Management's Discussion and Analysis

For the Three and Nine Months Ended December 31, 2022

DATE OF REPORT: February 6, 2023

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following management's discussion and analysis ("MD&A") has been prepared as at February 6, 2023 for the three and nine months ended December 31, 2022 and should be read in conjunction with the unaudited interim condensed consolidated financial statements of Medicenna Therapeutics Corp. for the three and nine months ended December 31, 2022 and 2021, and the annual consolidated financial statements and accompanying notes for the years ended March 31, 2022 and 2021 (the "Annual Financial Statements"), which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). Our IFRS accounting policies are set out in note 2 of the Annual Financial Statements and all dollar amounts are expressed in Canadian dollars unless otherwise noted.

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

FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements within the meaning of applicable securities laws. 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 "Risks and Uncertainties" in this MD&A, the Company's annual information form for the fiscal year ended March 31, 2022 (the "Annual Information Form") and the Company's annual report on Form 20-F for the fiscal year ended March 31, 2022 (the "Annual Report on Form 20-F") filed with the U.S. Securities and Exchange Commission.

Forward-looking statements in this MD&A include, but are not limited to:

- the therapeutic potential and clinical development and related milestones of the Company's Superkines and Empowered Superkines including MDNA11, the BiSKITs^{TM} platform and bizaxofusp (formerly MDNA55);
- the timely completion of the milestones related to the MDNA11 ABILITY Study (as defined below)
- the impact of the delay on clinical data;
- the clinical trial collaboration and supply agreement with Merck;

- a potential strategic partnership to facilitate bizaxofusp's further development and commercialization; and
- the use of proceeds from public equity offerings and the necessity for the Company to have recourse to such public equity offerings.

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, including the following:

- the lack of product revenue and inability to continue operations and research and development without sufficient funding;
- the Company's requirements for, and our 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 (if approved) 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 bizaxofusp (formerly MDNA55);
- the costs and uncertainty associated with extensive government regulation;
- the obtaining of regulatory approvals, including delays or negative outcomes from the regulatory approval process;
- the potential negative results from clinical trials or studies, or adverse safety events involving the targets of the Company's products, including in the demonstration of efficacy and safety;
- the pharmacokinetic ("PK") and pharmacodynamic ("PD") properties of MDNA11;
- the tumour response data from our clinical trials;
- 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 and for the manufacture of drug product;
- 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 ("CPRIT") grant;
- the potential uses of proceeds generated under Company's offerings;
- the ability to protect the Company's intellectual property and proprietary technology;
- the ability for the Company to obtain patent's term extensions;
- 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 U.S. 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 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;
- 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;
- 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.

The forward-looking information in this MD&A does not include a full assessment or reflection of the impacts of the COVID-19 pandemic. The continued evolution of COVID-19 and its variants, as well as periodic spikes in infection rates and local outbreaks, in spite of safety measures or vaccinations, could cause disruptions to our operations or those of third parties with whom we engage. The COVID-19 pandemic has led to global supply chain challenges, which could adversely impact our ability to conduct business in the manner and timelines presently planned. As new variants of the virus appear, especially variants that are more easily spread, cause more serious outcomes, or are resistant to existing vaccines, new health orders and safety protocols could further impact our operations. The Company will continue to monitor developments of the pandemic and continuously assess its potential further impact on its operations to prevent any disruptions to the conduct of its business and clinical trials. In the event of a prolonged continuation of the pandemic, it is not clear what the potential impact may be on the Company's business, financial position and financial performance.

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

Any forward-looking statements represent the Company's estimates only as of the date of this MD&A and should not be relied upon as representing the Company's estimates as of any subsequent date. The Company undertakes no obligation to update any forward-looking statement or statements to reflect events

or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events, except as may be required by securities laws.

COMPANY OVERVIEW

The Company's principal business activity is the development and commercialization of Superkines and Empowered Superkines for the treatment of cancer, inflammation and immune-mediated diseases. Medicenna has four wholly owned subsidiaries, Medicenna Therapeutics Inc. (British Columbia), Medicenna Biopharma Inc. (Delaware), Medicenna Biopharma Inc. (British Columbia) and Medicenna Australia PTY Ltd (Australia). On November 13, 2017, Medicenna continued under the *Canada Business Corporations Act*. On August 24, 2020, Medicenna began trading on the Nasdaq Capital Market ("Nasdaq") under the symbol "MDNA.

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 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 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, 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 to precisely activate or inhibit relevant signalling pathways or immune cells in order to improve therapeutic efficacy and safety.

Medicenna has built diverse platforms, each comprised of a pipeline of Superkine candidates in-licensed from Leland Stanford Junior University ("Stanford"). This includes the MDNA109 platform that consists of IL-2 agonists, IL-2 antagonists and partial agonists of IL-2. Additional assets from Stanford also include several super-agonists of IL-4 and IL-13 and dual IL-4/IL-13 antagonists. In addition, Medicenna has also independently developed therapeutic agents based on its Empowered Superkine and BiSKITs™ platforms.

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, two additional mutations (FEAA) were incorporated in MDNA109 to abolish binding to CD25. To improve the PK properties of the highly selective version of MDNA109 (MDNA109FEAA), it was genetically fused to 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 to avoid frequent daily dosing required for Proleukin®.

We believe that, unlike Proleukin®, both MDNA11 and MDNA19, have superior PK properties, lack CD25 binding 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 study comparing MDNA11 with MDNA19 demonstrated that the former had better PK and 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 resulting in two distinct but synergistic functions into one molecule: a BiSKIT™.

Complementing our Superkine platform is bizaxofusp (formerly MDNA55), Medicenna's Empowered Superkine, for the treatment of recurrent glioblastoma ("rGBM"), the most common and uniformly fatal form of brain cancer. Bizaxofusp 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"). Bizaxofusp has been studied in five 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"). Bizaxofusp 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 bizaxofusp's further development and commercialization.

ACHIEVEMENTS & HIGHLIGHTS

The following are the achievements and highlights for the quarter ended December 31, 2022 through to the date hereof:

- On November 10, 2022, the Company announced new safety, PK, and PD data from the first four dose escalation cohorts of the Phase 1/2 ABILITY Study of MDNA11, the Company's "beta-only" long-acting IL-2 super-agonist. The data were featured in two posters presented at the Society for Immunotherapy of Cancer (SITC) 37th Annual Meeting, which took place from November 8 – 12, 2022.
- In December 2022, previously reported data from the Phase 1/2 ABILITY Study of MDNA11 were featured in an oral presentation at the 2022 Immunotherapy Bridge Conference. The presentation, titled "*Early Results of an IL-2 Superkine (MDNA11) from the Phase 1/2 ABILITY Study in Advanced Solid Tumors*" was delivered by Arash Yavari, M.B.B.S., DPhil., M.R.C.P., Principal Investigator at the Radcliffe Department of Medicine, University of Oxford and Principal Clinical Advisor to Medicenna.
- Subsequent to the quarter end, on January 5, 2023, Medicenna announced that the U.S. Patent and Trademark Office (USPTO) has issued U.S. Patent No. 11,542,312 titled "IL-2 Superagonists in Combination with Anti-PD-1." The patent provides intellectual property (IP) protection for methods of treating cancer with an IL-2 Superkine such as MDNA11 and a PD1 (for example, pembrolizumab), PDL1 or CTLA-4 checkpoint inhibitor in combination, as planned in the on-going ABILITY Study, or as a single agent using our BiSKIT™ (Bifunctional SuperKine for ImmunoTherapy) platform. The patent's term extends into at least 2039 without accounting for any potential extensions.
- Subsequent to the quarter end, in January 2023, the full results of a single-arm Phase 2b trial of bizaxofusp (formerly MDNA55) in patients with recurrent glioblastoma were published in the peer-reviewed journal *Neuro-Oncology.* Results showed the trial met its primary endpoint, with median overall survival (mOS) in the primary and supportive analysis populations exceeding the trial's pre-defined success criteria and the mOS historically achieved with currently approved therapies.

FINANCING UPDATE

Nine months ended December 31, 2022

August 2022 Public Offering

On August 10, 2022, pursuant to an underwritten public offering, we sold 13,333,334 units at a purchase price of US$1.50 per unit for gross proceeds of US$20.0 million ($25.6 million). Each unit included one common share with a fair value of US$1.06 and one common share purchase warrant with a fair value of US$0.44. Each common share purchase warrant entitles the holder to purchase one common share at an exercise price of US$1.85 until August 9, 2027. We incurred transaction costs of $2.2 million (US$1.7

million) of which $1.6 million (US$1.2 million) were allocated to share issue costs and $0.6 million (US$0.5 million) were allocated to operating expenses, based on their relative fair values.

At-The-Market Facility

On December 30, 2020, the Company entered into a sales agreement with SVB Securities LLC (f/k/a SVB Leerink LLC) ("SVB Securities") acting as sales agent (the "ATM Agreement"), pursuant to which the Company may, from time to time sell, through an at-the-market ("ATM") offering on the Nasdaq such number of common shares as would have an aggregate offering price of up to US$25.0 million (the "ATM Facility"). The ATM Facility expired on December 30, 2022. During the nine months ended December 31, 2022, the Company issued 656,656 common shares (December 31, 2021 – 1,671,995) for gross proceeds of US$0.8 million (December 31, 2021 - US$2.9 million) at an average price of US$1.20 (December 31, 2021 - US$1.76). The Company received, net of commissions, US$0.7 million (December 31, 2021 - US$2.8 million). In total, the Company incurred share issuance costs (including commissions) of US$0.1 million (December 31, 2021 - US$0.1 million).

Warrants

During the nine months ended December 31, 2022, no warrants were exercised.

The term of the warrants outstanding and exercisable, totaling 1,549,052 due to expire on October 17, 2022, and issued on October 17, 2019, as part of a public offering of an aggregate of 5,307,693 units of the Company, was extended on October 17, 2022 to July 17, 2023.

Nine months ended December 31, 2021

During the nine months ended December 31, 2021, 266,290 warrants were exercised for proceeds of $0.4 million, the details of which are described below:

Number of Warrants	Exercise Price	Proceeds	Expiry Date
	$	$	
50,000	1.20	60,000	December 21, 2023
71,744	1.30	93,267	October 17, 2021
144,546	1.75	252,955	October 17, 2022
266,290		**406,222**	

NASDAQ LISTING

On October 28, 2022, the Company announced that on October 25, 2022, it received a notice from the Nasdaq Stock Market LLC (the 'Nasdaq Notice"), stating that the Company was not in compliance with the minimum bid price requirement of US$1.00 (the "Minimum Bid Requirement") per share under the Nasdaq Listing Rule 5450(a)(1) based upon the closing bid price of the Company's common shares for the 30 consecutive business days prior to the date of the Nasdaq Notice. The Nasdaq Notice had no immediate effect on the listing or trading of the Company's common shares on Nasdaq, and the Company's operations currently remain unaffected by the receipt of the Nasdaq Notice.

Under Nasdaq Listing Rule 5810(c)(3)(A), the Company has 180 calendar days from the date of the Nasdaq Notice, or until April 24, 2023, to regain compliance with the Minimum Bid Requirement, during which time the Company's common shares will continue to trade on Nasdaq. If at any time before April 24, 2023, the bid price of the Company's common shares closes at or above US$1.00 per share for a minimum of 10 consecutive business days, the Company will regain compliance with the Minimum Bid Requirement. If the Company does not regain compliance with the Minimum Bid Requirement by April 24, 2023, the Company

may be eligible, upon satisfaction of certain Nasdaq listing requirements, for an additional period of 180 calendar days to regain compliance or its common shares may be subject to delisting from Nasdaq.

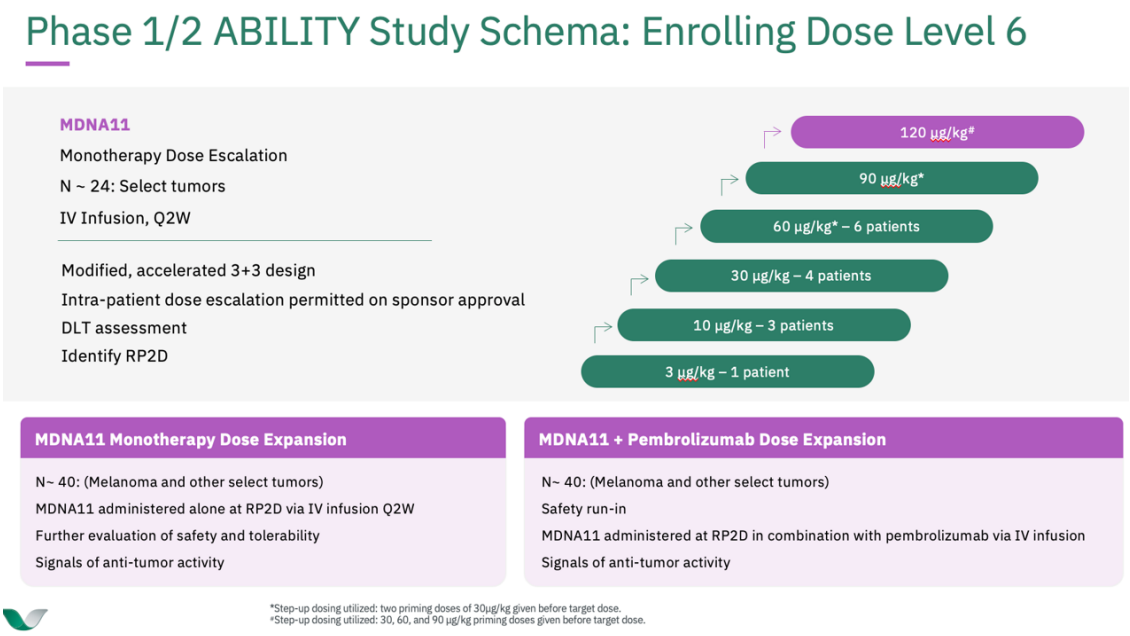
The Company is closely monitoring the closing bid price of its common shares and is considering its options to regain compliance with the Minimum Bid Requirement under the Nasdaq Listing Rules. This notice does not have any impact on the Company's TSX listing.

RESEARCH & DEVELOPMENT UPDATE

Superkine Platform

MDNA11

On September 14, 2021, we announced that we had dosed the first patient in 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 of MDNA11 administered intravenously every two 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. The ABILITY Study is currently enrolling patients at clinical sites in Australia, Canada and the United States.



On May 2, 2022, Medicenna announced new clinical data from the third cohort of the Phase 1/2 ABILITY Study of MDNA11. These data were subsequently updated in July as described below.

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. These data were subsequently updated in July as described below.

On July 27, 2022, Medicenna announced new clinical data on safety, PK, PD and anti-tumor activity from the Phase 1/2 ABILITY Study of MDNA11 which were presented at the Cytokine Based Drug Development

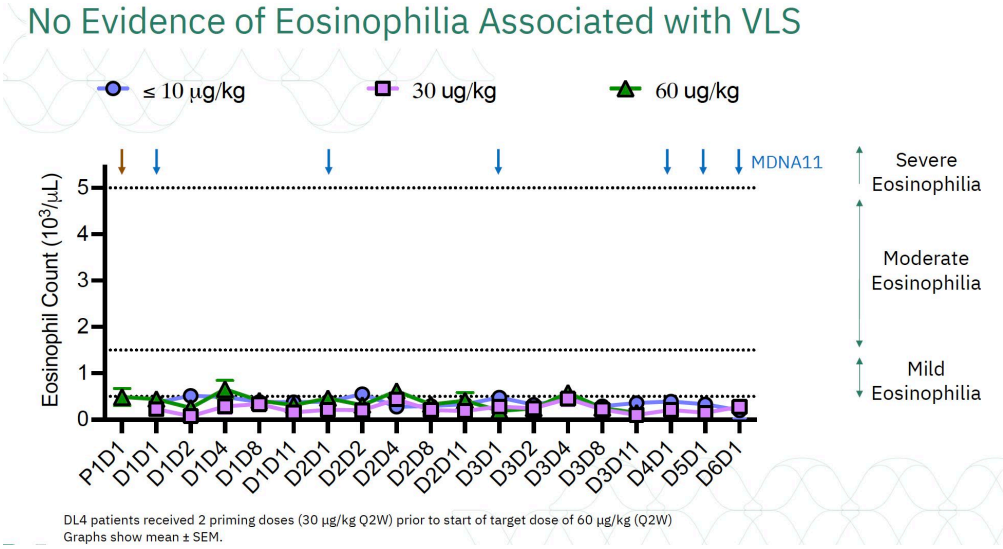
Summit, held in Boston. These data were subsequently updated on September 28, 2022 and November 10, 2022 and are described below.

In the dose escalation portion of the ABILITY Study, MDNA11 is administered intravenously, as a monotherapy, once every two weeks to patients with advanced solid tumors. The trial's first two cohorts evaluated MDNA11 doses ≤ 10 µg/kg. The trial's third cohort was administered a dose of 30 µg/kg. Patients in the fourth and fifth dose escalation cohorts receive two 30 µg/kg "priming" doses of MDNA11 before stepping up to receive fixed doses of 60 and 90 µg/kg, respectively.

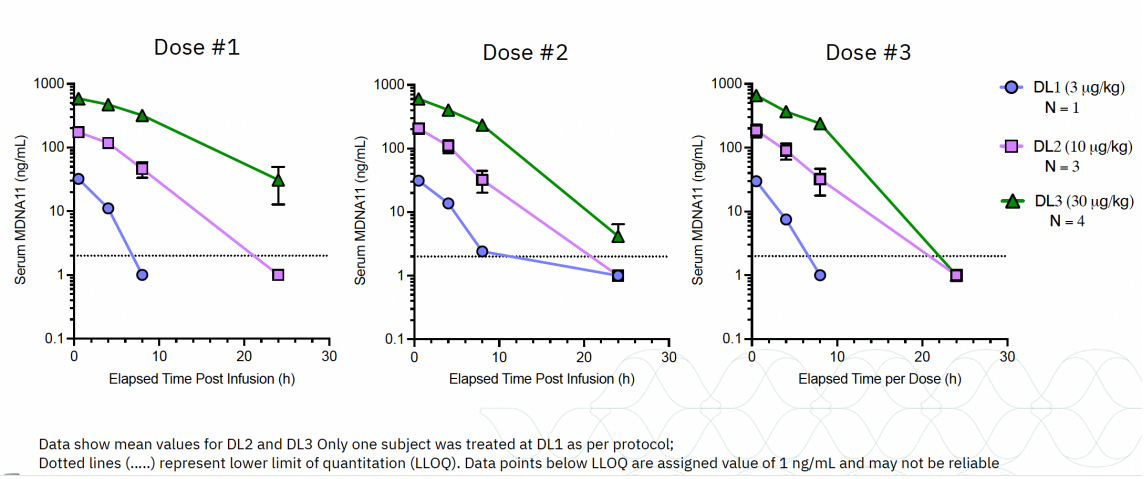
Key data from patients enrolled in the trial's four initial dose escalation cohorts include:

Demographics:
- Patients enrolled in the study to date (N=14) have failed up to four lines of prior systemic therapy.
- 11 of 14 patients have relapsed, were not tolerant to or did not respond to at least one prior immunotherapy with a checkpoint inhibitor.

Safety:
- MDNA11 treatment in Cohort 4 (comprised of two step-up doses of 30 µg/kg followed by fixed doses of 60 µg/kg every two weeks) was not associated with any dose-limiting toxicities.
- The Safety Review Committee approved dose escalation for Cohort 5 to the 90 µg/kg dose every two weeks following two priming doses at 30 µg/kg.
- Subsequent to the quarter end, the Safety Review Committee approved dose escalation for Cohort 6 to a target dose of 120 µg/kg dose every two weeks following three priming doses at 30, 60 and 90 µg/kg.
- Significant increases in eosinophil count from baseline have not been observed with MDNA11 treatment. Extremely high eosinophil count is associated with vascular leak syndrome which is a known side effect of high-dose recombinant human IL-2 (Proleukin®).



Pharmacokinetics:
- The pharmacokinetic data from the first three cohorts demonstrated similar trends following each of three repeat doses which suggests lack of immunogenicity or insignificant levels of anti-drug-antibodies.
- Dose dependent increase in the C_{max} and Area Under the Curve were also observed.



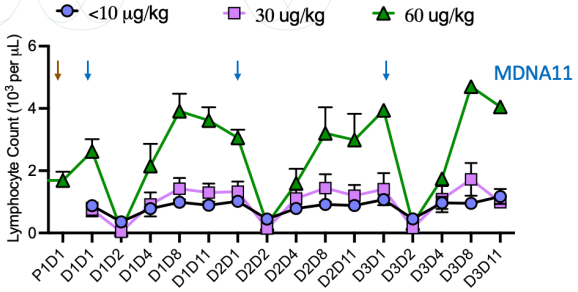
Data show mean values for DL2 and DL3 Only one subject was treated at DL1 as per protocol;
Dotted lines (.....) represent lower limit of quantitation (LLOQ). Data points below LLOQ are assigned value of 1 ng/mL and may not be reliable

Pharmacodynamics:

- In addition to dose-dependent increases in lymphocyte counts and lymphocyte kinetics, MDNA11 preferentially expanded anti-cancer NK and CD8⁺ T cells without stimulating proliferation of pro-tumor Treg cells.

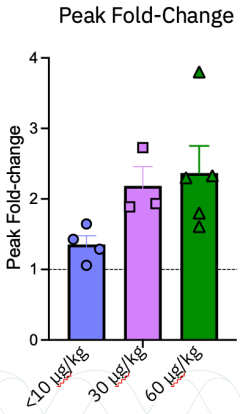
MDNA11 Induced Lymphocyte Expansion

➢ Expansion of circulating lymphocytes irrespective of baseline count



	Average AUC (day.10³ cells/µL) (Average of Dose 1 & 2)
< 10 µg/kg	3
30 µg/kg	4.8
60 µg/kg	12.2

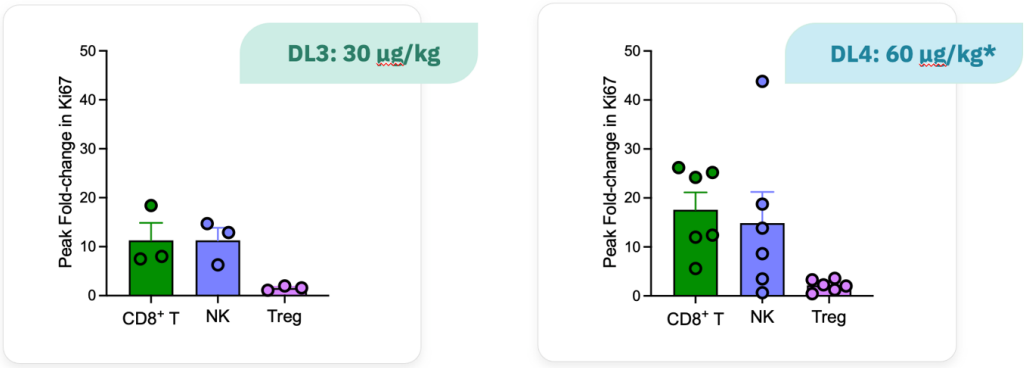
DL4 patients received 2 priming doses (30 µg/kg Q2W) prior to target dose (60 µg/kg Q2W)
Graph shows mean ± SEM.
AUC measured as area between minimum lymphocyte count values



Peak fold-change relative to baseline.
Graph shows mean ± SEM
For < 10 µg/kg and 30 µg/kg, peak data for Dose
For 60 µg/kg, peak data for Target Dose 1

MDNA11 Stimulated CD8+ T and NK Cell Proliferation (Ki67)

No increase in Tregs

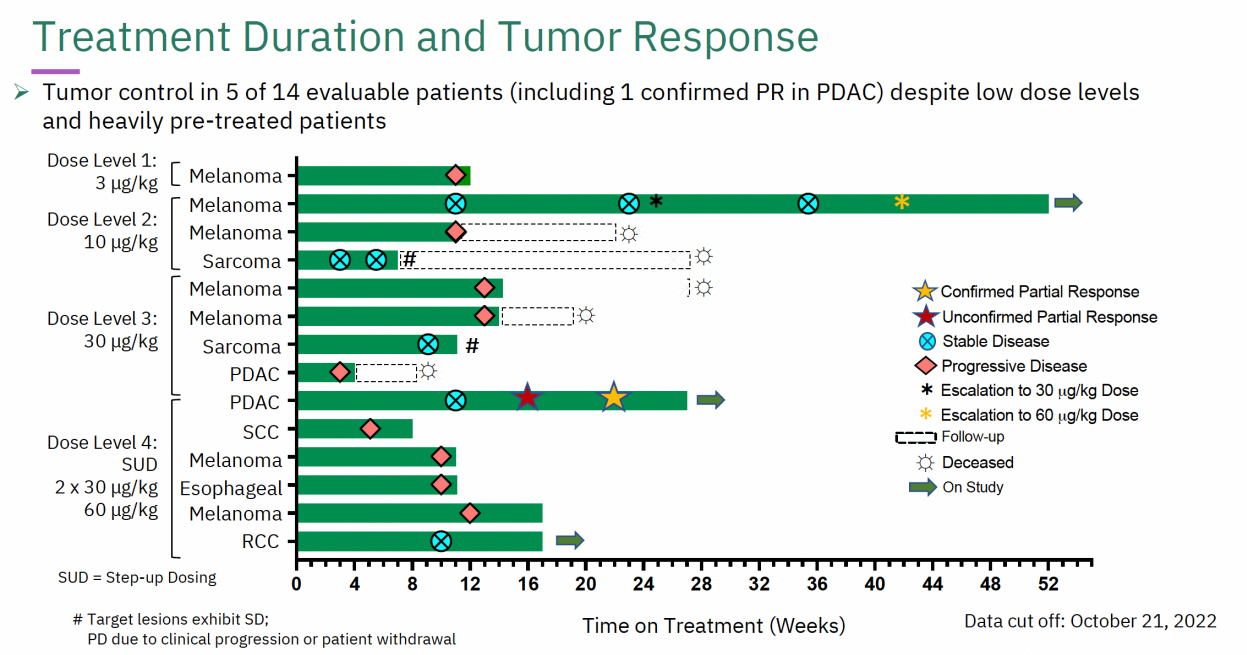


Peak fold-change relative to baseline. Proliferation assess based on Ki67 expression
*Patients received 2 priming 30 µg/kg doses (Q2W) prior to target dose of 60 µg/kg. Data for 30 µg/kg cohort are based on 3rd administration for comparison.
Dose 3 data available for 3 of 4 patients.

Anti-tumor Activity:

- Of the 14 evaluable patients with at least one on-treatment imaging scan, five patients achieved tumor control (defined as stable disease, partial response, or complete response as per RECIST 1.1) during the monotherapy dose-escalation portion of the MDNA11 ABILITY Study as follows:

1. Metastatic Leiomyosarcoma Stage IV (Dose Level 2 @ 10 µg/kg); stable disease.
2. Metastatic Melanoma Grade 4C (initially enrolled at Dose Level 2 @ 10 µg/kg Q2W with subsequent intra-patient dose escalations to Dose Level 3 @30 µg/kg and Dose Level 4 @60 µg/kg), stable disease.
3. Metastatic Sarcoma Stage IV (Dose Level 3 @ 30 µg/kg), stable disease
4. Pancreatic Ductal Adenocarcinoma (PDAC) Stage IV (Dose Level 4 @ 60 µg/kg following 2 priming doses of 30 µg/kg), confirmed partial response.
5. Non-clear cell 3L renal cell carcinoma patient (Dose Level 4 @ 60 µg/kg following 2 priming doses of 30 µg/kg), stable disease.



On September 13, 2022 we announced that we had entered into a Clinical Trial Collaboration and Supply Agreement ("CTCSA") with Merck (known as MSD outside the United States and Canada) to evaluate MDNA11 in combination with KEYTRUDA® (pembrolizumab), Merck's anti-PD-1 (programmed death receptor-1) therapy, in the ongoing Phase 1/2 ABILITY Study. Under the terms of the CTCSA, Medicenna will sponsor the study and Merck will supply KEYTRUDA®. The two companies will establish a Joint Development Committee to optimally advance the study's combination arm.

Medicenna anticipates completing the following upcoming milestones related to the MDNA11 ABILITY Study:

1) Initial PK/PD data from the ABILITY study's fifth dose escalation cohort and updated anti-tumor activity data from the first four dose escalation cohorts are expected in calendar Q1 2023.
2) Early anti-tumor activity data from the ABILITY study's sixth dose escalation cohort and single agent expansion phase (Phase 2) are expected in calendar Q3 2023.
3) Early anti-tumor activity data from the ABILITY study's combination arm are expected in calendar Q4 2023.

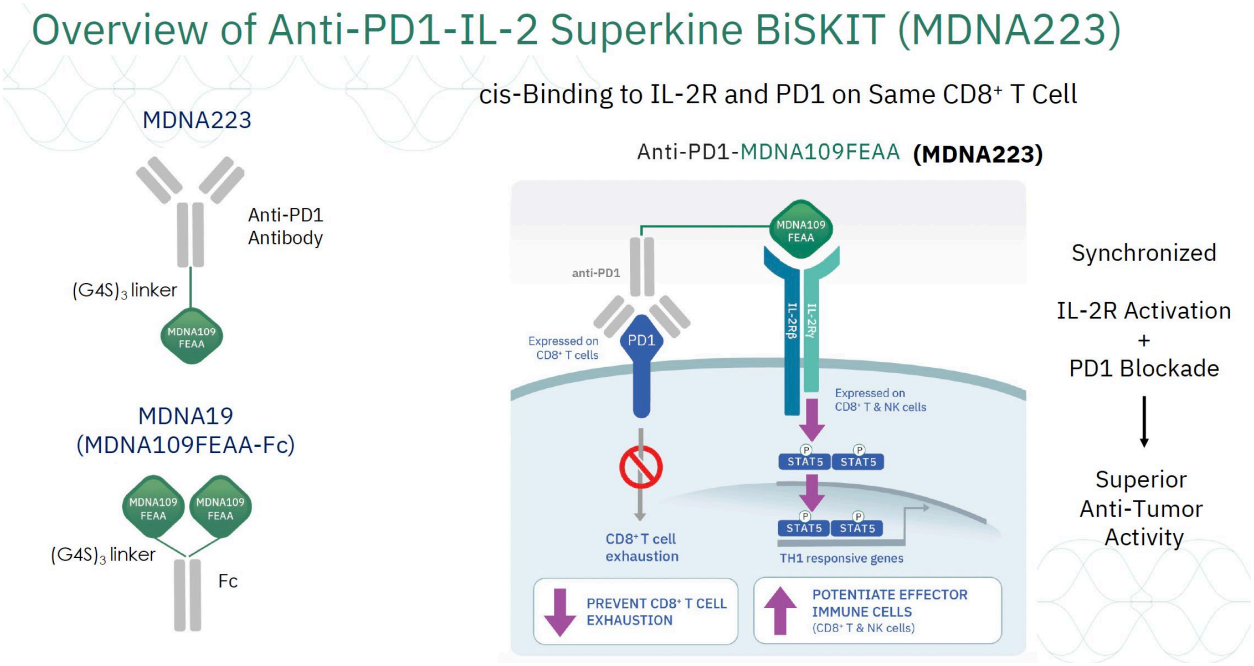
There has been a slight delay to milestone number 2 due to the addition of Cohort 6 to the escalation portion of the study.

BiSKITs™ (Bi-functional SuperKine ImmunoTherapies) Platform

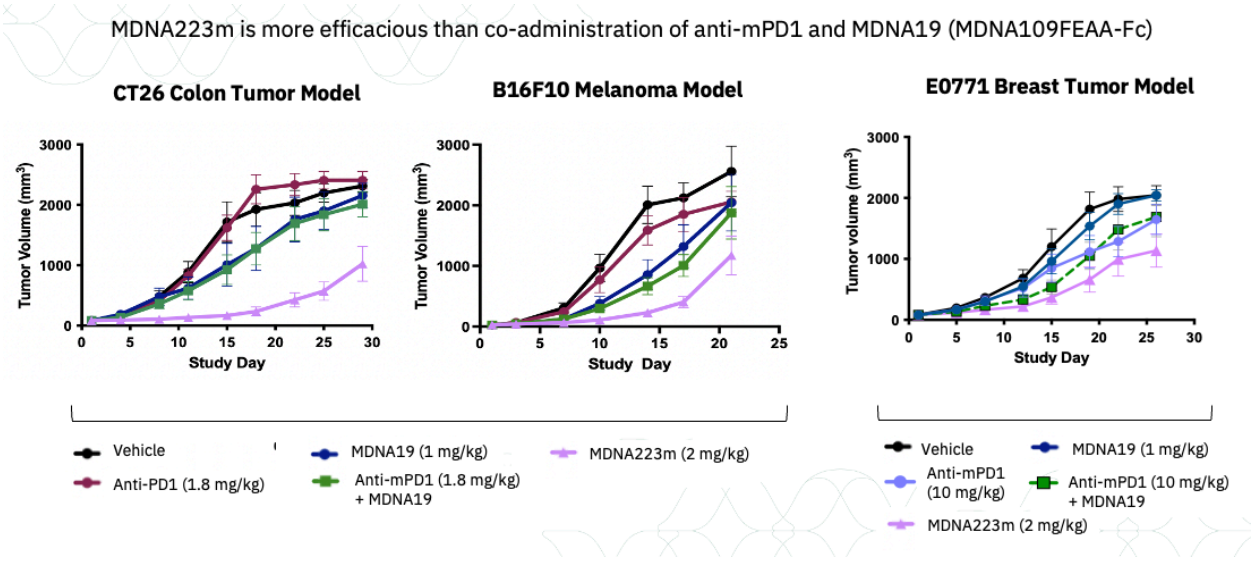
Our BiSKITs™ platform allows us to develop designer Superkines by fusing them to other proteins, antibodies, cytokines or other Superkines to combine two distinct but synergistic functions into one molecule: a BiSKIT™.

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. BiSKITs can target cancers where other immunotherapies have failed to be effective. One example of this is MDNA223, an IL-2 Superkine fused to a checkpoint inhibitor (anti-PD1). MDNA223 is a BiSKIT designed to activate cancer killing immune cells via the IL-2 receptor while simultaneously preventing their exhaustion through the validated method of blocking PD-1 signaling. Combining these two functions into a single molecule allows us to simultaneously engage both of these important targets on the same immune cells (also known as cis-binding).

On September 22, 2022, *in vitro* data presented at Cytokines 2022 demonstrated that MDNA223's potency was similar to that of a control anti-PD1 antibody while displaying high-affinity for IL-2 receptor beta (IL-2Rβ) and no binding to IL-2 receptor alpha (IL-2Rα). This enhanced IL-2Rβ selectivity resulted in potent and preferential stimulation of anti-cancer CD8+ T cells over pro-tumor Treg cells. *In vivo* murine data showed MDNA223 exhibiting a prolonged pharmacodynamic response extending beyond the duration of pharmacokinetic exposure.



Data from murine tumor models of colon, skin and breast cancer using a mouse version of MDNA223 (i.e MDNA223m) showed dose-dependent and statistically significant improvements in efficacy compared to co-administration of the anti-PD-1 antibody and IL-2 super-agonist (MDNA19) at equivalent molar doses, demonstrating the advantage of exploiting the BiSKIT's cis-binding potential. These data demonstrate the therapeutic synergy resulting from the BiSKIT's ability to concurrently target PD1 and the IL-2 receptor on the same immune cells (*cis*-binding approach).



Subsequent to the quarter end, on January 5, 2023, Medicenna announced that the USPTO has issued U.S. Patent No. 11,542,312 titled "IL-2 Superagonists in Combination with Anti-PD-1." The patent provides IP protection for methods of treating cancer with an IL-2 Superkine such as MDNA11 and a PD1 (for example, pembrolizumab), PDL1 or CTLA-4 checkpoint inhibitor in combination, as planned in the on-going ABILITY Study, or as a single agent using our BiSKIT™ (Bifunctional SuperKine for ImmunoTherapy) platform. The patent's term extends into at least 2039 without accounting for any potential extensions.

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 IL13Rα2. 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).

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.

On September 22, 2022, data presented at Cytokines 2022 showed that Fc-MDNA413 blocks the IL-4 and IL-13 pathways that polarize Tumor Associated Macrophages ("TAMs") to the M2a phenotype and stimulate proliferation of Myeloid Derived Suppressor Cells ("MDSCs"). Both, TAMs and MDSCs that are known to promote cancer growth, especially in immunologically cold tumors. *In vitro* analyses showed that Fc-MDNA413 is 300-times more selective for IL-13Rα1 (over-expressed by TAMs and MDSCs) over IL-13Rα2 (a decoy receptor) compared to wild type Fc-IL13. This superior binding profile enabled Fc-MDNA413 to potently inhibit IL-4/IL-13 mediated functions as measured by blockade of pSTAT6 signaling, TF-1 cell proliferation, and M2a polarization of macrophages. In murine studies, Fc-MDNA413 demonstrated sustainable serum exposure at a dose that was well tolerated and inhibited tumor growth as a single agent in melanoma and colon cancer models. In addition, Fc-MDNA413 synergized with MDNA19 in a murine melanoma model, highlighting the advantages of co-targeting suppressive and effector immune cells within an otherwise cold tumor microenvironment.

Medicenna is currently screening and optimizing a variety of IL-2/IL-4/IL-13 Superkines as part of our BiSKITs™ platform with the goal of having a BiSKIT candidate IND-ready by the end of calendar year 2023.

Bizaxofusp (formerly MDNA55)

Bizaxofusp has been studied in five clinical trials in 132 patients, including 112 patients with rGBM, suggesting potentially superior efficacy when compared to the current SOC. The Company has secured Orphan Drug Status from the FDA and the EMA as well as Fast Track Designation from the FDA.

A Phase 2b clinical trial with bizaxofusp was completed in a multi-center, open-label, single-arm study in patients with first or second recurrence or progression of GBM after surgery or radiotherapy ± adjuvant therapy or other experimental therapies. Subsequently, a separate blinded study that collected rGBM survival and prognostic data from 81 patients, that had contemporaneously received treatment at major clinical centres using current SOC, were used to establish a matched External Control Arm ("ECA"). The blinded survival data from the matched ECA (established by matching with the bizaxofusp treated population based on 11 different prognostic factors using propensity scoring methods) were then used as a control arm versus survival data from the Phase 2b bizaxofusp trial.

On September 29, 2020, Medicenna had an End of Phase 2 (EOP2) meeting with the FDA to discuss future development and commercialization of bizaxofusp, if approved for rGBM. On October 15, 2020, we 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 bizaxofusp for rGBM. Medicenna is pursuing strategic partnerships to assist with additional clinical development of bizaxofusp, as well as preparing the program for commercialization and its subsequent launch in various countries where marketing authorization has been granted.

In January 2023, the full results of a single-arm Phase 2b trial of bizaxofusp (recently named as per WHO International Non-proprietary Names) in patients with recurrent glioblastoma were published in the peer-reviewed journal *Neuro-Oncology*. Results showed the trial met its primary endpoint, with mOS in the primary and supportive analysis populations exceeding the trial's pre-defined success criteria and the mOS historically achieved with currently approved therapies.

SELECTED FINANCIAL INFORMATION

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

	Three months ended December 31,		**Nine months ended December 31,**	
	2022	2021	**2022**	2021
	$	$	**$**	$
General and Administration	**1,976**	1,990	**6,266**	5,821
Research and Development	**2,945**	2,907	**7,718**	13,525
Change in fair value of warrant derivative	**(3,747)**	-	**(5,547)**	-
Foreign exchange (gain) loss	**307**	(74)	**(1,713)**	85
Net Loss	**(1,141)**	(4,807)	**(6,192)**	(19,371)
Basic and Diluted Loss per Share	**(0.02)**	(0.09)	**(0.10)**	(0.36)
Total Assets	**38,174**	26,107	**38,174**	26,107
Total Liabilities	**4,949**	4,107	**4,949**	4,107

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

For the nine months ended December 31, 2022, we reported a net loss of $6.2 million ($0.10 loss per share), compared to a net loss $19.4 million ($0.36 loss per share) for the nine months ended December 31, 2021. The decrease in net loss for the nine-month period ended December 31, 2022, compared with the nine-month

period ended December 31, 2021, was partially as a result of decreased research and development expenditures related to the MDNA11 program, where GMP manufacturing and IND-enabling studies were completed in the prior year. There was a foreign exchange gain of $1.7 million during the nine-month period ended December 31, 2022, compared to a loss of $0.1 million in the nine months ended December 31, 2021, as a result of gain on USD cash and cash equivalents. There was a non-cash change in the fair value of the warrant derivative (gain) of $3.7 million and $5.5 million for the three and nine months ended December 31, 2022, respectively. These reductions were offset by a reimbursement of $1.8 million under the grant from CPRIT in the period ended December 31, 2021 which offset R&D expenditures in the prior year period.

For the three months ended December 31, 2022, we reported a net loss of $1.1 million ($0.02 loss per share), compared to a net loss of $4.8 million ($0.09 loss per share) for the three months ended December 31, 2021 respectively. The decrease in net loss for the three-month period ended December 31, 2022, compared with the three-month period ended December 31, 2021, was primarily due to non-cash change in the fair value of the warrant derivative (gain) of $3.7 million for the three months ended December 31, 2022.

Cash utilized in operating activities for the nine months ended December 31, 2022 was $10.4 million, compared to cash utilized in operating activities for the nine months ended December 31, 2021 of $20.7 million. The decrease in cash utilized in the nine months ended December 31, 2022 compared to the nine months ended December 31, 2021 is primarily the result of decreased research and development expenses, and unrealized foreign exchange gain.

RESULTS OF OPERATIONS FOR THE THREE AND NINE MONTHS ENDING DECEMBER 31, 2022

Research and Development ("R&D") Expenses

	Three months ended December 31,		**Nine months ended December 31,**	
	2022	2021	**2022**	2021
	$	$	**$**	$
Chemistry, manufacturing, and controls	**146**	173	**686**	6,588
Regulatory	**15**	69	**52**	458
Discovery and pre-clinical	**295**	522	**1,166**	2,822
Clinical	**1,221**	934	**2,752**	1,956
Salaries and benefits	**780**	751	**1,839**	2,061
Licensing, patent legal fees and royalties	**303**	255	**739**	783
Stock based compensation	**156**	194	**452**	511
CPRIT grant claimed on eligible expenses	**-**	-	**-**	(1,753)
Other research and development expenses	**29**	9	**32**	99
	2,945	2,907	**7,718**	13,525

R&D expenses of $2.9 million and $7.7 million were incurred during the three and nine months ended December 31, 2022, respectively, compared with $2.9 million and $13.5 million incurred in the three and nine months ended December 31, 2021, respectively.

The decrease in R&D expenses during the nine months ended December 31, 2022 compared to the nine months ended December 31, 2021 is primarily attributable to:

- One-time higher chemistry, manufacturing and controls costs ("CMC"), associated with the first scale-up GLP and GMP manufacturing of MDNA11 required to supply adequate drug product for IND-enabling studies and the ABILITY Study, completed in the prior year period.
- Discovery and pre-clinical expenses associated with the one-time GLP compliant MDNA11 IND enabling studies, completed in prior year period.

- Decrease in regulatory costs due to the preparation of regulatory filings necessary to initiate the MDNA11 ABILITY study incurred in the prior year period.
- Lower salary and benefits costs due to reduced headcount in the current year.

The above decreases were partially offset by an increase in clinical costs as more patients were enrolled in MDNA11 ABLILITY Study in the three and nine months ended December 31, 2022, and by the reimbursement of previously incurred expenses with respect to the CPRIT grant of $1.8 million in the nine months ended December 31, 2021.

The increase in R&D expenses during the three months ended December 31, 2022, compared to the three months ended December 31, 2021 is primarily attributable to higher clinical costs as additional patients enrolled in the MDNA11 ABILITY Study.

The above increases were partially offset by decreased discovery and pre-clinical expenses associated with the one-time GLP compliant MDNA11 IND enabling studies, decrease in regulatory costs due to the preparation of regulatory filings necessary to initiate the MDNA11 ABILITY study both completed in the prior year period.

General and Administrative ("G&A") Expenses

	Three months ended December 31,		**Nine months ended December 31,**	
	2022	2021	**2022**	2021
	$	$	**$**	$
Depreciation expense	**2**	10	**4**	30
Stock based compensation	**183**	232	**724**	676
Facilities and operations	**149**	109	**422**	291
Public company expenses	**1,213**	1,351	**3,587**	4,116
Transaction costs, warrant derivative	**-**	-	**652**	-
Salaries and benefits	**429**	288	**877**	708
	1,976	1,990	**6,266**	5,821

G&A expenses of $2.0 million and $6.3 million were incurred during the three and nine months ended December 31, 2022, respectively, compared with $2.0 million and $5.8 million during the three and nine months ended December 31, 2021, respectively.

The increase in G&A expenses in the nine-month period ended December 31, 2022, compared to the nine-month period ended December 31, 2021, primarily relates to one-time transaction costs associated with the warrant derivative partially offset by a reduction in directors and officers liability insurance premiums.

The decrease in G&A expenses in the three-month period ended December 31, 2022, compared to the three-month period ended December 31, 2021, is primarily attributable to a reduction in directors and officers liability insurance premiums, partially offset by increased salary costs to support ongoing operations and finance expense on warrant amendment.

SUMMARY OF QUARTERLY FINANCIAL RESULTS:

	Dec. 31 2022	Sep. 30 2022	Jun. 30 2022	Mar. 31 2022	Dec. 31 2021	Sep. 30 2021	Jun. 30 2021	Mar. 31 2021
	$	$	$	$	$	$	$	$
Revenue	-	-	-	-	-	-	-	-
General and administration	1,976	2,371	1,919	1,936	1,990	1,964	1,867	2,009
Research and development	2,945	2,362	2,411	1,191	2,907	6,269	4,349	3,701
Change in fair value of warrant derivative	(3,747)	(1,800)	-	-	-	-	-	-
Net loss	(1,141)	(896)	(4,155)	(3,206)	(4,807)	(8,178)	(6,386)	(5,813)
Basic and diluted loss per share	(0.02)	(0.01)	(0.07)	(0.06)	(0.09)	(0.15)	(0.12)	(0.11)
Total assets	38,174	42,560	20,140	23,456	26,107	30,093	37,336	42,252
Total liabilities	4,949	8,644	2,147	2,621	2,351	5,431	4,958	4,107

R&D expenses fluctuate quarter over quarter based on activities ongoing during that period. The higher expenditures from the quarter ended March 31, 2021 through to the quarter ended September 30, 2021 are primarily related to one-time higher CMC costs, associated with the scale-up GLP and GMP manufacturing of MDNA11 which was predominantly completed in the quarter ended September 30, 2021. Refundable tax credits of $0.7 million contributed to a decrease in R&D expenses during the quarter ended March 31, 2022. R&D expenses increased in the quarter ended December 31, 2022, as activity in the MDNA11 ABILITY study expands.

G&A expenses have remained consistent quarter over quarter, with the exception of the quarter ended September 30, 2022, which saw an increase in expenses due to one-time transaction costs associated with a warrant derivative established as part of the August 2022 public offering.

There was a non-cash change in the fair value of the warrant derivative (gain) totalling $1.8 million in the quarter ended September 30, 2022, and $3.7 million in the quarter ended December 31, 2022.

LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company has devoted its resources to funding R&D programs, including securing intellectual property rights and licenses, conducting discovery research, manufacturing drug supplies, initiating preclinical and clinical studies, submitting regulatory dossiers and providing administrative support to R&D activities, which has resulted in an accumulated deficit of $77.1 million as of December 31, 2022. With current revenues only consisting of interest earned on excess cash, cash equivalents and marketable securities, losses are expected to continue while the Company's R&D programs are advanced.

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

Management has forecasted that the Company's current level of cash will be sufficient to execute its current planned expenditures for more than the next 12 months without further financing. The company's cash is expected to fund operations into calendar Q2 of 2024.

CASH POSITION

At December 31, 2022, we had a cash, cash equivalents and marketable securities balance of $36.2 million, compared to $20.5 million at March 31, 2022. We invest cash in excess of current operational requirements in highly rated and liquid instruments. Working capital at December 31, 2022 was $35.1 million (March 31, 2022 - $20.8 million).

On August 10, 2022, pursuant to an underwritten public offering, we sold 13,333,334 units at a purchase price of US$1.50 per unit for gross proceeds of US$20.0 million ($25.6 million). Each unit included one common share with a fair value of US$1.06 and one common share purchase warrant with a fair value of US$0.44. Each common share purchase warrant entitles the holder to purchase one common share at an exercise price of US$1.85 until August 9, 2027. We incurred transaction costs of $2.2 million (US$1.7 million) of which $1.6 million (US$1.2 million) were allocated to share issue costs and $0.6 million (US$0.5 million) were allocated to operating expenses, based on their relative fair values.

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

CONTRACTUAL OBLIGATIONS

CPRIT Assistance

In February 2015, the Company received notice that it had been awarded a grant by the CPRIT whereby the Company was 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 bizaxofusp. As of March 31, 2022, all of the US$14.1 million had been received and the grant with CPRIT is complete.

Under the terms of the grant, the Company is required to pay a royalty to CPRIT, comprised of 3-5% of revenues on net sales of bizaxofusp 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.

Refundable tax credits

In June 2022, the company received $0.7 million through our Australian R&D incentive program relating to the year ended March 31, 2022. The amount receivable was recorded as a reduction in research and development expenses in the year ended March 31, 2022.

Intellectual Property

The Company has entered into various license agreements with respect to accessing patented technology. In order to maintain these agreements, the Company is obligated to pay certain costs based on timing or certain milestones within the agreements, the timing of which is uncertain. These costs include ongoing license fees, patent prosecution and maintenance costs, royalty and other milestone payments. As at December 31, 2022, the Company is obligated to pay the following:

- Given the current development plans and expected timelines of the Company it is assumed that project milestones of US$0.3 million will be due in the next five years.
- Project milestone payments, assuming continued success in the development programs, of uncertain timing totaling US$2.0 million and an additional US$2.0 million in sales milestones.

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

Future commitments

As of December 31, 2022, we have the following obligations to make future payments, representing contracts and other commitments that are known and committed:

	Payments Due by Period			
Contractual obligations	**Less than 1 year**	**1-3 years**	**3-5 years**	**Total**
Patent licensing costs, minimum annual royalties per license agreements	$ 203	$ 1,232	$ 312	$ 1,747

The Company cannot reasonably estimate future royalties which may be due upon the marketing authorization of bizaxofusp or MDNA11.

As at the date of this report, we had obligations to make future payments, representing significant research and development and manufacturing contracts and other commitments that are known and committed in the amount of approximately $3.4 million, of which $2.4 million has been paid or accrued at December 31, 2022. Most of these agreements are cancellable by the Company with notice. These commitments include agreements for clinical contract research organizations, manufacturing, and preclinical studies.

OFF-BALANCE SHEET ARRANGEMENTS

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

TRANSACTIONS WITH RELATED PARTIES

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

	Three months ended December 31,		Nine months ended December 31,	
	2022	2021	**2022**	2021
	$	$	**$**	$
Salaries and wages	**331**	511	**836**	1,272
Board fees	**95**	77	**247**	217
Stock option expense	**261**	349	**972**	895
	687	937	**2,055**	2,384

As at December 31, 2022, the Company had trade and other payables in the normal course of business, owing to directors and officers of $0.1 million (2021: $0.1 million) related to accrued bonuses, board fees and accrued vacation.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The significant accounting policies of the Company are described in note 2 of the Annual Financial Statements and available on SEDAR at www.sedar.com and included in the Annual Report on Form 20-F filed on EDGAR at www.sec.gov.

Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The determination of estimates requires the exercise of judgement based on various assumptions and other factors such as historical experience and current and expected economic conditions. Actual results could differ from those estimates. Critical judgements in applying the Company's accounting policies are detailed in the Annual Financial Statements, filed on SEDAR at www.sedar.com and included in the Annual Report on Form 20-F filed on EDGAR at www.sec.gov.

FINANCIAL INSTRUMENTS

Financial instruments are defined as a contractual right or obligation to receive or deliver cash on another financial asset. The Company recognizes financial instruments based on their classification. Depending on the financial instrument's classification, changes in subsequent measurements are recognized in net loss or other comprehensive loss.

A description of the financial instruments, their fair value and risk management is included in notes 2, 5 and 6 of the Annual Financial Statements, filed on SEDAR at www.sedar.com and included in the Annual Report on Form 20-F filed on EDGAR at www.sec.gov/edgar.

2020 PUBLIC OFFERING AND USE OF PROCEEDS

The following table provides an update on the anticipated use of proceeds raised as part of the public offering of common shares of the Company which was completed on March 17, 2020 (the "2020 Public Offering") along with amounts actually expended. Following completion of the 2020 Public Offering, Medicenna selected MDNA11 as its lead IL-2 candidate over MDNA19 to progress to the clinic and, as such, proceeds from the 2020 Public Offering, which were initially allocated to the development of MDNA19, have been re-directed to the development of MDNA11 in the same proportions. As of December 31, 2022, the following expenditures have been incurred (in thousands of Canadian dollars):

Item	Amount to Spend	Spent to Date	Adjustments	Remaining to Spend
Preclinical development	$ 3,300	$ 3,300	–	-
Manufacturing of clinical batch	$ 4,400	$ 4,400	–	-
Clinical development	$ 13,150	$ 7,993	–	$ 5,157
General corporate and working capital purposes	$ 11,350	$ 11,350	–	-
Total	**$ 32,200**	**$ 27,043**	**$ –**	**$ 5,157**

2022 PUBLIC OFFERING AND USE OF PROCEEDS

The following table provides an update on the anticipated use of proceeds raised in the 2022 Public Offering along with amounts actually expended. As of December 31, 2022, the following expenditures have been incurred (in thousands of Canadian dollars):

Item	Amount to Spend	Spent to Date	Adjustments	Remaining to Spend
Phase 1/2 MDNA11 ABILITY Study	US$ 8,000	–	–	US$ 8,000

Pre-clinical development of a BiSKIT candidate	US$ 8,000	US$ 295	–	US$ 7,705
Total	**US$ 16,000**	**US$ 295**	**$ –**	**US$ 15,705**

ATM FACILITY

On December 30, 2020, the Company entered into the ATM Agreement with SVB Securities acting as sales agent, pursuant to which the Company may, from time to time sell, through ATM offerings, on the Nasdaq such number of common shares as would have an aggregate offering price of up to US$25.0 million. This agreement expired on December 30, 2022. During the nine-month period ended December 31, 2022, the Company issued 656,656 common shares, raising total gross proceeds of $1.0 million under the ATM Facility.

RISKS AND UNCERTAINTIES

The Company is an immunotherapy company that operates in a highly competitive industry that is dependent on a number of factors that include the Company's capacity to raise additional funding on reasonable terms when necessary, secure partnerships for the development of its product candidates, obtain necessary regulatory approvals and achieve market acceptance, face disruption in availability of key components for ongoing clinical studies, obtain positive results from pre-clinical and clinical studies, successfully develop existing and new products, hire and retain skilled staff and key personnel, rely on third party providers, protect its intellectual property, and face litigation risk in connection thereof. An investment in the Common Shares is subject to a number of risks and uncertainties, including the risks related to the Company being a foreign private issuer.

In addition, the Company may, from time to time, announce or publish preliminary or interim data from its clinical trials. Preliminary and interim data remains subject to audit and verification procedures that may result in the final data being materially different from the preliminary or interim data. Preliminary and interim results of a clinical trial are not necessarily predictive of final results. There can be no assurance that favorable interim or preliminary data will result in favorable final data. Preliminary and interim data are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues, patient data are further examined and reviewed, more patient data become available, and the Company prepares and issues its final clinical study report. As a result, preliminary and interim data should be viewed with caution until the final, complete data are available. Material adverse changes in the final data compared to the preliminary or interim data could significantly harm the Company's business, prospects, financial condition and results of operations.

An investor should carefully consider these risks, as well as the risks described in the Company's Annual Information Form and the Annual Report on Form 20-F filed with the U.S. Securities and Exchange Commission, as well as the other information filed with the securities regulators before investing in the Common Shares. If any of such described risks occur, or if others occur, the Company's business, financial condition and the results of operations could be seriously harmed and investors could lose all or part of their investment.

There are important risks which management believes could impact the Company's business. For information on risks and uncertainties, please also refer to the "Risk Factors" section of the Company's most recent Annual Information Form filed on SEDAR at www.sedar.com and included in the Annual Report on Form 20-F filed on EDGAR at www.sec.gov/edgar.

DISCLOSURE CONTROLS AND INTERNAL CONTROL OVER FINANCIAL REPORTING

The Company has implemented a system of internal controls that it believes adequately protects the assets of the Company and is appropriate for the nature of its business and the size of its operations. The internal control system was designed to provide reasonable assurance that all transactions are accurately recorded,

that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that our assets are safeguarded.

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

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

The internal controls are not expected to prevent and detect all misstatements due to error or fraud. There were no changes in our internal control over financial reporting that occurred during the three and nine month period ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

As of December 31, 2022, the Company's management has assessed the effectiveness of our internal control over financial reporting and disclosure controls and procedures using the Committee of Sponsoring Organizations of the Treadway Commission's 2013 framework. Based on their evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that these controls and procedures are effective.

OTHER MD&A REQUIREMENTS

Outstanding Share Data

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

	Number
Common shares	69,637,469
Warrants	16,185,386
Stock options	5,755,353
Total	**91,578,208**

For a detailed summary of the outstanding securities convertible into, exercisable or exchangeable for voting or equity securities of Medicenna as at March 31, 2022, refer to notes 9, 10, and 11 of the Annual Financial Statements of the Company.

Additional information relating to the Company, including the Company's Annual Information Form and the Annual Report on Form 20-F, is available under the Company's profile on SEDAR at www.sedar.com and EDGAR at www.sec.gov, respectively.