable at a price of $1.75 until October 17, 2022.

On November 21, 2019, the Company announced new positive results on drug distribution from the Phase 2b clinical trial of MDNA55. Results suggest that implementing new advances in convection-enhanced delivery ("CED"), that were previously not available allows MDNA55 to

bypass the blood-brain barrier and deliver high concentrations of MDNA55 directly to the tumor and the at-risk area immediately surrounding it, without exposure to the rest of the body. Delivering MDNA55 to where it needs to be, along with the ability to continuously monitor distribution using real-time imaging, may allow improvement in drug delivery and maximize tumor coverage.

On November 25, 2019, Medicenna announced the presentation of updated clinical results from the Phase 2b trial of MDNA55, by Dr. John Sampson at the 24th annual meeting of the Society for Neuro-Oncology ("SNO"). Dr. Sampson discussed updated efficacy results from the Phase 2b clinical trial of MDNA55 in rGBM patients using the IL4R as an immunotherapy target.

On December 12, 2019, Medicenna announced a presentation by Dr. Fahar Merchant at the Inaugural Glioblastoma Drug Development Annual Summit. The presentation reported subgroup analysis from the first 40 patients treated with MDNA55 in a Phase 2b clinical trial for patients with rGBM.

On January 8, 2020, the Company announced receipt of $1.3 million in proceeds from the exercise of previously issued warrants.

On January 13, 2020, Medicenna announced results from a retrospective study of subjects with rGBM who matched eligibility requirements of subjects enrolled in the MDNA55-05 clinical trial (Synthetic Control Arm, "SCA") receiving standard therapies and compared their survival versus subjects treated with MDNA55, in the Phase 2b rGBM clinical. The SCA comprised 81 rGBM patients receiving standard therapies including Avastin®, lomustine and temozolomide ("TMZ") with similar baseline features as patients treated in the MDNA55 trial such as age, tumor size, ineligibility for surgery, lack of isocitrate dehydrogenase ("IDH") mutations, IL4R expression and other parameters known to affect survival. When comparing IL4R High groups across the two populations, a 150% survival advantage was seen in patients who received MDNA55.

On March 25, 2020, Medicenna presented preclinical data, including NHP data from its IL-2 Superkine program, highlighting data from the long-acting variant MDNA19, engineered to have enhanced binding to CD122 without binding to CD25. This may allow MDNA19 to specifically activate naive CD8 T cells and NK cells with minimal stimulation of regulatory T cells ("Tregs"), thereby circumventing toxicity and demonstrating potential for best-in-class features which was supported by the NHP data.

*Year ended March 31, 2021*

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 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 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 (≥ 180 μg) 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 μg). 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 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 NHP for MDNA11.

On August 24, 2020, the Common Shares 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 End of Phase 2 ("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 32nd 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.

On October 26, 2020, we also announced a Late Breaking Abstract poster presentation at the 32nd 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 to10%) 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"). MHRA 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 calendar 2021 in order to commence first in human studies with MDNA11 in the UK.

On December 9, 2020, we presented at an oral session at the 2nd 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 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, 2022, US$16 million ($20.5 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.

*Year ended March 31, 2022*

On April 12, 2021, Medicenna 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.

On May 7, 2021, Medicenna announced the peer-reviewed publication of clinical data from the MDNA55 Phase 2b rGBM trial in the journal Clinical Cancer Research entitled "Modified RANO, Immunotherapy RANO, and Standard RANO Response to Convection-enhanced Delivery of IL4R-targeted Immunotoxin MDNA55 in Recurrent Glioblastoma.

On June 23, 2021, Medicenna announced submission of a clinical trial application to the Human Research Ethics Committee (HREC) in Australia to initiate a Phase 1/2 ABILITY Study (A Beta-only IL-2 ImmunoTherapY Study) of MDNA11 to assess the safety, PK, PD and anti-tumor activity of MDNA11 in patients with advanced solid tumors.

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 of the total US$14.1 million grant was received in August 2021. Accordingly, the grant has been fully received as at March 31, 2022.

On September 14, 2021, Medicenna announced that the first patient was dosed in the MDNA11 Phase 1/2 ABILITY Study.

On September 20, 2021, Medicenna announced that the US Patent and Trademark Office ("USPTO") has issued its patent, titled "Superagonists and Antagonists of Interleukin-2." The patent provides intellectual property protection for methods of treating a wide range of cancers specified in the claims with IL-2 variants such as MDNA11.

On September 23, 2021, Medicenna announced the election of John H. Sampson, MD, PhD, MBA, a world-renowned clinician-scientist, to its board of directors.

On October 7, 2021, Medicenna announced the presentation of new preclinical data from its MDNA11 program during a virtual poster session at the AACR-NCI-EORTC Virtual International Conference on Molecular Targets and Cancer Therapeutics.

On October 27, 2021, Medicenna announced that the FDA had allowed the Company to expand the Phase 1/2 ABILITY Study at clinical trial sites in the United States, under an Investigational New Drug ("IND") application.

On November 18, 2021, Medicenna announced that Dr. John H. Sampson, a Director of Medicenna's board of directors, received The Abstract Award for Excellence in Clinical Trials in connection with an oral presentation on MDNA55, which was delivered by Dr. Sampson at the 26th Annual Meeting of the SNO.

On December 17, 2021, Medicenna announced that Health Canada had approved the expansion of the Phase 1/2 ABILITY Study to clinical trial sites in Canada.

On December 22, 2021, Medicenna announced preliminary data from the Phase 1/2 ABILITY Study, which were subsequently updated in May 2022.

On January 17, 2022, Medicenna announced the appointment of industry veterans to its Development Advisory Committee, including Mr. Paul Smith, Dr. Bruce Pearce, and Dr. Peter Lloyd who have been instrumental in supporting MDNA11's pre-clinical safety, PK/PD studies, international regulatory filings and designing the Phase 1/2 ABILITY Study.

On January 26, 2022, Medicenna announced the peer-reviewed publication of preclinical data on MDNA11 entitled "Fine-tuned Long-Acting Interleukin-2 Superkine Potentiates Durable Immune Responses in Mice and Non-Human Primate" published in the Journal for ImmunoTherapy of Cancer.

On January 31, 2022, Medicenna announced the formation of its Scientific Advisory Board ("SAB"). The SAB consists of four highly accomplished leaders in oncology, immunotherapy and drug development: Sergio Quezada, PhD (Chairman), Burkhard Becher, PhD, David Mooney, PhD, and William Redmond, PhD.

On March 3, 2022, Medicenna announced the formation of its Clinical Advisory Board (CAB) comprised of Paolo Ascierto, M.D., Lillian Siu, M.D., FRCPC, and Hussein Tawbi, M.D., PhD, and the appointment of Dr. Kapil Dhingra as a Strategic Advisor.

*Subsequent Events*

On April 8, 2022, Medicenna announced new preclinical data highlighting the potent anti-tumor efficacy of the next-generation BiSKIT, anti-PD1-MDNA109FEAA, an anti-PD1 antibody fused to an IL-2 Superkine, during a poster session at the American Association for Cancer Research ("AACR") Annual Meeting.

On April 8, 2022, Medicenna announced new preclinical data on its long-acting dual IL-4/IL-13 super-antagonist, Fc-MDNA413, during a poster session at the AACR Annual Meeting.

On May 2, 2022, Medicenna announced new clinical data from the Phase 1/2 ABILITY Study. Subjects treated in the third dose cohort (30 µg/kg of MDNA11 every 2 weeks) had a 17-fold and 10-fold increase in Ki67+ expression relative to baseline by CD8+ T and NK cells, respectively; A dose-dependent expansion of CD8+ T and NK cells of >3-fold and >6-fold over baseline, respectively; preferentially increased anti-cancer CD8+ T cells over pro-tumor Treg cells was observed following treatment with MDNA11, as the mean peak CD8+ T cell / Treg ratio increased by 2.6 fold over baseline; preferentially increased anti-cancer NK cells over Treg cells was observed after treatment with MDNA11, as the mean peak NK cell / Treg ratio increased 4.4-fold over baseline.

On May 11, 2022 , Medicenna announced that clinical data from the Phase 1/2 ABILITY Study, were featured in a poster presentation at the 9th Annual Frontiers in Cancer Immunotherapy Meeting organized by the New York Academy of Sciences. Key findings included: a dose-dependent expansion of cancer fighting lymphocytes (>200% increase at 30 µg/kg) and no significant increases in eosinophil count when compared to baseline after treatment with MDNA11; Unlike with IL-2, there was no increase in ICOS+ Treg cells after treatment with MDNA11. ICOS+ Treg cells are highly immunosuppressive and associated with lack of response to high dose IL-2 immunotherapy; Granulysin expressing immune cells also increased by 3-fold in a dose-dependent manner. Granulysin is a potent agent causing cancer specific cell death and is associated with better patient outcomes.

On June 9, 2022, Medicenna announced that the USPTO has issued its patent, titled“Interleukin-4 Receptor-Binding Fusion Proteins and Uses Thereof.” The patent provides intellectual property protection for composition and methods of treating degenerative diseases via administration of a fusion protein comprising an IL-4 or IL-13 Superkine and an anti-apoptotic Bcl-2 family polypeptide.

### *Significant Acquisitions*

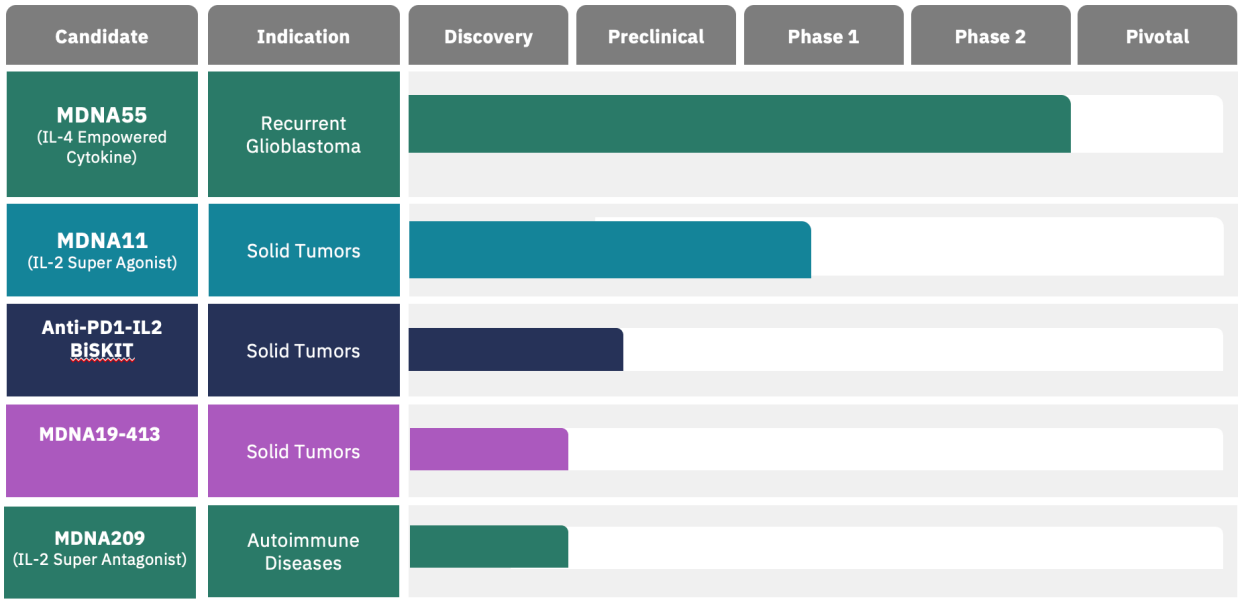
Except as set forth herein, the Company has not completed any significant acquisitions for which disclosure would be required under Part 8 of National Instrument 51-102 as at the date hereof.

## NARRATIVE DESCRIPTION OF THE BUSINESS

### *Overview*

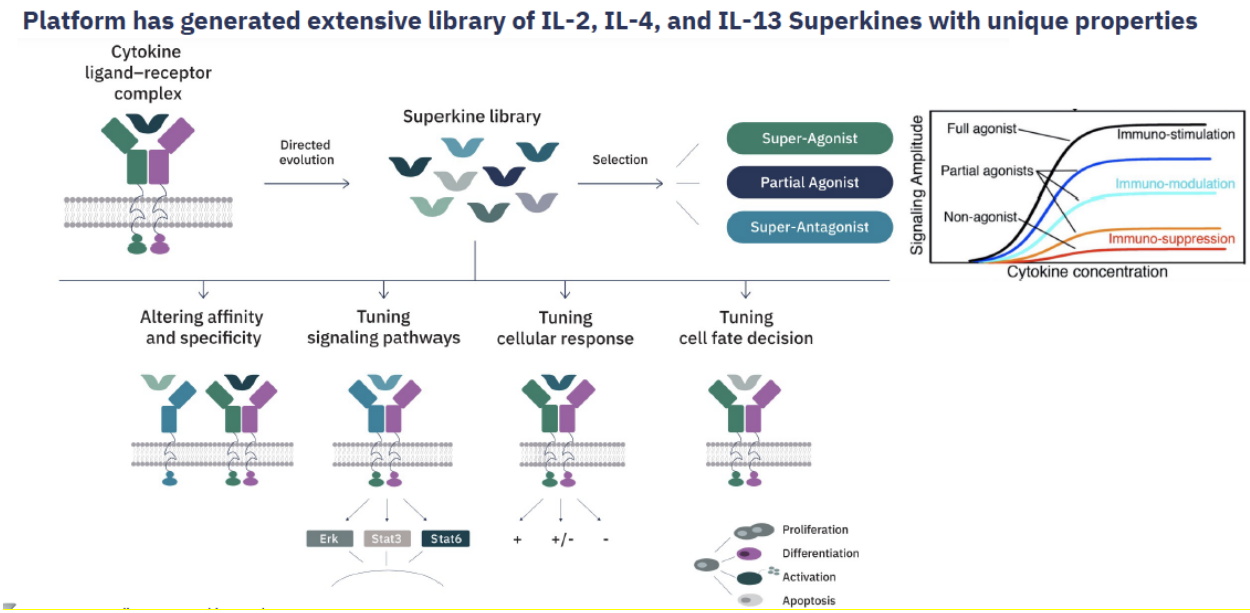
Please refer to ‘Overview of the Business’ section above.

### *OUR PRODUCT CANDIDATES*




## *Superkines*

Developed by scientists at Stanford, Medicenna has exclusively licensed a of 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. Compared to naturally occurring cytokines – that bind to multiple receptor types on many cell types – Superkines are engineered with unique specificity toward defined target cell subsets to enable precise activation or inhibition of relevant immune cells in order to improve therapeutic efficacy and safety. Superkines can also be fused with a large variety of proteins, antibodies and even other Superkines to incorporate two synergistic mechanisms of action into one molecule: a BiSKITs$^{TM}$ – (Bi-functional SuperKine ImmunoTherapies).

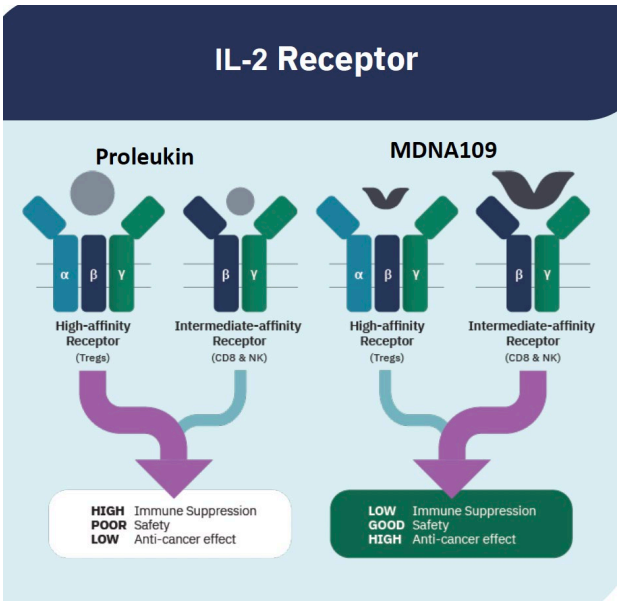



***IL-2 Superkines***

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 by virtue of its ability to bind to the IL-2 receptor.

The IL-2 receptor is composed of three different subunits, IL-2Rα (also known as CD25), IL-2Rβ (CD122) and IL-2Rγ (CD132). The arrangement of these different proteins determines the response to IL-2 signaling.

The IL-2β and IL-2γ components together make a receptor capable of binding IL-2, but only moderately so. When all three components are together, including IL-2Rα, 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 intermediate affinity receptor, composed of just the IL-2β and IL-2γ 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, in particular MDNA11 which is currently enrolling patients in the Phase 1/2 ABILITY study.

Like the MDNA109 platform, MDNA209 based therapeutics bind with exceptional affinity to IL-2Rβ, but have varying degrees of reduced affinity towards the common IL-2γ receptor which in turn blocks signaling and activation of NK cells and effector CD8 T cells. Therefore, we believe that the MDNA209 platform can offer 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.

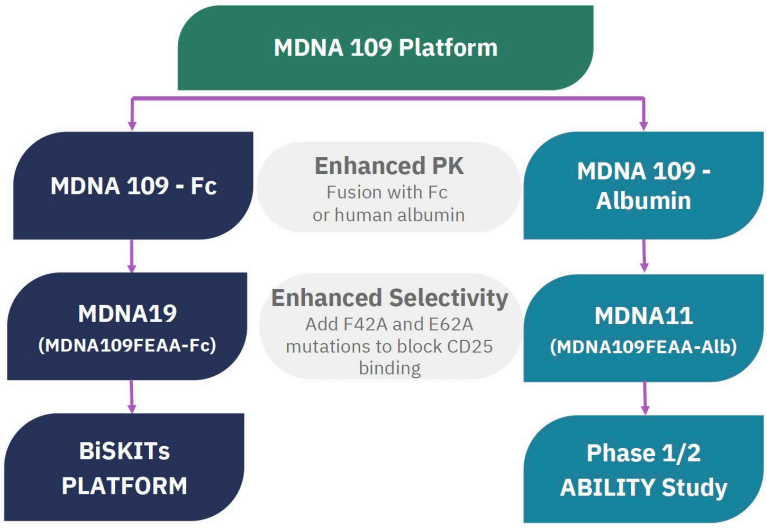
***MDNA11***

MDNA109 (a precursor to MDNA19 and MDNA11) is an enhanced version of IL-2 that binds up to 200 times more effectively to IL-2Rβ, thus greatly increasing its ability to activate and proliferate the immune cells needed to fight cancer. Because it preferentially binds IL-2Rβ and not the receptor containing IL-2Rα, 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 these fusions have better pharmacokinetic properties enabling less frequent dosing without sacrificing potential 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 while MDNA19 is being used in Medicenna's BiSKIT program. MDNA11 is currently enrolling patients in the Phase 1/2 ABILITY study in Australia, Canada and the United States for the treatment of various solid tumors.




| | Enhanced affinity for IL-2Rβ | IL-2Rα affinity abolished |
|---|---|---|
| | $K_D$(nM) | $K_D$(nM) |
| rhIL-2 | 210 | 24 |
| MDNA11 | 6.6 | No binding |

On February 6, 2019, the Company presented results on MDNA109 and its long acting variants in a podium presentation entitled "Putting Pedal to the Metal: Combining IL-2 Superkine (MDNA109) with Checkpoint Inhibitors" at the 5th Annual Immuno-Oncology 360° Meeting in New York, NY. The results presented have subsequently been updated as described below.

Medicenna presented a poster entitled "Engineering a long-acting CD122 biased IL-2 superkine displaying potent anti-tumoral responses" at the Inaugural Immuno-Oncology Pharma Congress, held from June 18-20, 2019 during World Pharma Week in Boston, MA. The data presented at this conference were subsequently updated as described below.

On September 26, 2019, Medicenna announced the publication of a peer-reviewed article in the August 2019 edition of *Nature Communications* presenting results of a study by independent third-party researchers supporting the efficacy of Medicenna's IL-2 Superkine platform, MDNA109. The publication, titled "A next-generation tumor-targeting IL-2 preferentially promotes tumor infiltrating CD8+ T cell response and effective tumor control", describes the safety, efficacy, pharmacokinetics, immunogenicity results as well as efficacy profile in different tumor models of long-acting variants of MDNA109 including fusions to antibodies to create tumor targeted immunocytokines. The work reported in the publication is covered by Medicenna's patents and patents in-licensed by the Company.

On September 30, 2019, Medicenna announced the presentation of preclinical data to support the differentiating characteristics of long-acting MDNA109 variants and their potency *in vitro* and *in vivo* from other long-acting IL-2 programs.

On March 25, 2020, Medicenna announced preclinical data, including NHP data from MDNA19, 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 demonstrating a dose-dependent upregulation of Ki67 in CD8 T cells lasting for almost two weeks post-MDNA19 administration, with no apparent toxicity as well as an increase in the absolute number of circulating CD8 T cells in the absence of Treg and eosinophil stimulation.

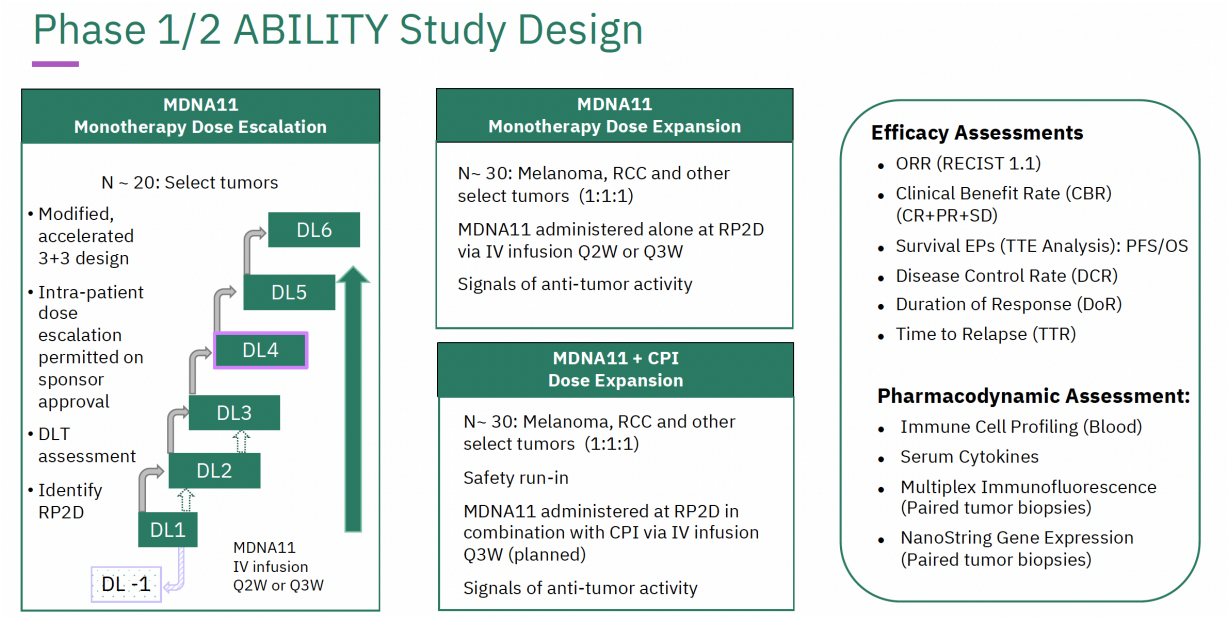
On May 29, 2020, Medicenna announced the virtual presentation of data on MDNA11 at the 2020 ASCO Annual Meeting. The poster presentation focused on encouraging data in NHP for MDNA11 and demonstrated that MDNA11 had better in-vitro and in-vivo characteristics than MDNA19 and was therefore selected as the lead candidate to move into clinical development.

On October 26, 2020, we announced a poster presentation at the 32nd 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.

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 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.

On June 23, 2021, we announced that we had submitted a clinical trial application to a Human Research Ethics Committee in Australia to initiate a Phase 1/2 clinical study of MDNA11. Medicenna's Phase 1/2 ABILITY Study is designed to assess the safety, PK, 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 includes 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 explore the pan-tumor potential of MDNA11. The study also permits alternative dosing schedules, as well as options for intra-patient dose escalation.




On September 14, 2021, Medicenna announced that it had dosed the first patient in the Phase 1/2 ABILITY Study.

On September 20, 2021, Medicenna announced that the USPTO issued U.S. Patent No. 11,117,943, titled "Superagonists and Antagonists of Interleukin-2." The patent provides intellectual property protection for methods of treating a wide range of cancers specified in the claims with IL-2 variants such as MDNA11, which is Medicenna's selective, long-acting and novel IL-2 super-agonist. The patent's term extends into at least 2032, without accounting for any potential extensions.

On October 7, 2021, Medicenna announced the presentation of new MDNA11 preclinical data at the AACR-NCI-EORTC Annual International Meeting. Data presented in the poster were from murine studies evaluating the anti-tumor activity of MDNA11 as monotherapy and in combination with anti-PD1 checkpoint inhibition in MC38 colon cancer model and NHP studies evaluating safety, PK, and PD of MDNA11.

On October 27, 2021, Medicenna announced that the FDA allowed it to proceed with the Phase 1/2 ABILITY Study and begin enrolling patients in the United States under its IND.

On December 17, 2021, Medicenna announced that Health Canada approved the expansion of the Phase 1/2 ABILITY Study to clinical trial sites in Canada.

On December 22, 2021, Medicenna announced preliminary data from the Phase 1/2 ABILITY (study of MDNA11, the Company's selective, long-acting and novel IL-2 super-agonist). This data was subsequently updated in May 2022.

On January 26, 2022, Medicenna announced the peer-reviewed publication of preclinical data on MDNA11. The paper, which was published in the Journal for ImmunoTherapy of Cancer, is entitled, "Fine-tuned Long-Acting Interleukin-2 Superkine Potentiates Durable Immune Responses in Mice and Non-Human Primate."

Key data and conclusions from the paper include:

***In vitro studies:***

- MDNA11 demonstrated a 30-fold increase in binding affinity for IL-2Rβ vs. rhIL-2.
- MDNA11 showed no affinity for IL-2Rα at concentrations up to 2,000 nM MDNA11.
- MDNA11 showed enhanced signaling in anti-cancer T and NK cells and reduced activation of pro-tumor Treg cells when compared to rhIL-2 as shown by 231-fold and 124-fold enhancements in $CD8^+$/Treg and NK/Treg pSTAT $EC_{50}$ ratios, respectively.

***Murine studies:***

- The terminal half-life of MDNA11 in mice was 25 times greater than that of rhIL-2.
- Cell depletion studies showed that both, $CD8^+$ T cells and NK cells are important for MDNA11 mediated anti-tumor efficacy.
- There was enhanced activation of $CD8^+$ T cells within the tumors as demonstrated by significant increase in expression of intracellular interferon γ.
- MDNA11 alone or in combination with checkpoint inhibitors generated durable complete responses and provided long-term protection against tumor re-challenge in murine cancer models.

***NHP studies:***

- MDNA11 preferentially induced durable proliferation and expansion of anti-cancer immune effector cells ($CD8^+$ T-cells, NK cells and non-Treg $CD4^+$ T-cells), with limited stimulation of pro-tumor Treg cells.
- Proliferation of anti-cancer immune effector cells remained elevated for at least 7 days following treatment with MDNA11.
- MDNA11 was well tolerated. The main safety observations of reduced activity and diarrhea were primarily observed at the highest dose level following the first dose and were generally transient in nature.

Subsequent to the year end, on May 2, 2022, Medicenna announced new clinical data from the third cohort of the Phase 1/2 ABILITY Study of MDNA11, the Company's long-acting IL-2 super-agonist. Key findings from these initial dose escalation cohorts included:

- There were increases in levels of Ki67+ expression by CD8+ T and NK cells of 17-fold and 10-fold over baseline, respectively, following treatment with MDNA11 in the trial's third dose escalation cohort.
- Dose-dependent and significant expansion of CD8+ T and NK cells at the 30 µg/kg when compared to MDNA11 doses of ≤ 10 µg/kg was observed following MDNA11 treatment. Levels of each cell type increased >3-fold and >6-fold over baseline, respectively.
- There was an increase of anti-cancer CD8+ T cells over pro-tumor Treg cells following MDNA11 treatment, as the mean peak CD8+ T cell / Treg ratio increased by 2.6 fold over baseline.
- There was an increase of anti-cancer NK cells over Treg cells following MDNA11 treatment, as the mean peak NK cell / Treg ratio increased 4.4-fold over baseline.
- MDNA11 continues to be well tolerated. No dose limiting toxicities have been reported in the ABILITY Study in the first 3 cohorts.

Subsequent to the year end, on May 11, 2022 , Medicenna presented additional clinical data from the Phase 1/2 ABILITY Study during a poster presentation at the 9th Annual Frontiers in Cancer Immunotherapy Meeting, organized by the New York Academy of Sciences. Key findings from the new analyses include:

- A dose-dependent expansion of cancer fighting lymphocytes (>200% increase at 30 µg/kg) and no significant increases in eosinophil count when compared to baseline were observed following MDNA11 treatment. Extremely high eosinophil count is associated with severe toxicity and is a known side effect of high-dose recombinant human IL-2 (Proleukin®).
- A potently activated anti-cancer CD8+ T cells by increasing (a) their population by >3-fold, and (b) boosting their activation as shown by increase in both, CD25+ and ICOS+ CD8+ T cells was observed following MDNA11 treatment.
- Unlike with IL-2, there was no increase in ICOS+ Treg cells after treatment with MDNA11. ICOS+ Treg cells are highly immunosuppressive and associated with lack of response to high dose IL-2 immunotherapy.
- MDNA11 has shown a favorable and consistent PK profile following multiple doses suggesting that it may not be generating anti-drug antibodies associated with immunogenicity.
- Granulysin expressing immune cells also increased by 3-fold in a dose-dependent manner. Granulysin is a potent agent causing cancer specific cell death and is associated with better patient outcomes.

An initial update on efficacy data from the dose-escalation portion of the ABILITY Study is expected in 2022.

Medicenna is currently in the process of enrolling patients in the dose escalation portion of the MDNA11 Phase 1/2 ABILITY Study for the treatment of solid tumors. Medicenna has regulatory approval to conduct the study and has opened clinical sites in Australia, Canada and the United States. 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. An initial update on efficacy data from the dose-escalation portion of the ABILITY Study is expected in calendar year 2022. It is expected that the dose escalation portion of the study will be completed in the second half of calendar 2022 with the monotherapy dose expansion initiating in calendar Q4 2022 and the combination arm initiating in calendar 2023.

Additional funding will be required to achieve the Company's business objectives with respect to the completion of the clinical development (Phase 2b and/or 3 clinical trials) and commercialization of MDNA11, if approved. The Company expects the completion of clinical development of MDNA11, if undertaken by the Company, to last until at least 2027, with a projected aggregate cost of approximately $150 million, incremental to the current funds available to the Company. It is anticipated that following the completion of a Phase 1/2 ABILITY study, the Company will either license the program to one or more partners who would continue the clinical development or raise additional capital at that time. Additional time and capital would also be required to obtain pre-market approval for MDNA11 and to complete business development, marketing and other pre-commercialization activities related to commercial launch.

### *IL-2 Superkine Competition*

The development of next-generation IL-2 agonists for cancer immunotherapy is an area of intense interest within the biotechnology industry. The Company is aware of several IL-2 agonists in various stages of development, due to the number of competitors only those listed in the clinical stage of development are noted in the table below.

| Developer | Name | Stage |
|---|---|---|
| Philogen | Darleukin | Phase 3 |
| ImmunityBio Inc | Anktiva | Phase 3 |
| Alkermes | ALKS 4230 | Phase 2 |
| Cue Biopharma | CUE-101 | Phase 2 |
| Sanofi (formerly Synthorx) | THOR-707 | Phase 2 |
| SOTIO Biotech AS | SO C101 | Phase 1 |
| Neoleukin | NL-201 | Phase 1 |
| Anaveon | ANV419 | Phase 1 |
| Synthekine | STK012 | Phase 1 |
| BioNTech | BNT151 | Phase 1 |
| Xilio Therapeutics | XTX202 | Phase 1 |
| Ascendis Pharma | Transcon IL-2 | Phase 1 |
| Aulos | AU-007 | Phase 1 |

Many of the programs in development that are ahead of Medicenna are engineered variants of IL-2 that each attempt to reduce CD25 binding and extend the therapeutic window of native IL-2. To our knowledge, MDNA11 is the only IL-2 product in development where a significantly reduced CD25 binding and an increased CD122 binding have been observed while maintaining greater than 95% sequence homology to native IL-2. In addition to these findings, MDNA11 relies on an Albumin binding designed to increase its half-life to allow for dosing every 2 or 3 weeks rather than PEGylation as many of its competitors. Albumin is known to accumulate in tumors providing MDNA11 with enhanced targeting capabilities.

### **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'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 the 2021 AACR meeting as described below.

On October 26, 2020, we announced a poster presentation at the 32nd 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.

On April 12, 2021, we announced new preclinical data demonstrating the immune modulatory effects of MDNA19-413, an IL-2/IL-13 dual specific cytokine derived from the Company's BiSKITs™ platform. 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-4Rα/IL-13Rα1).

Subsequent to the year end, on April 8, 2022, we announced new preclinical data highlighting the potent anti-tumor efficacy of the next-generation BiSKIT, anti-PD1-MDNA109FEAA, in an electronic poster at the AACR Annual Meeting. Anti-PD1 drugs, such as Keytruda® and Opdivo®, have been approved for a number of cancer indications and have shown to benefit patients by reducing exhaustion of cancer fighting immune cells. By fusing Medicenna's IL-2 Superkine to an anti-PD1, the combined benefits of stimulating cancer fighting immune cells and preventing their exhaustion has the potential to substantially improve patient outcomes. Key data and conclusions from the AACR poster include:

- Anti-PD1-MDNA109FEAA showed no binding to IL-2Rα and a 313-fold increase in binding affinity for IL-2Rβ compared to a wild-type IL-2 fusion protein.
- Human and mouse versions of anti-PD1-MDNA109FEAA showed enhanced signaling in anti-cancer T cells and reduced activation of pro-tumor Treg cells as shown by 169-fold and 155-fold enhancements in CD8/Treg EC50 ratios, respectively.
- Anti-PD1-MDNA109FEAA's potency against the PD1/PDL1 checkpoint was similar to that of control anti-PD1 antibodies.
- Treatment with the anti-PD1-IL-2 BiSKIT led to dose-dependent and statistically significant improvements in tumor growth inhibition and survival compared to co-administration of individual components, namely MDNA19 (MDNA109FEAA-Fc) and anti-PD1 in murine tumor models.

Subsequent to the year end, on April 8, 2022, Medicenna announced new preclinical data on its long-acting IL-13 super-antagonist, Fc-MDNA413, in an electronic poster at the AACR Annual Meeting. Fc-MDNA413 is derived from Medicenna's Superkine platform and comprises of an IL-13 super-antagonist (MDNA413) fused to the Fc domain for half-life extension. Key data and conclusions from the AACR poster included:

- Compared to a fusion protein consisting of a Fc domain linked to wild-type IL13, Fc-MDNA413 is >300-fold more selective for IL-13Rα1 over IL-13Rα2 (a decoy receptor).

- Fc-MDNA413 potently inhibits pro-tumor IL-4/IL-13 mediated pathways, as measured by reductions in pSTAT6 signaling and TF-1 cell proliferation.
- Fc-MDNA413 potently inhibits IL-4 and IL-13 mediated M2a polarization of TAMs, which are known to accumulate in the TME and promote cancer growth and metastasis.
- Fc-MDNA413 inhibits tumor growth as a monotherapy and synergistically when combined with a long-acting IL-2 super-agonist (MDNA19) in a poorly immunogenic murine tumor model.

Medicenna is currently screening and optimizing a variety of IL-2/IL-4/IL-13 superkines as part of our BiSKITs™ platform. We believe that MDNA413's ability to block 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. Additional funding will be necessary to advance one or more of these product candidates into clinical trials.

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.

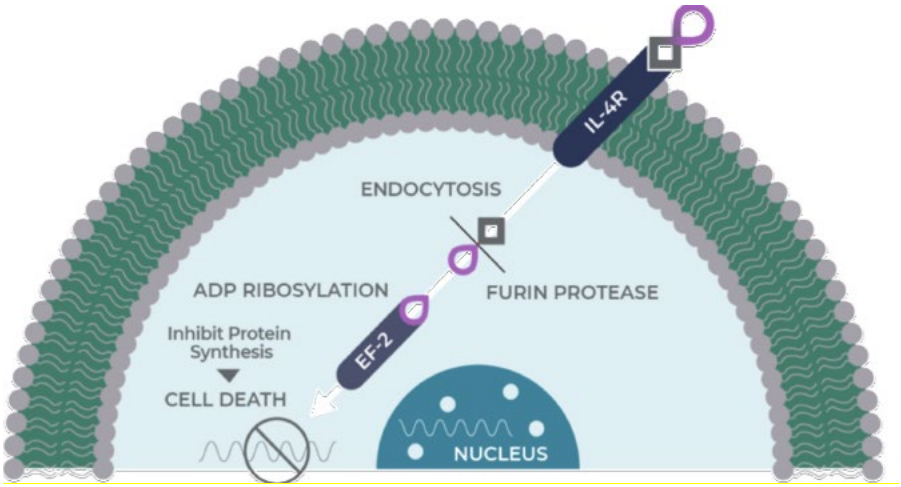
***MDNA55***

MDNA55 is a novel, locally acting, anti-cancer therapeutic being developed by Medicenna for the treatment of tumors of the brain in adults, of which glioblastoma ("GBM") is the most aggressive type. GBM is also the most common form of adult brain cancer, with 27,500 new cases diagnosed each year and the second most common cause of brain cancer deaths. MDNA55 has obtained Fast Track Designation from the FDA as well as Orphan Drug Designation from the FDA and the EMA.

***MDNA55: Structure and Mechanism of Action***

MDNA55 is a targeted fusion protein for the treatment of tumors that over-express the IL4R. MDNA55 (below) consists of a high-affinity circularly permuted variant of IL-4 (cpIL-4) fused with a truncated version of PE.


MDNA55 binds with high affinity to IL-4R overexpressed on the surface of tumor cells and is endocytosed. Following cleavage and activation by furin-like proteases found in the endosome of cancer cells, the catalytic domain of the truncated PE is released into the cytosol where it induces cell death via ADP-ribosylation of elongation factor-2 (below).




Expression levels of IL4R are low on the surface of healthy and normal cells, but increase 10- to 100-fold on cancer cells. This differential expression of IL4R therefore provides MDNA55 a wide therapeutic window.

The IL4R is an ideal target for the development of cancer therapeutics, as it is frequently and intensely expressed on a wide variety of human carcinomas. However, the IL4R target is currently under-exploited. Analysis of over 2,000 biopsies show IL4R over-expression in 20 different cancers affecting over a million cancer patients every year. Furthermore, the IL-4/IL4R bias is a marker for highly aggressive forms of cancer, plays a central role in the establishment of an immunosuppressive TME and is generally associated with poor survival outcomes. By disrupting this pro-tumoral IL-4/IL4R axis, MDNA55 directly interferes with multiple networks that support cancer.

***Glioblastoma***

GBM is an aggressive brain tumor characterized by rapid proliferation of undifferentiated cells, extensive infiltration, and a high propensity to recur. It is a rapidly progressing and universally fatal cancer. First-line treatment for primary GBM generally includes surgical resection of the bulk tumor to the maximal extent possible, followed by radiotherapy, often in combination with chemotherapy consisting of TMZ. The approval of TMZ represented a breakthrough in treatment; the drug offers improvements in overall survival (“OS”), although the actual benefits are modest. When used in combination with radiotherapy following surgery, TMZ provided a median survival of 58.4 weeks for newly diagnosed GBM patients compared to 48.4 weeks for radiotherapy alone. TMZ is less effective in GBM patients who harbor unmethylated O6-methylguanine-methyltransferase (“MGMT”) promoters in the tumor tissue; more than half of GBM patients have unmethylated MGMT promoters. In practice, even patients without MGMT promoter methylation are prescribed TMZ because of a lack of approved treatment alternatives.

***Recurrent Glioblastoma (rGBM)***

Unlike treatment of newly diagnosed GBM, no consensus exists regarding the optimal treatment of rGBM. Recurrence rates for newly diagnosed GBM patients treated with the current SOC is high, even in completely resected patients.

Drugs currently approved in the United States for treatment of rGBM are Gliadel® and bevacizumab (Avastin®). In a Phase 3 study, placing a Gliadel implant directly into the tumor cavity after surgical resection of the tumor, 56% of rGBM treated subjects survived 6 months and the median survival was 26 weeks. However, the majority of patients with rGBM are not candidates for additional surgery, resulting in a large unmet need for this patient population.

Avastin® is an anti-angiogenic antibody that targets the vascular endothelial growth factor receptors. It is indicated as a single agent for adult patients with rGBM but has not been shown to improve disease-related symptoms or survival. Avastin® was granted accelerated approval on the basis of an objective response rate (ORR) of 28% following an open label Phase 2 study in 85 patients receiving Avastin® only. In 2013, Avastin® completed its confirmatory trial in newly diagnosed GBM patients and did not meet its primary endpoint of overall survival. Based on the results of this trial, Genentech, for Avastin®, did not receive approval in the European Union for newly diagnosed GBM; however, Avastin® remains indicated in the United States and Japan for rGBM.

***Rationale for Development of MDNA55 for rGBM***

MDNA55 has been initially developed for the treatment of rGBM. Using current treatment paradigms, most GBM patients experience tumor recurrence/progression after standard first line treatment. Treatment options for patients with rGBM are very limited and the outcome is generally unsatisfactory. Specifically, chemotherapy regimens for recurrent or progressive GBM have been unsuccessful, producing toxicity without benefit. As overall survival remains dismal, novel anti-cancer modalities, with greater tumor specificity, more robust cytotoxic mechanisms and novel delivery techniques are needed for the treatment of recurrent GBM.

MDNA55 is one such novel therapeutic that is intended to provide a targeted treatment approach whereby tumor cells are more sensitive to the toxic effects of the drug than normal cells. When combined with a novel precision delivery to the brain using CED, a single administration of MDNA55 could be an ideal approach for the treatment of rGBM and other brain tumors that over-express the IL4R. Cells that do not express the IL4R target do not bind to MDNA55 and are, therefore, not subject to the effects of the toxic payload.

Many features of MDNA55 make it a potentially attractive choice for the treatment of recurrent GBM:

1. The majority of cancer biopsy and autopsy samples from adult and pediatric primary and metastatic brain cancers, including rGBM, have been shown to over-express the IL4R with little or no IL4R expression in normal adult and pediatric brain tissue.

2. MGMT positive cancer cells (harboring unmethylated MGMT promoters) are common in GBM, making them resistant to TMZ. However, MGMT positive cancer tumors are extremely sensitive to MDNA55, suggesting that MDNA55 could provide a treatment option for GBM patients who would not benefit from TMZ.

3. GBM has a robust immunosuppressive TME and may comprise up to 40% of the tumor mass. It has been shown that malignant gliomas have a T-helper cell type-2 (“Th2”) bias and are heavily infiltrated by myeloid derived suppressor cells (“MDSCs”) and tumor associated macrophages (“TAMs”) and that the IL-4/IL4R bias mediates their immunosuppressive functions. Furthermore, IL4R is up-regulated on glioma-infiltrating

myeloid cells but not in the periphery or in normal brain. Thus, purging Th2 cells, MDSCs, and TAMs using MDNA55 may alleviate the immune block associated with cancer (in a manner similar to immunomodulators such as ipilumimab, pembrolizumab or nivolumab), thereby promoting anti-tumor immunity and aid in long-term disease control.

The MDNA55 program therefore offers a promising approach to address serious unmet needs for brain cancer patients. Furthermore, to our knowledge, MDNA55 is the only treatment in development that has the potential to simultaneously target the bulk tumor and the immunosuppressive TME. Accordingly, we are of the view that MDNA55 has the potential of altering the treatment paradigm for many brain cancer patients.

***Convection Enhanced Delivery (CED) of MDNA55***

As with most protein therapeutics, MDNA55 does not cross the blood-brain barrier, and therefore must be delivered directly to the tumor (also known as intra-tumoral therapy) via local one time infusion procedure called CED. Medicenna's development platform includes rights to all oncology indications for MDNA55, a novel image guided CED of MDNA55 and a novel formulation used to prepare an infusate for delivery of MDNA55 in the brain. These technologies are protected by patents either owned or licensed by Medicenna.

***Development History of MDNA55***

The targeting domain and payload for Medicenna's lead candidate, MDNA55, were developed in the laboratories of Dr. Ira Pastan at the National Cancer Institute (NCI) and Dr. Raj Puri at Center for Biologics Evaluation and Research, at the FDA. The targeting domain (IL-4) was engineered to improve the binding affinity of IL-4 to the IL4R and thereby increase potency of MDNA55. The payload domain (pseudomonas toxin) of MDNA55 was engineered in order to remove off-target binding components further improving safety. Preclinical and clinical development of MDNA55 for the treatment of brain as well as other non-brain tumors is described in over 50 publications.

In March 2013, Medicenna acquired all clinical, regulatory and material assets for MDNA55 from Sophiris Bio Inc. (formerly Protox Therapeutics, Inc.) ("Sophiris"). The acquisition was comprised of two IND applications with the FDA, Fast Track Designation from the FDA, Orphan Drug Designations from the FDA and the EMA, clinical data from 72 patients enrolled in three different brain cancer studies with recurrent high grade glioma (66 rGBM and 6 recurrent anaplastic astrocytoma (rAA) patients), clinical data from 14 patients enrolled in a Phase 1 solid tumor study and all cell banks and reference material required to manufacture MDNA55. In a majority of the 72 patients enrolled in three different brain cancer studies, MDNA55 was delivered only once by intratumoral infusion using CED via ventricular catheters. Subsequent to the purchase agreement with Sophiris, Medicenna and the National Institutes of Health ("NIH") entered into license agreements (the "NIH License Agreements") covering composition, methods of use, combination therapy and delivery of MDNA55.

***Phase 2b Study for Recurrent Glioblastoma***

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.

In April 2017, Medicenna 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, it was announced that based on encouraging drug distribution and safety data observed Medicenna 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-therapeutic 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.

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 ≤ 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 μg; median 180 μg) 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 was well tolerated in this and earlier clinical trials (MTD = 240 μg).

On September 29, 2020, Medicenna had an End of Phase 2 (EOP2) meeting with the FDA to discuss future development and commercialization of MDNA55, if approved, for rGBM. On October 15, 2020, Medicenna announced that 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 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.

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 showed a mOS of 11.9 months (expected 6-9 months) following treatment with MDNA55 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 sparring 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 May 7, 2021, Medicenna announced the peer-reviewed publication of clinical data from the MDNA55 Phase 2b 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 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 ECA (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.

In September 2021, Dr. Fahar Merchant, President and Chief Executive Officer, co-authored an article related to MDNA55 published in Lancet Oncology titled "Leveraging external data in the design and analysis of clinical trials in neuro-oncology."

On October 2, 2021, Medicenna participated in the Virtual SNO/ASCO Conference on CNS Clinical Trials through an Oral Presentation titled: "Incorporating external control arm in MDNA55 recurrent glioblastoma registration trial."

On November 18, 2021, Medicenna announced that John H. Sampson, MD, PhD, MHSc, MBA, Robert H. and Gloria Wilkins Distinguished Professor of Neurosurgery at Duke University School of Medicine and member of Medicenna's board of directors, received The Abstract Award for Excellence in Clinical Trials in connection with an oral presentation on MDNA55. The presentation subject to the award was delivered by Dr. Sampson at the 26$^{th}$ Annual Meeting of the SNO .

The Company expects the completion of a pivotal Phase 3 clinical trial of MDNA55 to full approval to last until at least 2025, with a projected aggregate cost of up to approximately $75 million, incremental to the current cash on hand. The Company continues to work to out-license the program to one or more partners who would fund or co-fund Phase 3 clinical development of MDNA55 as well as prepare the program for commercialization and its subsequent launch in various countries where approval has been granted.

***Potential Market: MDNA55***

The incidence of glioblastoma multiforme (GBM) in the United States and EU5 (UK, Italy, Spain, France, Germany) alone exceeded 26,000 with a market opportunity in excess of US$1 billion. Although treatment options exist, including surgery, radiation, chemotherapy, Tumor Treating Fields and targeted therapeutics, the 5-year survival rate is less than 10%.

Treatment options for rGBM are severely limited. With the exception of Avastin®, providing limited survival benefits, no universal SOC exists for rGBM**.** Avastin® has not been approved by the EMA for newly diagnosed GBM or rGBM, although it has been granted accelerated approval by the FDA for rGBM. Management believes that MDNA55 is currently well positioned for the rGBM indication, when used either as monotherapy or in combination with other approved therapies.

Line extension for metastatic brain cancer, newly diagnosed GBM and pediatric gliomas has the potential to increase MDNA55 revenues.

### *MDNA55 Competition: Emerging Therapies for Adult GBM*

The SOC for newly diagnosed GBM, consisting of surgery, radiotherapy and concurrent TMZ followed by adjuvant TMZ has not changed for over a decade. The lack of effective treatment options extends to a shortage of approved targeted therapies for GBM. Development of novel agents for the treatment of GBM is therefore an active area of research, and multiple agents and drug classes are being assessed for GBM.

Northwest Biotherapeutics' DCVax-L, an autologous dendritic cell vaccine, is one of the furthest along in development for GBM. DCVax-L is being evaluated in newly diagnosed GBM patients who have received a complete surgical resection and received radiotherapy and concurrent TMZ. Northwest Biotherapeutics has completed a Phase 3 clinical trial in patients with newly diagnosed GBM for which data was announced in May 2022. It is anticipated that Northwest Biotherapeutics will seek regulatory approval for DCVax-L.

DNAtrix's DNX-2401, an oncolytic immunotherapy, has completed enrolment in a Phase 2 clinical trial in collaboration with Merck which evaluated the efficacy and safety of DNX-2401 in combination with pembrolizumab (Keytruda®), Merck's anti-PD-1 therapy. Positive Phase 2 data was presented in November 2020 and DNAtrix has disclosed plans to initiate a Phase 3 clinical study. DNX-2440 is currently enrolling patients in a Phase 1 trial to evaluate the safety and efficacy of DNX-2440. Adult subjects diagnosed with glioblastoma or gliosarcoma that have experienced disease progression after initial treatment may be eligible.

Kintara Therapeutics' (previously Delmar Pharmaceuticals) product VAL-083 is a "first-in-class" small molecule chemotherapeutic and is enrolling patients. In July 2019, Kintara Therapeutics began enrolling patients in a Phase 2/3 response adaptive randomization platform trial designed to evaluate multiple regimens of VAL-083 in newly diagnosed and recurrent GBM expected to be complete in 2023.

Kazia Therapeutics is developing Paxalisib, a brain-penetrant inhibitor of the PI3K / Akt / mTOR pathway, which is disordered in the vast majority of patients with glioblastoma. In January 2021 Kazia Therapeutics announced that patient recruitment had commenced for Paxalisib in the GBM AGILE platform study, which is expected to serve as the basis for registration in key territories.

Istari Oncology announced in November 2020 that it had dosed the first patient in a Phase 2 clinical trial, assessing the safety and efficacy of PVSRIPO in combination with the immune checkpoint inhibitor pembrolizumab (Keytruda®) in patients with rGBM. The study remains active but is not currently enrolling patients.

### *Liquidity*

The Company anticipates that its current level of cash and cash equivalents and marketable securities, will be sufficient to execute its current planned expenditures for the next 10 to12 months without further financing being obtained. This estimate assumes continuation of the MDNA11 Phase 1/2 ABILITY study, and that any further development of MDNA55 will be completed by a partner.

The Company does not earn any revenues from its drug candidates and is 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 research and development activities for MDNA55, MDNA11 and the BiSKITs$^{TM}$ platform and the commercialization of MDNA55 is dependent upon the Company's ability to successfully finance and complete its research and development programs through a combination of equity financing and revenues from strategic partners. The Company has no current sources of revenues from strategic partners.

***Intellectual Property and Partnerships***

Medicenna regards its intellectual property rights as one of the foundation blocks upon which it continues to build a successful biopharmaceutical development company. Medicenna has established a strong and defensive intellectual property position to protect its proprietary technologies. To date, Medicenna has 18 patent families providing patent protection in the US and in contracting states to the Patent Corporation Treaty. The Company has a total of 104 patents issued or filed of which 50 patents have been granted and the remaining patent applications are pending in the United States and other countries.

Patent families owned or licensed by Medicenna related to MDNA55 (granted US cases listed):

1. Method for Convection Enhanced Delivery of Therapeutic Agents (U.S. Patent No. 7,371,225)

2. Targeted Cargo Protein Combination Therapy (U.S. Patent No. 9,629,899)

3. IL-4 Fusion Formulations for Treatment of Central Nervous System (CNS) Tumors (pending US Patent Application No. 16/753,978)

4. ILR4 as a Biomarker in Cancer (pending US Patent Application No. 17/428,697)

Expiry dates for the above patents and related family members range from 2023 to 2042.

In addition to the above patent protection, MDNA55 has been granted Orphan Drug Designation in the United States and Europe for the treatment of GBM, which would result in 7 and 10 years of orphan drug exclusivity in the U.S. and Europe, respectively. Additionally, upon approval, MDNA55 as a biologic, is expected to be eligible for 12 years Reference Product Exclusivity in the United States, 8 years data exclusivity plus 2 years market exclusivity in Europe, 6 years data exclusivity plus 2 years market exclusivity in Canada and other markets where similar means of exclusivity are available.

Patent families owned or licensed by Medicenna related to the Superkine and Empowered Superkine platforms (granted/allowed US cases listed / representative PCT listed):

1. IL-2 Superagonists in Combination with Anti-PD-1 Antibodies (Allowed US Patent Application No. 16/012,733)

2. Interleukin-4 Receptor-Binding Fusion Proteins and Uses Thereof (Pro-apoptotic Fusions) (U.S. Patent Nos. 10,093,708 and 11,084,856)

3. Interleukin-4 Receptor Binding Fusion Proteins and Uses Thereof (Anti-apoptotic Fusions) (U.S. Patent Nos. 10,106,592 and 11,352,402)

4. Interleukin-2 Fusion Proteins and Uses Thereof (US Patent No. 10,781,242)

5. Uses and Methods for Oncolytic Virus Targeting of IL-4/IL-13 and Fusions Thereof (PCT/IB2019/00759)

6. Bifunctional Superkines and Uses Thereof (PCT/CA2021/050872)

7. Uses and Methods For IL-2 Cytokine Fusions (unpublished)

8. Uses and Methods for IL-2, IL-13 and IL-4 Cytokine Fusions (unpublished)

9. Superagonists and Antagonists of Interleukin-2 (U.S. Patent Nos. 9,428,567; 10,183,980; and 11,117,943)

10. Superkines and Synthekines: Repurposed Cytokines with New and Enhanced Signaling Activities (U.S. Patent No. 9,738,696 and US Patent No. 10,738,096)

11. Superagonists, Partial Agonists and Antagonists of Interleukin-2 (U.S. Patent Nos. 10,150,802 and 10,654,905; allowed US Patent Application No. 15/930,057)

12. Therapeutic IL-13 Polypeptides (U.S. Patent Nos. 9,512,194; 9,732,133; 10,227,389 and 11,084,858)

13. IL-13 Superkine: Immune Cell Targeting Constructs and Methods of Use Thereof (PCT/US2017/66529)

14. IL-13/IL-4 Superkine: Immune Cell Targeting Constructs and Methods of Use Thereof (PCT/US2019/035186)

Expiry dates for the above US patents, corresponding non-US patents and any future-issued patents claiming priority to pending patent applications filed range from 2031 to 2043. Upon approval, the above programs are expected to be eligible for 12 years Reference Product Exclusivity in the United States, 8 years data exclusivity plus 2 years market exclusivity in Europe, 6 years data exclusivity plus 2 years market exclusivity in Canada and other markets where similar means of exclusivity are available.

***CPRIT Agreement***

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. As of March 31, 2022, the grant with CPRIT is complete.

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% of revenues. 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.

***Business Strategy***

Medicenna's strategy to reduce risk is to diversify the assets in Medicenna's pipeline based on their stage of development, mechanism of action and target product profile. To achieve this goal, we in-licensed the Superkine platform from Stanford. These candidates, namely IL-2, IL-4 and IL-13 Superkines, are expected to enable the Company to develop a library of cytokine candidates as has been demonstrated by the advancement of our lead IL-2 Superkine MDNA11 into the Phase 1/2 ABILITY study and the various candidates from our BiSKIT™ platform discussed above. The resulting product candidates derived from the Superkine and Empowered Superkine platforms have different mechanisms of action and target product profiles compared to MDNA55, Medicenna's most advanced program, for the treatment of rGBM. By adopting a balanced approach, Medicenna is less reliant on a single product in Medicenna's pipeline, with greater upside potential through opportunities to partner or develop on its own, multiple products. Medicenna believes that establishing a pipeline of drug candidates with distinct mechanisms of actions targeting multiple disease indications mitigates development risk. Medicenna intends to achieve its business strategy by focusing on the following key areas:

1. Maximize the potential clinical and commercial success of Medicenna's drug candidates by pursuing development programs based on sound scientific rationale for multiple disease indications where there are significant unmet clinical needs. In the near-term, Medicenna's focus will be to complete a partnership transaction for MDNA55 as well advance MDNA11 through the Phase 1/2 ABILITY study;

2. Developing next generation Superkines from the BiSKIT™ platform for future partnerships, collaborations or clinical development;

3. Optimize the therapeutic potential of Medicenna's drug candidates by selecting sub-populations of patients who stand an improved chance of responding to treatment and employing the latest technologies and strategies for optimizing drug delivery, refining treatment schedules and dosing regimens and selecting appropriate combination strategies;

4. Establish collaborations and relationships with leading scientific and clinical centres to effectively maximize the success of Medicenna's drug development programs; and

5. Assess strategic alliances with select pharmaceutical and/or biotechnology companies where such alliances may enable successful development and commercialization of Medicenna's drug candidates while maximizing its return on investment. Medicenna may conduct transactions with established strategic partners on a regional or worldwide basis to accelerate product development, improve Medicenna's marketing strength and enhance its capability of bringing products to the markets worldwide.

Medicenna will continue to seek sources of non-dilutive funding as well as additional funds through equity financings and/or through collaborative arrangements with pharmaceutical and/or

biotechnology companies for any of Medicenna's products and technologies under development. Cash resources are carefully managed and focused on priority programs and initiatives. Accordingly, some initiatives may not be pursued or advanced in the near term as a prudent measure to preserve cash.

***Regulatory Process***

Government authorities in the United States, including federal, state, and local authorities, and in other countries, extensively regulate, among other things, the manufacturing, research and clinical development, marketing, labeling and packaging, storage, distribution, post-approval monitoring and reporting, advertising and promotion, and export and import of biological products, such as those Medicenna is developing. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local, and foreign statutes and regulations require the expenditure of substantial time and financial resources.

Securing final regulatory approval for the manufacture and sale of biological products in the United States, Europe, Canada and other commercial territories, is a long and costly process that is controlled by that particular territory's regulatory agency. The regulatory agency in the United States is the FDA, in Canada it is Health Canada, and in Europe it is the EMA. Other regulatory agencies have similar regulatory approval processes, but each regulatory agency has its own approval processes. Approval in the United States, Canada or Europe does not assure approval by other regulatory agencies, although often test results from one country may be used in applications for regulatory approval in another country.

None of Medicenna's products have been completely developed or tested and, therefore, Medicenna is not yet in a position to seek regulatory approval to market any of Medicenna's products. The time required to obtain approval by such regulatory authorities is unpredictable but typically takes many years following the commencement of preclinical studies and clinical trials and will require significant additional capital.

***United States Government Regulation***

In the United States, the FDA regulates drugs under the *Federal Food, Drug, and Cosmetic Act* ("FDCA"), and its implementing regulations, and biologics under the FDCA and the *Public Health Service Act* ("PHSA"), and its implementing regulations. FDA approval is required before any new unapproved drug or biologic or dosage form, including a new use of a previously approved drug, can be marketed in the United States. Drugs and biologics are also subject to other federal, state, and local statutes and regulations. If Medicenna fails to comply with applicable FDA or other requirements at any time during the product development process, clinical testing, the approval process or after approval, Medicenna may become subject to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, civil monetary penalties or criminal prosecution. Any FDA enforcement action could have a material adverse effect on Medicenna.

The process required by the FDA before product candidates may be marketed in the United States

generally involves the following:

- completion of extensive preclinical laboratory tests and preclinical animal studies, all performed in accordance with the Good Laboratory Practices (GLP) regulations;

- completion of extensive CMC (chemistry, manufacturing and control) to produce drug in accordance with current Good Manufacturing Practices ("cGMP");

- submission to the FDA of an IND, which must become effective before human clinical trials may begin and must be updated annually;

- approval by an independent institutional review board ("IRB") or ethics committee representing each clinical site before each clinical trial may be initiated;

- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the product candidate for each proposed indication;

- preparation of and submission to the FDA of a new drug application ("NDA") or biologics license application ("BLA") after completion of all pivotal clinical trials;

- potential review of the product application by an FDA advisory committee, where appropriate and if applicable;

- a determination by the FDA within 60 days of its receipt of an NDA or BLA to file the application for review;

- satisfactory completion of an FDA pre-approval inspection of the manufacturing facilities where the proposed product is produced to assess compliance with GMP.

- a potential FDA audit of the preclinical research and clinical trial sites that generated the data in support of the NDA or BLA; and

- FDA review and approval of an NDA or BLA prior to any commercial marketing or sale of the product in the United States

The preclinical research, including production of cGMP material, clinical testing and approval process require substantial time, effort, and financial resources, and Medicenna cannot be certain that any approvals for Medicenna's product candidates will be granted on a timely basis, if at all.

An IND is a request for authorization from the FDA to administer an investigational new drug product to humans in clinical trials. The central focus of an IND submission is on the general investigational plan and the protocol(s) for human clinical trials. The IND also includes description of the manufacturing process and testing of the batch, results of animal studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product; and any available human data or literature to support the use of the investigational new drug. An IND must become effective before human clinical trials may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to the proposed clinical trials. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before clinical trials can begin. Accordingly, submission of an IND may or

may not result in the FDA allowing clinical trials to commence.

***Clinical Trials***

Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with Good Clinical Practices ("GCP"), which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety, and the efficacy criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. Additionally, approval must also be obtained from each clinical trial site's IRB or ethics committee, before the trials may be initiated, and the IRB or ethics committee must monitor the trial until completed. There are also requirements governing the reporting of ongoing clinical trials and clinical trial results to public registries.

The clinical investigation of a drug is generally divided into three or four phases. Although the phases are usually conducted sequentially, they may overlap or be combined.

- Phase 1. The drug is introduced into healthy human subjects or subjects with the target disease or condition. These studies are designed to evaluate safety, dosage tolerance, metabolism and pharmacologic actions of the investigational new drug in humans, the side effects associated with increasing doses, and where possible, to gain early evidence on effectiveness.

- Phase 2. The drug is administered to a limited patient population to evaluate dosage tolerance and optimal dosage, identify possible adverse side effects and safety risks, and preliminarily evaluate efficacy.

- Phase 3. The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites to generate enough data to statistically evaluate dosage, clinical effectiveness and safety, to establish the overall benefit-risk relationship of the investigational new drug product, and to provide an adequate basis for physician labeling.

- Phase 4. In some cases, the FDA may condition approval of an NDA or BLA for a product candidate on the sponsor's agreement to conduct additional clinical trials after approval. In other cases, a sponsor may voluntarily conduct additional clinical trials after approval to gain more information about the drug. Such post-approval studies are typically referred to as Phase 4 clinical trials.

Clinical trial sponsors must also report to the FDA, within certain timeframes, serious and unexpected adverse reactions, any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator's brochure, or any findings from other studies or animal testing that suggest a significant risk in humans exposed to the product candidate. The FDA, the IRB or ethics committee, or the clinical trial sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for

whether or not a trial may move forward at designated check points based on access to certain data from the trial.

The clinical trial process can take years to complete, and there can be no assurance that the data collected will support FDA approval or licensure of the product. Results from one trial are not necessarily predictive of results from later trials. Medicenna may also suspend or terminate a clinical trial based on evolving business objectives and/or competitive climate.

***Submission of an NDA or BLA to the FDA***

Assuming successful completion of all required preclinical studies and clinical testing in accordance with all applicable regulatory requirements, detailed investigational new drug product information is submitted to the FDA in the form of an NDA or a BLA requesting approval to market the product for one or more indications. Under federal law, the submission of most NDAs and BLAs are subject to an application user fee. For the year 2022, the application user fee is US$3.117 million. This fee is typically increased annually. Applications for orphan drug products are exempted from the application user fee, unless the application includes an indication for other than a rare disease or condition.

An NDA or BLA must include all relevant data available from pertinent preclinical studies and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labeling, among other things. Data come from company-sponsored clinical trials intended to test the safety and effectiveness of a use of a product and may also come from a number of alternative sources, including trials initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy of the investigational new drug product to the satisfaction of the FDA.

Once an NDA or BLA has been submitted, the FDA's goal is to review the application within ten months after it accepts the application for filing, or, if the application relates to an unmet medical need in a serious or life-threatening indication, six months after the FDA accepts the application for filing. The review process is often significantly extended by the FDA's requests for additional information or clarification.

Before approving an NDA or BLA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with GMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP.

The FDA is required to refer an NDA or BLA for a novel drug (in which no active ingredient has been approved in any other application) to an advisory committee or explain why such referral was not made. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

***The FDA's Decision on an NDA or a BLA***

After the FDA evaluates the NDA or BLA and conducts inspections of manufacturing facilities where the product will be produced, the FDA will issue either an approval letter or a complete response letter ("Complete Response Letter"). An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application is not ready for approval. In order to satisfy deficiencies identified in a Complete Response Letter, additional clinical data and/or additional Phase 3 clinical trial(s), and/or other significant, expensive and time-consuming requirements related to clinical trials, preclinical studies or manufacturing may be required for the product candidate. Even if such additional information is submitted, the FDA may ultimately decide that the NDA or BLA does not satisfy the criteria for approval. The FDA could also approve the NDA or BLA with a risk evaluation and mitigation strategy, plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling, development of adequate controls and specifications, or a commitment to conduct one or more post-market studies or clinical trials. Such post-market testing may include Phase 4 clinical trials and surveillance to further assess and monitor the product's safety and effectiveness after commercialization. New government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of Medicenna's products under development.

***Additional Controls for Biologics***

To help reduce the increased risk of the introduction of adventitious agents, the PHSA emphasizes the importance of manufacturing controls for products whose attributes cannot be precisely defined. The PHSA also provides authority to the FDA to immediately suspend biologics licenses in situations where there exists a danger to public health, to prepare or procure products in the event of shortages and critical public health needs, and to authorize the creation and enforcement of regulations to prevent the introduction or spread of communicable diseases within the United States.

After a BLA is approved, the product may also be subject to official lot release as a condition of approval. As part of the manufacturing process, the manufacturer is required to perform certain tests on each lot of the product before it is released for distribution. If the product is subject to official release by the FDA, the manufacturer submits samples of each lot of product to the FDA together with a release protocol showing a summary of the lot manufacturing history and the results of all of the manufacturer's tests performed on the lot. The FDA may also perform certain confirmatory tests on lots of some products, such as viral vaccines, before allowing the manufacturer to release the lots for distribution. In addition, the FDA conducts laboratory research related to the regulatory standards on the safety, purity, potency, and effectiveness of biological products. As with drugs, after approval of a BLA, biologics manufacturers must address any safety issues that arise, are subject to recalls or a halt in manufacturing, and are subject to periodic inspection after approval.

***Other Healthcare Laws***

Pharmaceutical manufacturers are subject to additional healthcare laws, regulation, and

enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business. Such laws include, without limitation, U.S. federal anti-kickback, anti-self-referral, false claims, transparency, including the federal Physician Payments Sunshine Act, consumer fraud, pricing reporting, data privacy, data protection, and security laws and regulations as well as similar foreign laws in the jurisdictions outside the U.S. Similar state and local laws and regulations may also restrict business practices in the pharmaceutical industry, such as state anti-kickback and false claims laws, which may apply to business practices, including but not limited to, research, distribution, sales, and marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, or by patients themselves; 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, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws and regulations that require drug manufacturers to file reports relating to pricing and marketing information; state and local laws which require the tracking of gifts and other remuneration and any transfer of value provided to physicians, other healthcare providers and entities; and state and local laws that require the registration of pharmaceutical sales representatives; and state and local laws governing the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by the federal *Health Insurance Portability and Accountability Act of 1996* ("HIPAA"), thus complicating compliance efforts.

***Coverage and Reimbursement***

Sales of any pharmaceutical product depend, in part, on the extent to which such product will be covered by third-party payors, such as federal, state, and foreign government healthcare programs, commercial insurance, and managed healthcare organizations, and the level of reimbursement for such product by third-party payors. Significant uncertainty exists as to the coverage and reimbursement status of any newly approved product. Decisions regarding the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. One third-party payor's decision to cover a particular product does not ensure that other payors will also provide coverage for the product. As a result, the coverage determination process can require manufacturers to provide scientific details, information on cost-effectiveness, and clinical support for the use of a product to each payor separately. This can be a time-consuming process, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

In addition, third-party payors are increasingly reducing reimbursements for pharmaceutical products and related services. The U.S. government and state legislatures have continued implementing cost-containment programs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products. Third-party payors are increasingly challenging the prices charged, examining the medical necessity and reviewing the cost effectiveness of pharmaceutical products, in addition to questioning their safety and efficacy. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit sales of any product. Decreases in third-party reimbursement for any product or a decision by a third-party payor not to cover a product could reduce physician usage and patient demand for the product.

### *Comparable European and Other International Government Regulation*

In addition to FDA regulations in the United States, we will be subject to a variety of comparable regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries.

Some countries outside of the United States have a similar process that requires the submission of a clinical trial application ("CTA") much like the IND prior to the commencement of human clinical trials. In Europe, for example, a CTA must be submitted to each country's national health authority and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is approved in accordance with a country's requirements, clinical trial development may proceed. To obtain regulatory approval to commercialize a new drug under European Union regulatory systems, we must submit a marketing authorization application ("MAA"). The MAA is similar to the NDA, with the exception of, among other things, country-specific document requirements and environmental impact assessments.

For other countries outside of the European Union, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials are conducted in accordance with GCPs and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

### *Specialized Skill and Knowledge*

Medicenna's business requires personnel with specialized skills and knowledge in the fields of basic and applied immunotherapy and immunology and oncology in general. Medicenna has subcontracted out several key functions to highly specialized individuals and companies to conduct the preclinical development of MDNA19, MDNA11 and drug candidates from our BiSKIT's platform, manufacturing of MDNA11 for the ABILITY study as well as certain clinical and regulatory aspects of the ABILITY study. These programs are overseen by Medicenna's Chief Executive Officer, Chief Development Officer and Acting Chief Medical Officer, to ensure proper and timely completion of the required activities. In addition Medicenna has deep expertise available on its Clinical Advisory Board, Development Advisory Committee and Scientific Advisory Board.

### *Employees*

As at March 31, 2022, Medicenna had 18 full-time employees and one part-time consultant, including ten holding PhD degrees, 1 with an MBBS and two employees holding CPA designations.

Medicenna's employees are not governed by a collective bargaining agreement. Medicenna depends on certain key members of its management and scientific staff and the loss of services of one or more of these persons could adversely affect the Company.

Medicenna also uses consultants and outside contractors to carry on many of Medicenna's activities, including preclinical testing and validation, formulation, assay development, manufacturing, clinical and regulatory affairs, toxicology and clinical trials.

### *Legal Proceedings*

To Medicenna's knowledge, there have not been any legal or arbitration proceedings, including those relating to bankruptcy, receivership or similar proceedings, those involving any third party, and governmental proceedings pending or known to be contemplated, which may have, or have had in the recent past, significant effect Medicenna's financial position or profitability.

To Medicenna's knowledge, there have been no material proceedings in which any director, any member of senior management, or any of Medicenna's affiliates is either a party adverse to Medicenna or any of Medicenna's subsidiaries or has a material interest adverse to Medicenna or any of Medicenna's subsidiaries.

## RISK FACTORS

*An investment in 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 AIF. 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 Medicenna's 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, Industry, and Financial Position*

*The Company has no sources of product revenue and there is substantial doubt regarding its ability 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 MDNA11 is advanced from the dose escalation portion of the Phase 1/2 ABILITY Study into the dose expansion cohorts as well as advancing a lead BiSKIT candidate into IND enabling studies.

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 will need substantial additional funding which may not be available on terms acceptable to the Company or at all. If the Company is unable to raise capital when needed, the Company would be forced to delay, reduce, terminate or eliminate product development programs.*

The Company expects research and development expenses to increase in connection with ongoing activities, particularly as MDNA11 is advanced from the dose escalation portion of the Phase 1/2 ABILITY Study into the dose expansion cohorts as well as advancing a lead BiSKIT candidate into IND enabling studies. In addition, if the Company obtains regulatory approval for any of its product candidates, the Company expects to incur significant commercialization expenses for product sales, marketing, manufacturing and distribution. Furthermore, the Company will need to obtain additional funding in connection with continuing operations. If the Company is unable to raise capital when needed or on attractive terms, the Company would be forced to delay, reduce, terminate or eliminate its product development programs, potentially including the ongoing Phase 1/2 ABILITY Study.

As of March 31, 2022, the Company had cash and cash equivalents of $20.5 million.

Developing pharmaceutical products, including manufacturing, quality control, conducting preclinical studies and clinical trials, is expensive. Our operations have consumed significant amounts of cash since inception. As we continue to advance MDNA11 or future product candidates into clinical trials and launch and commercialize any product candidates for which we receive regulatory approval, we expect research and clinical development expenses, and our selling, general and administrative expenses to increase substantially. In connection with our ongoing activities, we believe that our existing cash and cash equivalents will be sufficient to fund our operating requirements for next 10 to 12 months. However, circumstances may cause us to consume capital more rapidly than we anticipate. We will require additional capital for the further development and potential commercialization of future product candidates.

*We have incurred significant losses in every quarter since our inception and anticipate that we will continue to incur significant losses in the future.*

Investment in a biotechnology company is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval or become commercially viable. We have not generated any revenue from product sales to date, and all of our product candidates are in early clinical or preclinical development. We continue to incur significant expenses related to our ongoing operations. As a result, we are not profitable and have incurred losses in every reporting period since our inception. We expect to continue to incur

significant expenses and operating losses for the foreseeable future as we seek to identify, acquire and conduct research and development of future product candidates, and potentially begin to commercialize any future products that may achieve regulatory approval. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our financial condition. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenues. Our prior losses and expected future losses have had, and will continue to have, an adverse effect on our financial condition. If any of our future product candidates fail in clinical trials or do not gain regulatory approval, or if approved, fails to achieve market acceptance, we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods.

***Risks Related to the Discovery, Development and Commercialization of our Product Candidates***

*Our product candidates are in early stages of development and may fail in development or suffer delays that materially and adversely affect their commercial viability. If we are unable to complete development of, or commercialize our product candidates, if approved, or experience significant delays in doing so, our business will be materially harmed.*

We are in the early stages of development efforts for MDNA11 and our BiSKIT platform. We have no products on the market and all of our product candidates, with the exception of MDNA55 which is not in active development by the Company, are still in early clinical, preclinical or drug discovery stages, and we may not ever obtain regulatory approval for any of our product candidates. We have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approvals, including approval by the FDA. Before obtaining regulatory approval for the commercial distribution of our product candidates, we or an existing or future collaborator must conduct extensive preclinical tests and clinical trials to demonstrate the safety and efficacy in humans of our product candidates. Additionally, our BiSKIT platform is in earlier stages of discovery and preclinical development and may never advance to clinical-stage development. If we do not receive marketing approvals and successfully commercialize our product candidates, if approved, we may not be able to continue our operations.

The success of the Company's product candidates will depend on several factors, including the following:

- securing additional funding to continue development;
- successful completion of preclinical studies and clinical trials;
- demonstrating a superior product profile compared with competitors;
- receipt of marketing approvals from the FDA, Health Canada and similar regulatory authorities outside the United States and Canada;
- establishing commercial manufacturing capabilities by identifying and securing arrangements with third party manufacturers for the product candidates;
- maintaining patent and trade secret protection and regulatory exclusivity for the product candidates;
- launching commercial sales of the product candidates, if and when approved, whether alone or in collaboration with others;
- acceptance of the products, if and when approved, by patients, the medical community and third party payors;
- effectively competing with other therapies; and
- a continued acceptable safety profile of the products following approval.

If the Company does not achieve one or more of these factors in a timely manner or at all, the Company could experience significant delays or an inability to successfully commercialize its product candidates, if approved, which would materially harm its business.

*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 MDNA11 as the promising preclinical data may not be replicated in the Phase 1/2 ABILITY Study. 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 product candidates 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 product candidate is safe and effective 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, MDNA11 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.

*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 contract development and manufacturing organizations ("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.

*If the Company's competitors develop and market products that are more effective than the Company's existing product candidates or any future product candidates 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 or the ability of our partners to further progress MDNA55, MDNA11 and our BiSKIT platform 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 product candidates, if approved, or they may succeed in developing products that are more effective than our product candidates, if approved. 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 product candidates, if approved, 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 product candidates and may be more effective or less costly than its product candidates. In addition, other forms of medical treatment may offer competition to the product candidates, if approved. 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 product candidates, including its ability to obtain the necessary regulatory approvals for the conduct of such trials.

*The Company may not be able to secure a partnership for MDNA55 which would halt future development.*

The Company is seeking a partner to continue the clinical development and commercialization of MDNA55. The Company does not have the financial resources to complete the necessary development work internally and should it not be able to secure a partnership, further development of MDNA55 may not continue.

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

Securing 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 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 product candidates, government review and approval of a submission containing preclinical and clinical data establishing the safety and

efficacy of the product candidate 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 MDNA11 or MDNA55 will be approved or successfully commercialized, if approved, in any given country. There can be no assurance that the Company's product candidates 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 product candidates 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 candidates MDNA11, MDNA55, and in the future, the BiSKIT platform 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 product candidates, if approved. 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 US$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, if approved, or negatively impact existing or future collaborations.

*If the Company is unable to enroll subjects in clinical trials, it will be unable to complete its clinical*

*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 currently enrolling patients in a Phase 1/2 clinical study in Canada, Australia and the United States. It is anticipated, though not certain, that due to the high vaccination rates in these countries, the potential future impacts of COVID-19 pandemic will be 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 continue working closely with each clinical site and CROs to ensure that patient safety and the integrity of data is maintained despite any pandemic related impacts. While some clinical sites have paused or slowed enrollment in clinical trials owing to the pandemic or pandemic-related restrictions, other sites have been less impacted and 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, the ability to obtain and maintain patient consents, the 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 product candidates 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, if approved, will be delayed. In addition, any delays in completing clinical trials will increase costs, slow down product candidate development and approval processes and can shorten any periods during which the Company may have the exclusive right to commercialize its product candidates, if approved, all of which may allow the Company's 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 product candidates or its future 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.*

The commercial success of any of our product candidates, if approved, 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 licenses 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 and for which we receive marketing approval 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, if approved, to find market acceptance would harm our business prospects.

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

Although our current laboratory and manufacturing activities are handled by third parties, the Company's discovery, testing and development processes may, in the future, involve the direct controlled use of hazardous and radioactive materials. Accordingly, the Company may become 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. 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. 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.

*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 product candidates, compatible syringes or infusion systems for drug administration, catheters required to deliver the product candidate 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 applicable regulatory requirements. Any significant disruption in supplier relationships could harm the Company's business, including the potential impact of COVID-19 and rising inflation concerns which are creating supply chain instability. Any significant delay in the supply of a Component for an ongoing or future clinical study could considerably delay initiation or completion of a clinical trial, drug manufacturing, drug testing and regulatory approval of a product candidate or future product candidate. 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, if approved, 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, if approved. 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.

***Risks Related to the Company's Reliance on Third Parties***

*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 in different species, 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, or is unable to secure access to specific disease models or is unable to acquire and maintain inventory of different species required for pre-clinical testing, 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 CDMOs to manufacture MDNA11 and MDNA55 for clinical trials and the BiSKIT Platform for preclinical development as well as for manufacturing, testing, filling, packaging, storing and shipping of its product candidates 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 product candidates may adversely affect profit margins and ability to develop and deliver product candidates, if approved, on a timely and competitive basis.

*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 seeking a partnership for MDNA55, developing 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 a license agreement upon the occurrence of certain specified events. Each 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, if approved. 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.

*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 obtained a grant from CPRIT to fund a portion of its historical operations. 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 may be required to repay the grant proceeds received. A failure to maintain compliance with the grant, including maintaining a presence in the state of Texas for three years after the grant is complete, may require the Company to reimburse all or a portion of the CPRIT grant which may cause a halt or delay in ongoing operations, which may adversely affect the Company's financial condition and operating results.

***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 have filed and are actively pursuing certain applications for certain 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 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 that it successfully prosecute claims against others who it believes are infringing its rights and successfully defend 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 and 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.

*Intellectual property rights do not necessarily address all potential threats to our business.*

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business. The following examples are illustrative:

- others may be able to make compounds or formulations that are similar to our product candidates but that are not covered by the claims of any patents, should they issue, that we own or control;
- we might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or control;
- we might not have been the first to file patent applications covering certain of our inventions;

- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own or control may not provide us with any competitive advantages, or may be held invalid or unenforceable as a result of legal challenges;
- our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where we do not have patent rights and then use the information learned from such activities to develop competitive drugs for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.

Should any of these events occur, they could have a material adverse effect on our business, financial condition, results of operations and prospects.

***Risks Related to our Common Shares***

*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, 2022, our Common Shares traded on the TSX at a high of $5.44 and a low of $1.57 per share and on the Nasdaq at a high of US$4.33 and a low of US$1.20 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.

*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 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.

*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 the Company's interpretation of the law, the Company's recent financial statements, and taking into account expectations about the Company's income, assets and activities, the Company believes that it may have been a PFIC for the taxable year ended March 31, 2022 and expects that it will be a PFIC for the current taxable

year. The determination of whether the Company is a PFIC for the taxable year ended March 31, 2022 and the current taxable year will depend, in part, on whether the Company receives government grants (including certain grants similar to those previously awarded by CPRIT) during the taxable year ended March 31, 2023, and the Company's determination of whether such grants (if received) constitute passive income for PFIC testing purposes. A separate determination must be made after the close of each taxable year as to whether the Company is a PFIC for that year, and as a result, its PFIC status may change from year to 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.

*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 entertain actions or enforce judgments of courts of the United States predicated upon the Company's civil liability of the Company or its directors, officers and experts under the United States federal securities laws or the securities laws of any state or jurisdiction of the United States. Generally, original actions to enforce liabilities under U.S. federal securities laws may not be brought in a Canadian or other court. Such actions must be brought in a court in the United States with applicable jurisdiction. Persons obtaining judgments against the Company in United States courts, including judgments obtained under U.S. federal securities laws, will then be required to bring an application in a Canadian court to enforce such judgments in Canada. 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.

***Regulatory Risks***

*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 and commercialize its product candidates, if approved.

*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:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons, or entities from knowingly and willfully soliciting, offering, receiving, or paying any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, lease, order, or arranging for or recommending the purchase, lease or order of, any good or service, for which payment may be made, in whole or in part, under federal healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the U.S. civil False Claims Act (which can be enforced through "qui tam," or whistleblower actions, by private citizens on behalf of the federal government), prohibits any person from, among other things, knowingly presenting, or causing to be presented false or

fraudulent claims for payment of government funds or knowingly making, using, or causing to be made or used, a false record or statement material to an obligation to pay money to the government or knowingly and improperly avoiding, decreasing, or concealing an obligation to pay money to the U.S. federal government;

- HIPAA, which imposes criminal liability and amends provisions on the reporting, investigation, enforcement, and penalizing of civil liability for, among other things, 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; similar to the U.S. federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- 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 Affordable Care Act, 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; beginning in 2022, applicable manufacturers are required to report such information regarding payments and transfers of value provided, as well as ownership and investment interests held, during the previous year to physician assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists, and certified nurse-midwives;
- 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.

***General Risk Factors***

*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.

*The Company's operations could be adversely affected by events outside of its control, such as health pandemics, natural disasters, geopolitical conflict and macroeconomic challenges.*

The Company may be impacted by business interruptions resulting from pandemics and public health emergencies, including those related to COVID-19 coronavirus. Given the uncertainty associated with ongoing COVID-19 pandemic, including its remaining duration and outcome, COVID-19 variants, and vaccine efficacy, the Company is unable to estimate the full impact that the pandemic may have on its business, financial condition, results of operations, and/or cash flows; however, the impact could be material. The continued uncertainty surrounding COVID-19 and the impacts COVID-19 variants may have on the Company and its stakeholders may result in, among other things, disruptions to operations (including the Company's supply chain

channels), reductions in business activity, clinical trial and project development delays and disruptions, labour challenges, increased funding costs and funding pressures (as applicable), a decrease in the market price of the Company's Common Shares, a decrease in asset values, and additional write-downs and impairment charges, any of which could have a material adverse impact on the Company's financial results, position, and prospects. The Company has been impacted by supply chain delays with respect to both the cGMP manufacturing and IND enabling studies and clinical trial enrolment timelines may be impacted by future waves of COVID-19 and it is unknown whether and how the Company may further be affected if the pandemic persists for an extended period of time. Any other global health emergency or pandemic could raise similar issues and uncertainties. The Company's operations could also be negatively affected by natural disasters including earthquakes, typhoons, floods and fires, the impact of which is unknown, but could have a material adverse effect on the Company's operations.

Recent geopolitical conflicts, including the Russian invasion of Ukraine, have threatened peace and have helped to fuel global uncertainty. The outcome of the conflict is uncertain and is likely to have wide ranging consequences on the peace and stability of the region and the world economy. Certain countries including Canada and the United States, have imposed strict financial and trade sanctions against Russia and such sanctions may have far reaching effects on the global economy. The long-term impacts of the conflict and the sanctions imposed on Russia remain uncertain.

Combined with the lingering effects of the pandemic, the Russian war against Ukraine has put further pressure on the global economic order, further exacerbating inflation and global supply chain challenges and leading to an increase in market volatility. These supply chain issues could continue to negatively affect the Company's ability to secure necessary products and supplies, while inflationary pressures could drastically increase the Company's costs. Market volatility could also create material adverse effects for the Company as its ability to access public capital markets or private financing may be restricted owing to negative market conditions or the Company may be unable to access capital on acceptable terms, all of which could negatively impact the price of the Company's Common Shares.

*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.

*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 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 are recruiting patients into the MDNA11 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.

*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 or third parties on which we rely , 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.

*The Company may pursue opportunities for further research and development or additional 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. Such activities may distract management time and attention from the Company's principal product candidates and business and 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.

## DIVIDENDS

There are no restrictions in the Company's articles preventing it from paying dividends. The Company has not declared or paid any dividends since incorporation. The directors of the Company anticipate that the Company will retain all future earnings and other cash resources for the future operation and development of its business, and accordingly, do not intend to declare or pay any cash dividends in the foreseeable future. Payment of any future dividends will be at the discretion of the board of the directors after taking into account many factors including the Company's operating results, financial condition and current and anticipated cash assets.

## SHARE CAPITAL

### *Common Shares*

The authorized share capital of the Company consists of an unlimited number of Common Shares of which 56,304,135 Common Shares are issued and outstanding as fully paid and non-assessable as at the date hereof.

Each Common Share carries one vote at all meetings of shareholders, is entitled to receive dividends as and when declared by the directors and is entitled to a pro-rata share of the remaining property and assets of the Company distributable to the holders of the Common Shares upon any liquidation, dissolution or winding-up of the Company.

### *Convertible Securities*

In addition, as at the date hereof, there are issued and outstanding the following convertible securities of the Company, details of which are outlined in the table below:

| Security | Number | Exercise or Conversion Price | Expiry Date (dd/mm/yyyy) |
|---|---|---|---|
| Stock options | 4,464,640 | $1.00 to $5.19 | 24/02/2024 to 23/09/2031 |

| | | | |
|---|---|---|---|
| Warrants | 1,303,000 | $1.20 | 21/12/2023 |
| Warrants | 1,661,542 | $1.75 | 17/10/2022 |

## MARKET FOR SECURITIES

### *Trading Price and Volume*

The Common Shares are listed on the TSX and the Nasdaq Capital Market under the symbol "MDNA". The following table shows the price ranges and volumes traded on the TSX and Nasdaq for the periods noted:

| Month | TSX | | |
|---|---|---|---|
| | High ($) | Low ($) | Volume (#) |
| April 2021 | $5.44 | $4.33 | 1,196,572 |
| May 2021 | $4.90 | $3.85 | 1,427,067 |
| June 2021 | $4.84 | $3.55 | 1,284,306 |
| July 2021 | $3.82 | $2.52 | 2,112,745 |
| August 2021 | $3.18 | $2.35 | 1,256,316 |
| September 2021 | $3.55 | $2.87 | 863,892 |
| October 2021 | $3.67 | $2.66 | 1,606,525 |
| November 2021 | $3.15 | $2.26 | 1,357,916 |
| December 2021 | $2.50 | $1.90 | 1,134,960 |
| January 2022 | $2.49 | $1.73 | 759,690 |
| February 2022 | $2.43 | $1.86 | 549,879 |
| March 2022 | $2.17 | $1.57 | 692,080 |

| Month | Nasdaq | | |
|---|---|---|---|
| | High ($) | Low ($) | Volume (#) |
| April 2021 | US$4.33 | US$3.50 | 3,023,700 |
| May 2021 | US$4.06 | US$3.14 | 2,907,100 |
| June 2021 | US$4.02 | US$2.85 | 3,538,100 |
| July 2021 | US$3.07 | US$2.01 | 2,952,500 |
| August 2021 | US$2.64 | US$1.85 | 2,228,000 |
| September 2021 | US$2.84 | US$2.30 | 1,839,600 |
| October 2021 | US$2.94 | US$2.14 | 2,455,200 |
| November 2021 | US$2.52 | US$1.76 | 4,283,700 |
| December 2021 | US$1.98 | US$1.47 | 5,667,600 |
| January 2022 | US$2.07 | US$1.40 | 1,971,500 |
| February 2022 | US$2.00 | US$1.40 | 3,621,300 |
| March 2022 | US$1.69 | US$1.20 | 1,685,900 |

***Prior Sales***

The following securities of the Company (other than Common Shares) were issued during the fiscal year ended March 31, 2022:

| Date of Issue | Security | Number | Exercise Price |
|---|---|---|---|
| April 20, 2021 | Stock options | 185,000 | $4.85 |
| May 10, 2021 | Stock options | 185,000 | $4.46 |
| September 23, 2021 | Stock options | 598,056 | $3.14 |
| February 8, 2022 | Stock options | 79,000 | $2.43 |
| March 3, 2022 | Stock options | 50,000 | $2.05 |

## BOARD OF DIRECTORS AND MANAGEMENT

The following are the names, provinces or states and countries of residence of each of the directors and officers of the Company, the positions and offices held with the Company, their respective principal occupations within the five preceding years and the number and percentage of Common Shares beneficially held by each of them as of the date hereof. Each director will hold office until the next annual meeting of the Company, unless his or her office is earlier vacated in accordance with the CBCA or the by-laws of the Company.

| Name, State/ Province and Country of Residence | Positions with the Company and, if Director, Date First Elected | Principal Occupation(s) for Past 5 Years | Number and Percentage of Common Shares Owned[1] |
|---|---|---|---|
| **Fahar Merchant** Ontario, Canada | President, Chief Executive Officer and Director October 30, 2011[6] | President and Chief Executive Officer of Medicenna | 5,321,400[5] (9.45%) |
| **Albert Beraldo** Ontario, Canada | Director[2] November 22, 2016[6] | President of Idoman Ltd. (July 2008 to present) | 225,000 (0.40%) |
| **Karen Dawes** Florida, United States | Director[2][4] September 24, 2019 | President, Knowledgeable Decisions, LLC (2003 to present) | 25,000 (0.04%) |
| **Chandrakant Panchal** Quebec, Canada | Director[3] November 22, 2016[6] | Chairman, CEO and CSO of Axcelon Biopolymers Corp. (2001 to present) | 2,000 (0.00%) |
| **Jack Geltosky** Oregon, United States | Director[3] [4] September 30, 2020 | Managing Director of JEG and Associates, LLC (2011 to present) | Nil |

| Name, State/ Province and Country of Residence | Positions with the Company and, if Director, Date First Elected | Principal Occupation(s) for Past 5 Years | Number and Percentage of Common Shares Owned[(1)] |
|---|---|---|---|
| **John Sampson** North Carolina, United States | Director[(2)] September 23, 2021 | Robert H. and Gloria Wilkins Distinguished Professor (2009 to present)<br><br>Inaugural Chair, Department of Neurosurgery, Duke University Medical Center (2015 to 2020)<br><br>President, Private Diagnostic Clinic, PLLC, Duke Health (2018 to present) | Nil |
| **Rosemina Merchant** Ontario, Canada | Chief Development Officer and Director April 25, 2016[(6)] | Chief Development Officer of Medicenna (October 30, 2011 to present) | 5,250,000[(5)] (9.32%) |
| **Elizabeth Williams** Ontario, Canada | Chief Financial Officer, Corporate Secretary | Chief Financial Officer of Medicenna (December 2016 to present) | 15,300 (0.03%) |

Notes:

(1) Based on 56,304,135 Common Shares outstanding as of the date hereof.
(2) Member of the Company's Audit Committee.
(3) Member of the Company's Corporate Governance and Nominating Committee.
(4) Member of the Company's Compensation Committee.
(5) In addition, an aggregate of 5,500,000 Common Shares (representing 9.67% of the outstanding Common Shares) are held by Aries Biologics Inc. Fahar Merchant and Rosemina Merchant each own 50% of the voting shares, and are a director and officer, of Aries Biologics Inc.
(6) Represents the date the individual was first appointed as director of MTI. Each such director was appointed as director of the Company effective March 1, 2017 in connection with the completion of the Transaction.

***Biographies of Executive Officers and Directors***

**Fahar Merchant** – Chairman, President and CEO – Dr. Merchant is a biotech veteran with over 30 years of experience as a serial entrepreneur and co-founder of Medicenna. Previously he was President and CEO of Protox Therapeutics Inc. where he transitioned a pre-clinical start-up to a Phase 3 ready uro-oncology company in six years (2005-2011). In 1992, he co-founded IntelliGene Expressions, Inc., a biologics cGMP compliant CDMO, and built it to one of the fastest-growing companies in Canada ensuring profitability during his tenure as CEO. In 2000, by

strategic in-licensing, he co-founded Avicenna Medica, Inc., a clinical stage oncology company, and sold it a year later to KS Biomedix (LSE) for $90 million. Fahar was CTO and Director of KS Biomedix until its acquisition by Xenova (Nasdaq and LSE) in 2003. He has raised over $150 million from public and private sources to fund the development of targeted therapies for oncology and closed corporate transactions valued at over $250 million. Fahar holds a BSc in Biochemistry and Pharmacology from Aston University, MSc in Biotechnology from Birmingham University, and a PhD in Biochemical Engineering from Western University.

**Albert Beraldo** – Lead Independent Director – Mr. Beraldo, CPA, CA, has over 30 years' experience in varying roles within the pharmaceutical/biotechnology industry. Mr. Beraldo has been the President of Idoman Limited, a company dedicated to improving the lives of women through the manufacture and distribution of innovative, minimally invasive medical solutions, since July 2008. Mr. Beraldo is the Chairman and founding shareholder of Global Transplant Solutions Inc., a US based company providing human organ preservation fluid solutions and developing products for the Human organ procurement and transplant marketplace. Mr. Beraldo was the founder and President and Chief Executive Officer of Alveda Pharmaceuticals Inc., a leading supplier of pharmaceuticals to the Canadian health care market, from 2006 until November 2015. Alveda was acquired by Teligent, Inc. (formerly IGI Laboratories, Inc. (Nasdaq)), a New Jersey-based specialty generic pharmaceutical company. Mr. Beraldo formerly served as President and CEO of Bioniche Pharma Group Limited until 2006. Mr. Beraldo also served as an Independent Director of Helix Biopharma Corp. (January 2016 to July 2017) and was an Independent Director of Telesta Therapeutics Inc. (July 2011 to February 2014). Mr. Beraldo worked in public accounting with Ernst and Whinney until he joined Vetrepharm Canada Inc. as Financial Controller in 1983. Mr. Beraldo obtained a Bachelor of Commerce degree from the University of Windsor and a Chartered Accountant designation from the Canadian Institute of Chartered Accountants.

**Karen A. Dawes** – Director – With over 20 years of commercial and executive management Ms. Dawes has been a key player in the successful development, launch and marketing of products in the Cardiovascular, CNS, Oncology, Metabolic, Infectious Disease and Women's and Men's Health areas, including five blockbuster therapeutics. Karen's industry experience began with 10 years of commercial and executive management at Pfizer, where she gained increasing responsibility in product management, development, and strategy leading to her position as Vice-President, Marketing, Pratt Division. Karen then moved to biotech pioneer Genetics Institute (GI), where, as Chief Commercial Officer, she built the company's initial commercial operations including strategic and operational marketing, sales, medical affairs, public relations, and market research. When GI was acquired by Wyeth, Karen was appointed by the new parent company as Senior Vice-President, Global Strategic Marketing. Subsequently, Karen moved to Bayer Corporation as Division Head for the company's U.S. Pharmaceuticals Division. Ms. Dawes is currently President of Knowledgeable Decisions, a biopharmaceutical consulting firm focusing on corporate and commercial strategy. Ms. Dawes also serves as the chairperson of the board of directors of RepliGen (Nasdaq) and is a member of the board of directors of Medicines360. Karen has a combined B.A. and M.A. from Simmons College and an MBA from Harvard Business School.

**Chandrakant Panchal** – Director – Dr. Panchal is the Founder of Axcelon Biopolymers Corp., a biotechnology company where he is Chairman, CEO and CSO. From 1989 to 1999 he was Co-Founder, President, and CEO of Procyon Biopharma Inc., which he took public on the TSXV in 1998 and later on the TSX in 2000. Thereafter, Dr. Panchal was CSO at Procyon until its merger with Cellpep, Inc. in 2006. He was then Senior Executive VP of Business Development at the

merged entity, Ambrilia Biopharma Inc. During his term at Procyon and Ambrilia, he led several licensing and M&A transactions with pharmaceutical and biotechnology companies relating to cancer and HIV drugs developed by the company. Dr. Panchal currently sits on the boards of Avicanna Inc. (as Chairman) (TSX) ), and four other private corporations. Dr. Panchal obtained a PhD in biochemical engineering from Western University.

**Jack Geltosky –** Director - Dr. Geltosky is currently Managing Director of JEG and Associates, LLC, a business development consulting firm focused on biotech and pharmaceuticals, a position he has held since September 2011. Dr. Jack Geltosky is an experienced pharmaceutical licensing executive with a strong R&D background. He has extensive commercial development and deals portfolio from his role as Vice President External Science, Technology & Licensing at Bristol Myers Squibb (BMS) as well as Vice President, Scientific Licensing, Worldwide Business Development at SmithKline Beecham (now GlaxoSmithKline). Dr. Geltosky also held roles of increasing responsibility within Johnson & Johnson over a 10-year period. He began his career as a research scientist at E.I. DuPont. Dr. Geltosky is currently the Chairman of the Product Development Review Council for Cancer Prevention and Research Institute of Texas (CPRIT) and previously served as Senior Vice President of Business Development, Life Science at Arizona Technology Enterprises. He holds a PhD in biochemistry from the California Institute of Technology.

**Dr. John H. Sampson –** Director - John H. Sampson, MD, PhD, is the Robert H. and Gloria Wilkins Distinguished Professor of Neurosurgery and President of Private Diagnostic Clinic, Duke's physician practice with 1,800 members and revenue of over US$1 billion. As a translational scientist, he has been involved in the development of various immune based therapies and a lead investigator in dozens of early and late-stage clinical trials. Dr. Sampson has been continuously funded by the National Institutes of Health for 20 years and is one of the NIH's top funded neurosurgeons. Dr. Sampson has published more than 270 peer-reviewed papers in journals such as Nature, JAMA, and PNAS and has been an editorial board member for major journals in the field. Dr. Sampson was elected by his peers to the prestigious National Academy of Medicine, one of the highest honors for medical professionals and biomedical scientists. Dr. Sampson has served on multiple Scientific and Governance Boards in publicly traded biotechnology companies along with major non-profit health delivery organizations and has been a consultant for big pharma. He currently focuses his research on treating patients with benign and malignant brain tumors and is a recognized leader in the surgical resection and experimental treatment of complex cancers. As a world-renowned neurosurgeon-scientist, he is actively investigating new modalities of direct brain tumor infusion and development of novel immunotherapies. Dr Sampson has an MD from the University of Manitoba, a PhD from Duke University and an MBA from Duke's Fuqua School of Business.

**Rosemina (Nina) Merchant** – Director and Chief Development Officer – Ms. Merchant has over 30 years of experience in the development of biopharmaceuticals. Prior to co-founding Medicenna, Ms. Merchant was Senior VP of Development and Regulatory Affairs at Protox Therapeutics, Inc. (TSX), and responsible for the development of PRX302 (Topsalysin) a PSA activated protoxin for localized prostate cancer and BPH. She transitioned PRX302, a discovery project to Phase 3 readiness in 6 years. During that time, she executed multiple clinical trials, managed Canadian and the United States regulatory filings, and led all CMC related outsourcing activities in the United States and Europe. In 1992, Nina co-founded, IntelliGene Expressions, Inc., a biologics cGMP compliant CDMO, where she was VP of Manufacturing and Chief Operating Officer. Nina also held a variety of senior-level positions at KS Biomedix, GE LifeSciences, Alberta Innovates, Bioniche, and Sanofi Pasteur. She holds a B.Sc. in

Pharmacology and Chemistry from Aston University, MSc in Applied Organic Chemistry from Birmingham University, and M.E.Sc. in Biochemical Engineering from Western University.

**Elizabeth Williams** – Chief Financial Officer – Ms. Williams, CPA, CA has more than 16 years of experience in biotech, working with publicly listed entities in both Canada and the United States. Ms. Williams has extensive financing experience playing an integral role in raising more than $150 million in financing by way of public offerings, private placements, rights offerings, at-the-market facilities, warrant exercises, corporate reorganizations and debt (issuance and redemption). Prior to joining Medicenna, Ms. Williams was the Vice President of Finance and Administration at Aptose Biosciences Inc. (TSX and Nasdaq), a biotechnology company ("Aptose"). While at Aptose, Ms. Williams held several positions including acting as the Chief Financial Officer during a lengthy transition period and was responsible for a broad range of activities including financings, financial reporting and regulatory compliance. Prior to joining Aptose, Ms. Williams was an Audit Manager at Ernst & Young LLP with a focus on publicly listed multinational companies. Ms. Williams is a Director and Chair of the Audit Committee of Triumvira Immulogics Inc. Ms. Williams is a Chartered Professional Accountant and Chartered Accountant and received a Bachelor of Business Administration from Wilfrid Laurier University.

### *Shareholdings of Directors and Executive Officers*

As at the date hereof, the directors and executive officers of the Company as a group beneficially own, directly or indirectly, or exercise control or direction over 16,338,700 or approximately 29% of the number of issued and outstanding Common Shares.

## CEASE TRADE ORDERS, BANKRUPTCIES, PENALTIES OR SANCTIONS

### *Cease Trade Orders*

Other than as described below, to the knowledge of the Company, no director or executive officer of the Company is, or within the ten years prior to the date hereof has been, a director, chief executive officer, or chief financial officer, of any company (including the Company) that was subject to (a) a cease trade order; (b) an order similar to a cease trade order; or (c) an order that denied the relevant company access to any exemption under securities laws, that was in effect for a period of more than thirty consecutive days, issued while that person was acting in such capacity or issued thereafter but resulted from an event that occurred while that person was acting in such capacity.

Dr. Chandrakant Panchal is the chairman of the board of Avicanna Inc. ("Avicanna). Avicanna announced, on March 29, 2021, that it was unable to file its audited annual financial statements for the year ended December 31, 2020, and accompanying management's discussion and analysis, annual information form and related certifications on or before March 31, 2021, as required under applicable securities laws. On June 11, 2021, a cease trade order was issued by its principal regulator, the Ontario Securities Commission. The order was revoked on September 10, 2021, further to Avicanna filing the periodic and continuous disclosure documents required under applicable securities legislation.

### *Bankruptcies*

Other than as described below, to the knowledge of the Company, no director or executive officer or shareholder holding a sufficient number of securities of the Company to affect materially the

control of the Company is, or within the ten years prior to the date hereof has been, a director or executive officer of any company (including the Company) that, while that person was acting in such capacity or within a year of that person ceasing to act in such capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

Dr. Jack Geltosky was a director of Sophiris Bio Inc. when it decided to shut down its operations in May 2020. In connection with the shutdown, Sophiris Bio Inc. reached a compromise agreement with its senior creditor to pay an amount less than the full amount owed to the creditor.

Dr. Panchal and Mr. Albert Beraldo were both directors of Pure Global Cannabis Inc. when it sought and obtained, on March 19, 2020, an Order from the Ontario Superior Court of Justice (Commercial List) granting relief under the Companies' Creditors Arrangement Act (Canada). On May 1, 2020, Dr. Panchal and Mr. Beraldo both resigned as directors of Pure Global Cannabis Inc. and a receiver and manager was appointed to hold its assets pursuant to the Bankruptcy and Insolvency Act (Canada) by Order of the Ontario Superior Court of Justice (Commercial List).

To the knowledge of the Company, no director or executive officer or shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company has, within the ten years prior to the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement, or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold that person's assets.

### *Penalties and Sanctions*

No director or executive officer of the Company, or a shareholder holding a sufficient number of securities of Medicenna to affect materially the control of the Company has been subject to (a) any penalties or sanctions imposed by a court relating to securities laws or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (b) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

All of the above disclosure also applies to any personal holding companies of any of the persons referred to above.

## CONFLICTS OF INTEREST

Certain of the Company's officers and directors are also officers and/or directors of other, or may otherwise be involved with or consulted by, companies engaged in the biotechnology industry and research business generally and may be presented from time to time with situations or opportunities which give rise to apparent conflicts of interest which cannot be resolved by arm's-length negotiations but only through exercise by the officers and directors of such judgment as is consistent with their fiduciary duties to the Company which arise under applicable corporate law, especially insofar as taking advantage, directly or indirectly, of information or opportunities acquired in their capacities as directors or officers of the Company. Any such conflict is governed by applicable corporate laws, which require that directors act honestly, in good faith and with a view to the best interests of the Company. It is expected that any transactions with officers and directors will be on terms consistent with industry standards and sound business practice in

accordance with the fiduciary duties of those persons to the Company, and, depending upon the magnitude of the transactions and the absence of any disinterested board members, may be submitted to the shareholders for their approval.

In addition, the CBCA requires officers and directors to disclose any personal interest which they may have in any material contract or transaction which is proposed to be entered into with the Company and, in the case of directors, to abstain from voting as a director for the approval of any such contract or transaction, unless otherwise permitted under the CBCA.

## LEGAL PROCEEDINGS AND REGULATORY ACTIONS

There are no existing or contemplated material legal proceedings to which Medicenna or a subsidiary of Medicenna is a party or of which any of their respective property is the subject matter and no such proceedings known to Medicenna is contemplated. Medicenna has not had any material penalties or sanctions imposed against it by any legal or regulatory authorities.

## INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Except as otherwise set out herein, there are no material interests, direct or indirect, of any director, executive officer, person who beneficially owns, or controls or directs, directly or indirectly, more than 10% of the outstanding Common Shares, or any known associates or affiliates of such persons, in any transaction within the last three completed financial years or during the current financial year which has materially affected or is reasonably expected to materially affect the Company.

## TRANSFER AGENT

The Company's registrar and transfer agent is TSX Trust Company, located at 301 – 100 Adelaide St. West, Toronto, Ontario, M5H 4H1.

## MATERIAL CONTRACTS

The Company is not party to any material contract that was entered into either (1) in the last completed fiscal year, or (2) before the most recently completed fiscal year but that is still in effect as of the date hereof, except for contracts entered into in the ordinary course of business and as set out below:

1. the warrant indenture dated October 17, 2019 between the Company and TSX Trust Company regarding the provision for issuance of the unit warrants from the October 2019 public offering;

2. the warrant indenture dated December 21, 2018 between the Company and TSX Trust Company regarding the provision for issuance of the unit warrants from the December 2018 public offering;

3. the license agreements with Stanford made effective as of August 21, 2015, and subsequent amendments;

4. the NIH License Agreements and subsequent amendments; and

5. the CPRIT grant agreement made effective as of March 1, 2015, and subsequent extensions.

## INTEREST OF EXPERTS

The Company's registered public accounting firm is PricewaterhouseCoopers LLP who have advised us that they are independent with respect to the Company within the meaning of the Rules of Professional Conduct of the Chartered Professional Accountants of Ontario (registered name of the Institute of Chartered Accountants of Ontario) and the rules and standards of the Public Company Accounting Oversight Board (United States) and the securities laws and regulations administered by the United States Securities and Exchange Commission.

## ADDITIONAL INFORMATION

Additional information about us may be found on SEDAR at www.sedar.com and EDGAR at www.sec.gov. Additional information, including directors' and officers' remuneration and indebtedness, principal holders of our securities, options to purchase securities and securities authorized for issuance under equity compensation plans, is contained in our Management Information Circular for our most recent annual meeting of shareholders. Additional information may also be found in our audited financial statements and related management's discussion and analysis for our most recently completed financial year.

## SCHEDULE A
## AUDIT COMMITTEE INFORMATION

### a) Audit Committee Charter

See **Appendix 1** attached hereto.

### b) Composition of the Audit Committee

The Audit Committee of the Company is currently comprised of Mr. Alberto Beraldo (Chairman), Dr. John Sampson and Ms. Karen Dawes. All members of the Audit Committee are considered to be independent within the meaning of National Instrument 52-110 – *Audit Committees* ("NI 52-110") and under the rules of the Securities and Exchange Commission and the Nasdaq Stock Market and all are financially literate under NI 52-110.

### c) Relevant Education and Experience

The relevant education and experience of each member of the Audit Committee is provided above, under the heading "Board of Directors and Management". All of the Audit Committee members are independent of management of the Company as required by the TSX, the Nasdaq and the SEC, and each member is financially literate in that he or she has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements. Each individual has experience managing a company as the President and/or Chief Executive Officer or, in the case of Mr. Beraldo, as both the Chief Executive Officer and Chief Financial Officer and, in those roles, reviewing financial statements and reports. Mr. Albert Beraldo, Chairman of the Audit Committee, is the Financial Expert of the Committee and is a CPA, CA with many years of experience as the Chief Financial Officer of both private and public companies. Mr. Beraldo and Ms. Dawes have experience as both Executive Officers and experience serving on public company boards. Dr. Samspon has relevant experience as the President of Private Diagnostic Clinic, Duke's physician practice with revenues of over $1 billion.

### d) Audit Committee Oversight

Not applicable.

### e) Reliance on Certain Exemptions

Not applicable.

**f) Pre-Approval Policies and Procedures**

The Audit Committee has adopted specific policies and procedures for the engagement of non-audit services, as described in the Audit Committee Charter attached hereto as **Appendix 1** to this Schedule A.

**g) External Auditor Service Fees**

| YEAR ENDING | AUDIT FEES | AUDIT RELATED FEES | TAX FEES | ALL OTHER FEES | TOTAL FEES |
|---|---|---|---|---|---|
| March 31, 2022 | **$153,000** | **$72,500** | **$29,095** | **$5,202** | **$259,797** |
| March 31, 2021 | **$133,750** | **$69,550** | **$18,190** | **NIL** | **$221,490** |

"Audit Fees" refers to the aggregate fees billed by the Company's external auditors for audit services including interim reviews. "Audit Related Fees" refers to aggregate fees billed for assurance and related services by the Company's external auditors that are reasonably related to the performance of the audit or review of the Company's financial statements and not reported under Audit Fees, including the provision of comfort letters and consents, the consultation concerning financial accounting and reporting of specific issues and the review of documents filed with regulatory authorities. "Tax Fees" includes fees for professional services rendered by the Company's external auditors for tax compliance, tax advice and tax planning. "All Other Fees" includes all fees billed by the Company's external auditors for services not covered in the other three categories.

**APPENDIX 1**
**AUDIT COMMITTEE CHARTER**


## 1. PURPOSE

The primary function of the audit committee (the "Committee") is to assist the Board of Directors (the "Board") of Medicenna Therapeutics Corp. (the "Company") in fulfilling its oversight of, and recommend appropriate actions with respect to (i) the integrity of the Company's financial statements, accounting and financial reporting processes, system of internal controls over financial reporting and audit process, (ii) the Company's compliance with, and process for monitoring compliance with, legal and regulatory requirements so far as they relate to matters of financial reporting, (iii) the independent auditor's qualifications, independence and performance and (iv) the design, implementation and performance of the Company's internal audit function.

The members of the Committee are not full-time employees of the Company and may or may not be accountants or auditors by profession or experts in the fields of accounting or auditing and, in any event, do not serve in such capacity. Consequently, it is not the duty of the Committee to conduct audits or to determine that the Company's financial statements and disclosures are complete and accurate and are in accordance with generally accepted accounting principles and applicable laws, rules and regulations. These are the responsibilities of management and the external auditors.

## 2. COMPOSITION

(a) At Least Three Members. The Committee shall be comprised of a minimum of three directors as determined by the Board upon the recommendation of the Corporate Governance and Nomination Committee. All of the members of the Committee shall be "independent" as determined by the Board in compliance with applicable securities laws and applicable rules and guidelines of any stock exchange on which the securities of the Company are listed and any other laws applicable to the Company, including National Instrument 52-110 – *Audit Committees*.

All members of the Committee shall also be "financially literate", meaning the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements. At least one member of the Committee shall be a "financial expert", as such term is defined by the U.S. Securities and Exchange Commission, and have, as determined by the Board, financial sophistication (including past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in the individual's financial sophistication, including being or having a been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities).

The Board shall designate a Committee member as the Chairperson of the Committee, or if the Board does not do so, the Committee members shall appoint a Committee member as Chairperson by a majority vote of the full Committee membership.

(b) Appointment and Removal. The Board shall appoint Committee members and designate the Committee's "financial expert(s)" at the first meeting of the Board following each Annual General Meeting upon the recommendation of the Corporate Governance and Nomination Committee. Such members shall meet the independence, experience and expertise requirements under applicable securities law and the applicable rules and guidelines of any stock exchange on which the securities of the Company are listed and applicable policies of the Board. Members of the Committee shall serve for one year terms and until their successors are appointed. The Board may fill vacancies on the Committee by a majority vote of the authorized numbers of directors, but may remove Committee members only with the approval of a majority of the other independent directors then serving on the full Board.

## 3. MEETINGS, REPORTS AND RESOURCES OF THE AUDIT COMMITTEE

(a) Meetings. In discharging its responsibilities, the Committee shall meet as often as it determines necessary or advisable, but not less frequently than quarterly. The Committee may also hold special meetings or act by unanimous written consent as the Committee may decide. The meetings may be in person or telephone. The Committee shall keep written minutes of its meetings and shall deliver a copy of such minutes to the Board and to the corporate secretary of the Company for inclusion in the Company's minute books, and reports of Committee meetings will be presented at the next regularly scheduled Board meeting. The Committee may meet in separate executive sessions with other directors, the CEO and other Company employees, agents or representatives invited by the Committee. At least annually, the Committee will also meet separately with the independent auditors and/or the held of internal audit (or, if applicable, internal audit service providers), without management present.

(b) Procedures. The Committee may establish its own procedures, including the formation and delegation of authority to subcommittees, in a manner not inconsistent with this charter, the articles, applicable securities laws, or the applicable rules and guidelines of any stock exchange on which the securities of the Company are listed. The Chairperson or majority of the Committee members may call meetings of the Committee. A majority of the authorized number of Committee members shall constitute a quorum for the transaction of Committee business, and the vote of a majority of the Committee members present at the meeting at which a quorum is present shall be the act of the Committee. The Committee shall review and reassess at least annually the adequacy of this charter and recommend to the Board for approval any proposed changes, including any changes necessary to comply with applicable securities laws and applicable rules and guidelines of any stock exchange on which the securities of the Company are listed and any other laws applicable.

(c) Resources. The Committee shall have the authority, in its sole discretion, to (i) engage independent counsel and other advisors as it determines necessary to carry out its duties, (ii) set and pay the compensation for any advisors employed by the Committee, and (iii) communicate directly with the internal and external auditors. The Company shall provide funding, as determined appropriate by the Committee and in the Committee's sole authority, for payment of compensation to any registered public accounting firm engagement for the purpose of preparing or issuing an audit report or performing other audit, review or attest

services for the Company; compensation to any advisers employed by the Committee, as it determines necessary to carry out its duties; and ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out the Committee's duties.

## 4. AUTHORITY AND RESPONSIBILITIES

In furtherance of its purpose, the Committee shall have the following authority and responsibilities:

(a) be directly responsible for appointing and recommending to the Board and the shareholders: (i) the external auditor for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company; and (ii) the compensation of the external auditor;

(b) be directly responsible for retaining and overseeing the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company, including the resolution of disagreements between management and the external auditor regarding financial reporting, with the external auditor reporting directly to the Committee;

(c) pre-approve all non-audit services to be provided to the Company or its subsidiary entities by the Company's external auditor in accordance with the pre-approval process noted below;

(d) review the accounting principles and practices to be applied and followed by the Company during the fiscal year and any significant changes from those applied and followed during the previous year;

(e) review the adequacy of the systems of internal accounting and audit policies, practices and controls established by the Company, and discuss with the auditor the results of its reviews and reports;

(f) review all litigation and claims involving or against the Company which could materially adversely affect its financial position and which the auditor or any officer of the Company may refer to the Committee;

(g) ensure that the auditor submits on a periodic basis to the Committee, and review and discusses at least annually with the auditor, a formal written statement delineating all relationships between the auditor and the Company, consistent with applicable auditor independence standards, and to review such statement and to actively engage in a dialogue with the auditor with respect to any disclosed or undisclosed relationships or services that may impact on the objectivity and independence of the auditor, and to review the statement and the dialogue with the Board and recommend to the Board appropriate action to ensure the independence of the auditor;

(h) obtain written confirmation from the independent auditor that it is objective within the meaning of the Rules of Professional Conduct/Code of Ethics adopted by the provincial institute or order of Chartered Accountants to which it belongs and is an independent public accountant within the meaning of the Independence Standards of the Canadian

Institute of Chartered Accountants and as required by applicable law or standards of the Public Company Accounting Oversight Board (the "PCAOB"), or any successor body;

(i) meet with the auditor at least once per quarter without management present to allow a candid discussion regarding any concerns the auditor may have and to resolve any disagreements between the auditor and management regarding the Company's financial reporting;

(j) review the annual consolidated financial statements of the Company and the notes thereto following the examination thereof by the auditor and prior to their approval by the Board and report to the Board thereon;

(k) review and approve the quarterly financial statements, notes thereto and quarterly management discussion and analysis (MD&A) and related press releases of the Company prior to their release;

(l) review the annual MD&A, and other public disclosure documents and related press releases, including any prospectus prior to their approval by the directors.

(m) be satisfied that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements and must periodically assess the adequacy of those procedures;

(n) establish procedures for (i) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and (ii) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters;

(o) approve the Whistleblower Policy and review and assess the adequacy of the policy on an annual basis, or more often if deemed appropriate;

(p) discuss with management and the external auditor any other matters required to be communicated to the Committee by the external auditor under applicable standards of the PCAOB or applicable law or listing standards;

(q) review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and former external auditor of the Company;

(r) review, approve and oversee any related-party transactions (as defined in applicable securities laws and stock exchange rules and guidelines);

(s) review the adequacy of insurance policies maintained by the Company;

(t) approve the Corporate Disclosure and Trading Policy and review and assess the adequacy of the policy on an annual basis, or more often if deemed appropriate; and

(u) consider any other matter which in its judgment should be taken into account in reaching its recommendation to the Board concerning the approval of the financial statements.

## 5. PRE-APPROVAL OF NON-AUDIT SERVICES

The Committee satisfies the pre-approval requirement of item 4(c) of its Responsibilities if:

(a) the aggregate amount of all the non-audit services that were not pre-approved is reasonably expected to constitute no more than five per cent of the total amount of fees paid by the Company and its subsidiary entities to the Company's external auditor during the fiscal year in which the services are provided;

(b) the Company or the subsidiary entity of the Company, as the case may be, did not recognize the services as non-audit services at the time of the engagement; and

(c) the services are promptly brought to the attention of the Committee of the Company and approved, prior to the completion of the audit, by the Committee or by one or more of its members to whom authority to grant such approvals has been delegated by the Committee.

The Committee may delegate to one or more members the authority to pre-approve non-audit services in satisfaction of the requirement of item 4.(c) of its Responsibilities. The pre-approval of non-audit services by any member to whom authority has been delegated pursuant hereto must be presented to the Committee at its first scheduled meeting following such pre-approval.

The Committee satisfies the pre-approval requirement of item 4.(c) of its Responsibilities if it adopts specific policies and procedures for the engagement of the non-audit services, if: (i) the pre-approval policies and procedures are detailed as to the particular service; (ii) the Committee is informed of each non-audit service; and (iii) the procedures do not include delegation of the Committee's responsibilities to management.