UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of August 2022

Commission File Number: **001-39458**

Medicenna Therapeutics Corp.
(Translation of registrant's name into English)

2 Bloor St. W., 7th Floor
Toronto, Ontario M4W 3E2, Canada
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F [X] Form 40-F [ ]

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): [ ]

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): [ ]

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

MEDICENNA THERAPEUTICS CORP.

Date: August 15, 2022

By: /s/ Elizabeth Williams
Name: Elizabeth Williams
Title: Chief Financial Officer

EXHIBIT INDEX

Exhibit	Description
99.1	Interim Financial Statements for the period ended June 30, 2022
99.2	Management's Discussion and Analysis for the period ended June 30, 2022
99.3	Form 52- 109F2 Certification of Interim Filings Full Certificate – CEO
99.4	Form 52- 109F2 Certification of Interim Filings Full Certificate – CFO
99.5	News release dated August 15, 2022

Interim condensed consolidated financial statements of

Medicenna Therapeutics Corp.

(Expressed in Canadian Dollars)

For the three and nine months ended June 30, 2022

Medicenna Therapeutics Corp.

Interim Condensed Consolidated Statements of Financial Position
(Expressed in thousands of Canadian Dollars, except for share and per share amounts)
(Unaudited)

as at

	June 30, 2022	March 31, 2022
	$	$
Assets		
Current assets		
Cash and cash equivalents	**19,303**	20,535
Prepaids and deposits	**678**	1,548
Other receivables	**94**	1,308
	20,075	23,391
Intangible assets (Note 7)	**65**	65
	20,140	23,456
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	**2,147**	2,621
	2,147	2,621
Shareholders' Equity		
Common shares (Note 3)	**84,640**	83,671
Contributed surplus (Notes 4 and 5)	**8,333**	7,926
Accumulated other comprehensive income	**108**	171
Deficit	**(75,088)**	(70,933)
	17,993	20,835
	20,140	23,456

The accompanying notes are an integral part of these interim condensed consolidated financial statements.

Medicenna Therapeutics Corp.

Interim Condensed Consolidated Statements of Loss and Comprehensive Loss
(Expressed in thousands of Canadian Dollars, except for share and per share amounts)
(Unaudited)

	Three months ended June 30, 2022	Three months ended June 30, 2021
	$	$
Operating expenses		
General and administration (Note 9)	**1,919**	1,867
Research and development (Note 9)	**2,411**	4,349
Total operating expenses	**4,330**	6,216
Finance income	**(30)**	(23)
Foreign exchange (gain) loss	**(145)**	193
	(175)	170
Net loss for the period	**(4,155)**	(6,386)
Cumulative translation adjustment	**(63)**	(4)
Comprehensive loss for the period	**(4,218)**	(6,390)
Basic and diluted loss per share for the period	**(0.07)**	(0.12)
Weighted average number of common shares outstanding (Note 3)	**56,133,555**	53,554,885

The accompanying notes are an integral part of these interim condensed consolidated financial statements.

Medicenna Therapeutics Corp.

Interim Condensed Consolidated Statements of Cash Flows
(Expressed in thousands of Canadian Dollars)
(Unaudited)

	Three months ended June 30, 2022	Three months ended June 30, 2021
	$	$
Operating activities		
Net loss for the period	**(4,155)**	(6,386)
Items not involving cash		
Depreciation	**—**	10
Stock based compensation	**407**	354
Government grant expense recoveries (Note 6)	**—**	(664)
Unrealized foreign exchange	**(168)**	190
Accrued interest	**(11)**	(30)
Changes in non-cash working capital		
Other receivables and deposits	**2,095**	1,092
Accounts payable and accrued liabilities	**(474)**	862
	(2,306)	(4,572)
Investing activities		
Acquisition of marketable securities	**—**	(10,000)
Disposition of marketable securities	**—**	10,040
	—	40
Financing activities		
Repayment of lease liabilities	**—**	(12)
Issuance of share capital, net of issuance costs (Note 3)	**969**	—
Warrant and option exercises (Notes 4 and 5)	**—**	269
	969	257
Effect of foreign exchange on cash	**105**	(193)
Net decrease in cash	**(1,232)**	(4,468)
Cash, beginning of period	**20,535**	30,375
Cash, end of period	**19,303**	25,907

The accompanying notes are an integral part of these interim condensed consolidated financial statements.

Medicenna Therapeutics Corp.

Interim Condensed Consolidated Statements of Changes in Shareholders' Equity
(Expressed in thousands Canadian Dollars, except for share and per share amounts)
(Unaudited)

	Common shares issued and outstanding		Contributed surplus	Accumulated other comprehensive income	Deficit	Total shareholders' equity
	Number	Amount				
		$	$	$	$	$
Balance, March 31, 2021	**53,547,709**	**79,587**	**6,680**	**234**	**(48,356)**	**38,145**
Stock based compensation	—	—	354	—	—	354
Warrant and option exercises	169,236	327	(58)	—	—	269
Cumulative translation adjustment	—	—	—	(4)	—	(4)
Net loss for the period	—	—	—	—	(6,386)	(6,386)
Balance, June 30, 2021	**53,716,945**	**79,914**	**6,976**	**230**	**(54,742)**	**32,378**
Balance, March 31, 2022	**55,647,479**	**83,671**	**7,926**	**171**	**(70,933)**	**20,835**
Stock based compensation	—	—	407	—	—	407
Issued on ATM financing (Note 3)	656,656	969	—	—	—	969
Cumulative translation adjustment	—	—	—	(63)	—	(63)
Net loss for the period	—	—	—	—	(4,155)	(4,155)
Balance, June 30, 2022	**56,304,135**	**84,640**	**8,333**	**108**	**(75,088)**	**17,993**

The accompanying notes are an integral part of these interim condensed consolidated financial statements.

1. Nature of business and liquidity

The Company's principal business activity is the development and commercialization of IL-2, IL-4 and IL-13 Superkines and Empowered Superkines for the treatment of cancer, inflammation and immune-mediated diseases. Medicenna has four wholly owned subsidiaries, Medicenna Therapeutics Inc. ("MTI") (British Columbia), Medicenna Biopharma Inc. ("MBI") (Delaware), Medicenna Biopharma Inc. ("MBIBC") (British Columbia) and Medicenna Australia PTY Ltd ("MAL") (Australia). Medicenna is traded on both the Toronto Stock Exchange and the Nasdaq Capital Market ("Nasdaq") under the symbol ''MDNA".

Aa at June 30, 2022, the head and registered office is located at 2 Bloor St W, 7th Floor, Toronto, Ontario, Canada.

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 $75.1 million as of June 30, 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 MDNA55, MDNA11 and the BiSKITs^{TM} platform and the commercialization of MDNA55 is dependent upon our ability to successfully finance and complete our research and development programs through a combination of equity financing and revenues from strategic partners. We have no current sources of revenues from strategic partners.

Subsequent to quarter end, the Company completed a financing which raised an additional US$20 million. This additional cash is expected to fund operations into Q1 of calendar 2024. For further details see Note 10.

COVID-19 Update

In March 2020, the World Health Organization declared the COVID-19 outbreak a global pandemic and the Company continues to evaluate the COVID-19 situation and monitor any impacts or any potential impacts to the business. Medicenna has implemented health and safety measures in accordance with health officials and guidance from local government authorities. Further, the pandemic has had an impact on the Company's third-party vendors resulting in delays in receiving components and supplies which delayed our ability to start certain studies and could result in development delays including the ongoing and planned clinical activities related to MDNA11. As the COVID-19 health crisis continues, the Company will continue to rely on guidance and recommendations from local health authorities, Health Canada and the Centers for Disease Control and Prevention to update the Company's policies.

2. Basis of presentation and significant accounting policies

a) Statement of compliance

These interim condensed consolidated financial statements have been prepared in accordance with International Accounting Standards ("IAS") 34 'Interim Financial Reporting' (IAS 34) using accounting policies consistent with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and the Interpretations of the International Financial Reporting and Interpretations Committee ("IFRIC").

The interim condensed consolidated financial statements do not include all the information and disclosures required in the annual financial statements and should be read in conjunction with the Company's audited financial statements for the year ended March 31, 2022.

The interim condensed consolidated financial statements were approved by the Company's Board of Directors and authorized for issue on August 12, 2022.

b) Functional and presentation currency

The functional currency of an entity and its subsidiary is the currency of the primary economic environment in which the entity operates. The functional currency of the parent company is the Canadian dollar and the functional currency of MBI is the US dollar, the functional currency of MTI and MBI BC is the Canadian dollar, the functional currency of MAL is the Australian dollar, and the presentation currency of the parent company is the Canadian dollar.

c) Significant accounting judgments, estimates and assumptions

The preparation of these unaudited interim condensed consolidated financial statements in accordance with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities at the date of the unaudited condensed consolidated interim financial statements and reported amounts of revenues and expenses during the reporting period. Actual outcomes could differ from these estimates.

The unaudited interim condensed consolidated financial statements include estimates, which, by their nature, are uncertain. The impacts of such estimates are pervasive throughout the unaudited interim condensed consolidated financial statements and may require accounting adjustments based on future occurrences. The estimates and underlying assumptions are reviewed on a regular basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised and in any future periods affected.

The accompanying unaudited interim condensed consolidated financial statements are prepared in accordance with IFRS and follow the same accounting policies and methods of application as the audited consolidated financial statements of the Company for the year ended March 31, 2022. They do not include all of the information and disclosures required by IFRS for annual financial statements. In the opinion of management, all adjustments considered necessary for fair presentation have been included in these unaudited condensed consolidated interim financial statements. Operating results for the three months ended June 30, 2022 are not necessarily indicative of the results that may be expected for the full year ended March 31, 2023. For further information, see the Company's audited consolidated financial statements including notes thereto for the year ended March 31, 2022.

(Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

3. Share capital

Authorized

Unlimited common shares

Equity Issuances

On December 30, 2020, the Company entered into a sales agreement with SVB Leerink acting as sales agent, pursuant to which the Company may, from time to time sell, through at-the-market ("ATM") on the NASDAQ such number of common shares as would have an aggregate offering price of up to US$25.0 million (the ATM Offering). The Company plans 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 three months ended June 30, 2022, the Company issued 656,656 common shares (June 30, 2021 – nil) for gross proceeds of US$0.8 million (June 30, 2021 - $nil) at an average price of US$1.20. The company received; net of commissions US$0.7 million (June 30, 2021 - $nil). In total, we incurred share issuance costs (including commissions) of US$0.1 million (June 30, 2021 - $nil).

Calculation of loss per share
Loss per common share is calculated using the weighted average number of common shares outstanding. For the period ended June 30, 2022 and 2021, the calculation was as follows:

	Three months ended June 30, 2022	Three months ended June 30, 2021
Common shares issued and outstanding, beginning of period	**55,647,479**	53,547,709
ATM issuances	**486,076**	—
Effect of warrants and options exercised	—	7,176
Weighted average common shares issued and outstanding, end of period	**56,133,555**	53,554,885

The effect of any potential exercise of the Company's stock options and warrants outstanding during the year has been excluded from the calculation of diluted loss per common share as it would be anti- dilutive.

4. Warrants

Warrant continuity:

	Number of Warrants	**Weighted average exercise price**
Warrants outstanding at March 31, 2021	**4,018,993**	**$ 1.82**
Warrants expired during the period	(18,000)	2.00
Warrants exercised during the period	(169,246)	1.59
Warrants outstanding at June 30, 2021	**3,831,747**	**$ 1.83**
Warrants exercised during the period	(41,950)	1.57
Warrants outstanding at September 30, 2021	**3,789,797**	**$ 1.83**
Warrants exercised during the period	(55,094)	1.30
Warrants outstanding at December 31, 2021	**3,734,703**	**$ 1.84**
Warrants expired during the period	(770,161)	3.10
Warrants outstanding at March 31, 2022	**2,964,542**	**$ 1.51**
Warrants outstanding at June 30, 2022	**2,964.542**	**$ 1.51**

There were no warrants exercised during the period ended June 30, 2022.

(Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

4. Warrants cont'd

At June 30, 2022, warrants were outstanding and exercisable, enabling holders to acquire common shares as follows:

Number of Warrants	Exercise Price	Expiry Date
	$	
1,661,542	1.75	October 17, 2022
1,303,000	1.20	December 21, 2023
2,964,542		

5. Stock options

During the three months ended June 30, 2022, the Company granted 1,115,713 stock options at an average exercise price of $1.45 per share. 822,608 of the options were granted to the Company's officers and employees and vest 1/3 after one year, 1/3 after two years and 1/3 after three years, and have a ten-year life; and 293,105 options were granted to Directors of the Company at a price of $1.45 and vest 50% upon issuance and 50% after 1 year and have a five-year life.

During the three months ended June 30, 2021, the Company granted 370,000 stock options at an average exercise price of $4.66 per share. 350,000 of the options were granted to the Company's officers and employees and vest 1/3 after one year, 1/3 after two years and 1/3 after three years, and have a ten-year life; and 20,000 stock options granted to a consultant vest 1/3 after one year, 1/3 after two years and 1/3 after three years, and have a ten-year life.

Stock option transactions for the period ended June 30, 2022 and 2021 are set forth below:

	Number of options		Weighted average exercise price
Balance outstanding at March 31, 2021	**4,155,084**		**1.96**
Granted	370,000		4.66
Forfeited	(62,480)		5.11
Balance outstanding at June 30, 2021	**4,462,604**	**$**	**2.14**
Granted	598,056		3.14
Exercised	(84,880)		1.47
Forfeited	(302,640)		3.28
Balance outstanding at September 30, 2021	**4,673,140**	**$**	**2.17**
Balance outstanding at December 31, 2021	**4,673,140**	**$**	**2.17**
Granted	129,000		2.28
Forfeited	(337,500)		4.92
Balance outstanding at March 31, 2022	**4,464,640**	**$**	**2.00**
Granted	1,115,713		1.45
Balance outstanding at June 30, 2022	**5,580,353**	**$**	**1.89**

(Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

5. Stock options cont'd

The following table summarizes information about stock options outstanding at June 30, 2022:

	Options Outstanding			Options Exercisable	
Exercise Prices	Options	Weighted average remaining contractual life	Weighted average exercise price	Options	Weighted average exercise price
$		**Years**	**$**		**$**
1.00-1.99	3,070,713	7.08	1.27	1,747,500	1.15
2.00-2.99	1,679,000	4.58	2.08	1,550,000	2.06
3.00-5.19	830,640	5.30	3.82	131,458	5.11
	5,580,353	**6.07**	**1.89**	**3,428,958**	**1.64**

The following assumptions were used in the Black-Scholes option-pricing model to determine the fair value of stock options granted during the period:

	June 30, 2022	March 31, 2022
Exercise price	$ 1.45	$2.05-4.85
Grant date share price	$ 1.45	$2.05-4.85
Risk free interest rate	4.5%	1.0%
Expected life of options	5 years	5 years
Expected volatility	90%	90%
Expected dividend yield	—	—
Forfeiture rate		
Weighted average fair value of options granted during the period	$ 1.04	$ 2.58

6. Government assistance

CPRIT assistance

In February 2015, the Company received notice that it had been awarded a grant by the Cancer Prevention Research Institute of Texas ("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 MDNA55. As of March 31, 2022, the grant with CPRIT was complete.

Of the US$14.1 million grant approved by CPRIT, Medicenna had received US$14.1 million from CPRIT at March 31, 2022.

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 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.

Refundable Tax

In June 2022, the Company received $0.7 million through our Australian R&D incentive program relating to the year ended March 31, 2022.

(Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

7. Commitments

Intellectual property

On August 21, 2015, the Company exercised its right to enter into two license agreements (the "Stanford License Agreements") with the Board of Trustees of the Leland Stanford Junior University ("Stanford"). In connection with this licensing agreement, the Company issued 649,999 common shares with a value of $0.1 million to Stanford and affiliated inventors. The value of these shares has been recorded as an intangible asset that is being amortized over the life of the underlying patents. As at June 30, 2022, the Company's intangible assets have a remaining capitalized net book value of $65 thousand (March 31, 2022 - $65 thousand).

The Company has entered into various license agreements with respect to accessing patented technology. In order to maintain these agreements, the Company is obligated to pay certain costs based on timing or certain milestones within the agreements, the timing of which is uncertain. These costs include ongoing license fees, patent prosecution and maintenance costs, royalty and other milestone payments. As at June 30, 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.

Contractual obligations	**Less than 1 year**	**1-3 years**	**3-5 years**	**Total**
	$	$	$	$
Patent licensing costs	193	1,173	296	1,662

As at June 30, 2022, the Company 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 $10.7 million, of which $8.6 million has been paid or accrued as at June 30, 2022. Most of these agreements are cancellable by the Company with notice. These commitments include agreements for manufacturing and preclinical studies.

8. Related party disclosures

(a) Key management personnel

Key management personnel, which consists of the Company's officers (President and Chief Executive Officer, Chief Financial Officer, Chief Development Officer, former Chief Medical Officer and former Chief Scientific Officer) and directors, earned the following compensation for the following periods:

	Three months ended June 30, 2022	Three months ended June 30, 2021
	$	$
Salaries and wages	**253**	391
Board fees	**76**	72
Stock option expense	**342**	207
	671	670

(b) Amounts payable to related parties

As at June 30, 2022, the Company had trade and other payables in the normal course of business, owing to directors and officers of $0.1 million, (2021 - $0.2 million) related to board fees and accrued vacation.

(Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

9. Components of Expenses

	Three months ended June 30, 2022	Three months ended June 30, 2021
	$	$
General and Administration Expenses		
Depreciation expense	**—**	10
Stock based compensation	**296**	161
Facilities and operations	**124**	80
Public company expenses	**1,277**	1,422
Salaries and benefits	**222**	194
	1,919	1,867

	Three months ended June 30, 2022	Three months ended June 30, 2021
	$	$
Research and Development Expenses		
Chemistry, manufacturing, and controls	**495**	3,392
Regulatory	**28**	214
Discovery and pre-clinical	**470**	688
Clinical	**630**	650
Salaries and benefits	**514**	654
Licensing, patent, legal fees and royalties	**161**	222
Stock based compensation	**111**	193
CPRIT grant claimed in eligible expenses (Note 6)	**—**	(1,753)
Other research and development expenses	**2**	89
	2,411	4,349

10. Subsequent Events

On August 11, 2022, subsequent to the quarter end, Medicenna completed a marketed underwritten public offering of 13,333,334 units (the "Units") of the Company in Canada and the United States at a price to the public of US$1.50 per Unit for aggregate gross proceeds of US$20 million. Each Unit is comprised of one common share and one common share purchase warrant (a “Warrant”). Each Warrant entitles the holder thereof to purchase one common share at a price of US$1.85 per common share, subject to adjustment in certain events, during a period of 60 months following August 11, 2022.

Management's Discussion and Analysis

For the Three Months Ended
June 30, 2022

DATE OF REPORT: August 12, 2022

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following management's discussion and analysis ("MD&A") has been prepared as at August 12, 2022 for the three months ended June 30, 2022 and should be read in conjunction with the unaudited interim condensed consolidated financial statements of Medicenna Therapeutics Corp. for the three months ended June 30, 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 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 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 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 and MDNA19;
- 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 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 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.

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

The forward-looking information in this MD&A does not include a full assessment or reflection of the unprecedented impacts of the COVID-19 pandemic and the 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 COVID-19 restrictions could impact the planned clinical development timelines of the MDNA11 Phase 1/2 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 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) ("MAL"). 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 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 BiSKITsä 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"). 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 BiSKITsä 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, 2 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 in order to avoid frequent daily dosing required for Proleukinâ.

We believe that, unlike Proleukinâ, 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 ("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.

ACHIEVEMENTS & HIGHLIGHTS

The following are the achievements and highlights for the three months ending June 30, 2022 through to the date hereof:

- 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 American Association for Cancer Research (AACR) Annual Meeting ("AACR Annual Meeting").
- On April 8, 2022, Medicenna also announced new preclinical data highlighting the potent anti-tumor efficacy of the next-generation BiSKIT, anti-PD1-MDNA109FEAA, an anti-PD1antibody fused to an IL-2 Superkine, 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.
- 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 ("NYAS")..
- On June 9, 2022, Medicenna announced that the U.S. Patent and Trademark Office (USPTO) has issued U.S. Patent No. 11,352,402 titled, "Interleukin-4 Receptor-Binding Fusion Proteins And Uses Thereof." The patent provides intellectual property (IP) 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. The patent's term extends into at least 2038 without accounting for any potential extensions.
- On July 27, 2022, Medicenna announced new clinical data on safety, pharmacodynamics and anti-tumor activity from the Phase 1/2 ABILITY study of MDNA11. The data provide preliminary evidence of MDNA11's single agent anti-cancer activity in patients with advanced solid tumors who have been unresponsive to other treatments, were featured in an oral presentation at the Cytokine Based Drug Development Summit.
- On August 11, 2022 the Company announced the closing of a marketed underwritten public offering of 13,333,334 units (the "Unit") of the Company in the Canada and in the United States at a price to the public of US$1.50 per Unit (the "Offering"). The gross proceeds to the Company from the Offering were US$20 million, before deducting underwriting discounts and commission and other expenses. Each Unit is comprised of one common share and one common share purchase warrant (a "Warrant"). Each Warrant entitles the holder thereof to purchase one common share at a price of US$1.85 per common share, subject to adjustment in certain events, during a period of 60 months following August 11, 2022.

FINANCING UPDATE

Subsequent event

On August 11, 2022, subsequent to the quarter end, Medicenna completed the Offering and issued 13,333,334 Units for aggregate gross proceeds of US$20 million. Each Unit is comprised of one common share and one Warrant.

Three months ended June 30, 2022

On December 30, 2020, the Company entered into a sales agreement with SVB Leerink LLC ("SVB Leerink") acting as sales agent (the "ATM Agreement"), pursuant to which the Company may, from time to time sell, through 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 Company plans 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 three months ended June 30, 2022, the Company issued 656,656 common shares (June 30, 2021 – nil) for gross proceeds of US$0.8 million (June 30, 2021 - $nil) at an average price of US$1.20. The Company received, net of commissions, US$0.7 million (June 30, 2021 - $nil). In total, the Company incurred share issuance costs (including commissions) of US$0.1 million (June 30, 2021 - $nil).

During the three months ended June 30, 2022, no warrants were exercised.

Three months ended June 30, 2021

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

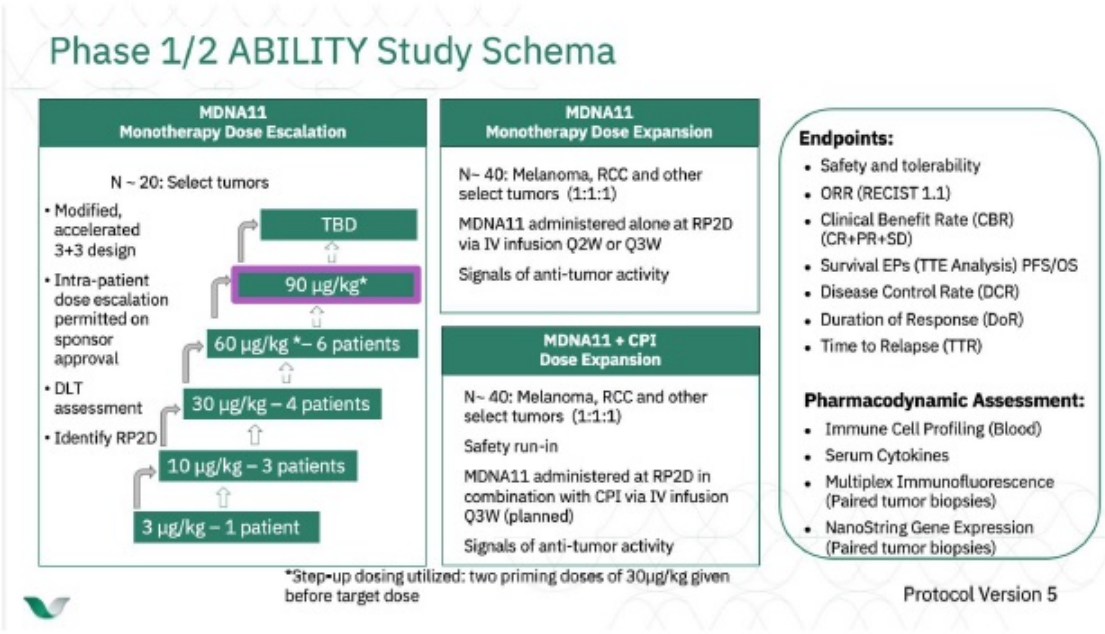
Number of Warrants	Exercise Price	Proceeds	Expiry Date
	$	$	
50,000	1.20	60,000	December 21, 2023
119,236	1.75	208,663	October 17, 2022
169,236		**268,663**	

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 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 Proleukinâ 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. This data was 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 NYAS. This data was subsequently updated in July as described below.

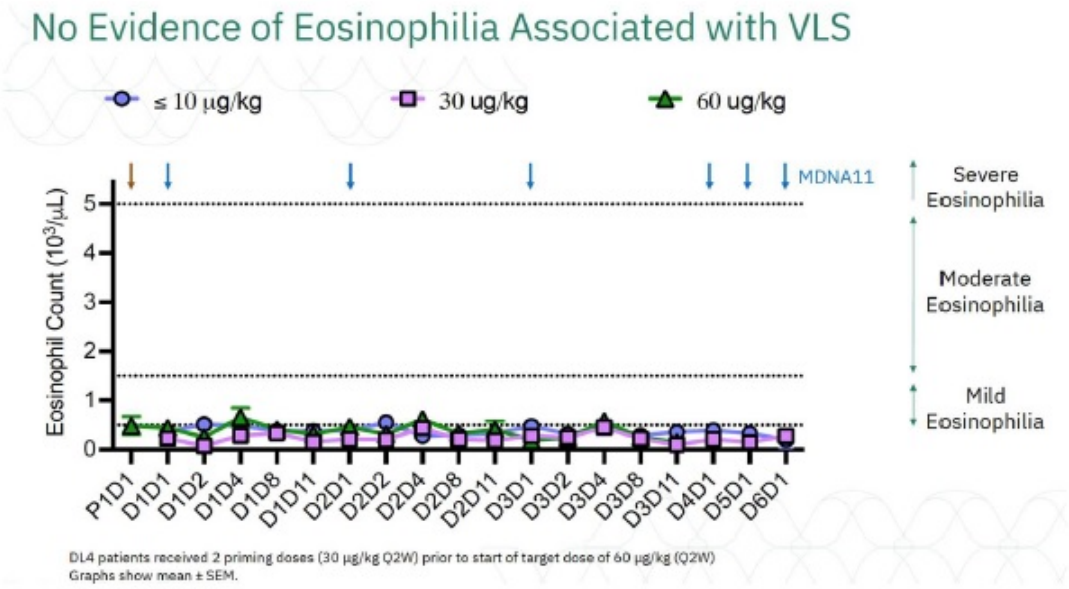
On July 27, 2022, Medicenna announced new clinical data on safety, PK, PD and anti-tumor activity from the Phase 1/2 ABILITY Study of MDNA11 which were presented at the Cytokine Based Drug Development Summit, held in Boston.

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:

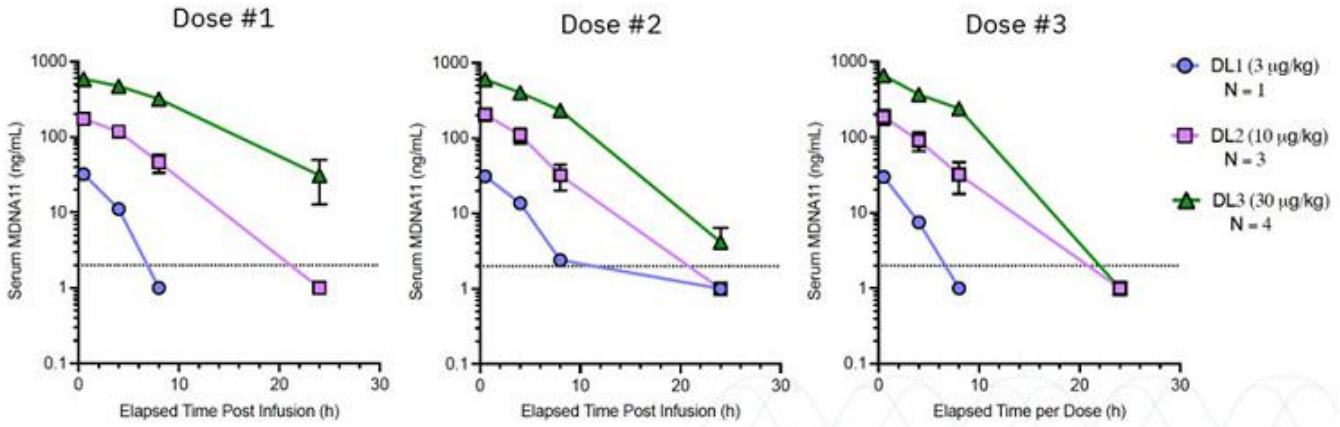
Demographics:
- Patients enrolled in the study to date (N=14) have failed up to four lines of prior systemic therapy.
- 11 of 14 patients have relapsed, were not tolerant to or did not respond to at least one prior immunotherapy with a checkpoint inhibitor.
- To date, 10 of the 14 enrolled patients, including two of six patients in Cohort 4, have received at least one post-baseline scan and are evaluable for response to the investigational treatment.

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 2 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 2 weeks following two priming doses at 30 µg/kg.
- Significant increases in eosinophil count from baseline were not 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 3 cohorts demonstrated similar trends following each of 3 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 ("AUC") were also observed.



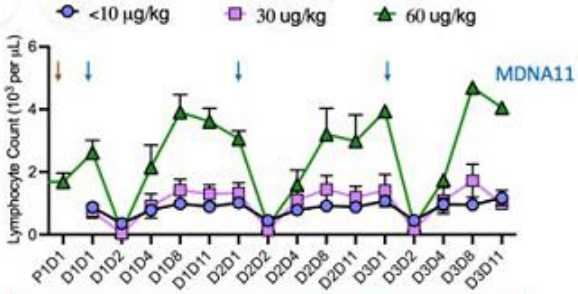
Data show mean values for DL2 and DL3 Only one subject was treated at DL1 as per protocol;
Dotted lines (.....) represent lower limit of quantitation (LLOQ). Data points below LLOQ are assigned value of 1 ng/mL and may not be reliable

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.

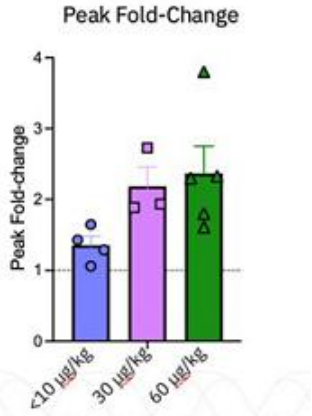
MDNA11 Induced Lymphocyte Expansion

➢ Expansion of circulating lymphocytes irrespective of baseline count



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

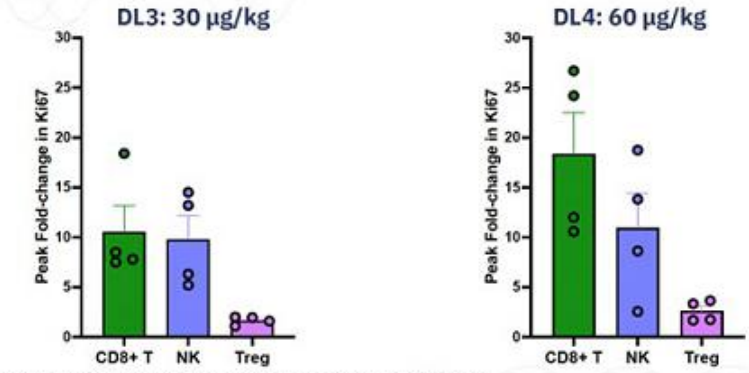
DL4 patients received 2 priming doses (30 µg/kg Q2W) prior to target dose (60 µg/kg Q2W)
Graph shows mean ± SEM.
AUC measured as area between minimum lymphocyte count values



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)

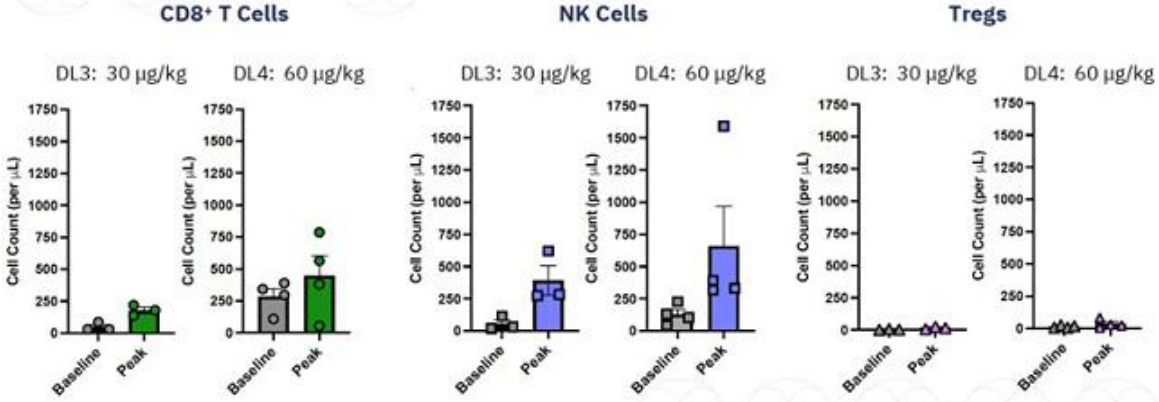
- No increase in Tregs



Peak fold-change relative to respective baseline (D1D1 for DL3; P1D1 for DL4)
DL4 patients received 2 priming doses (30 µg/kg Q2W) prior to start of target dose of 60 µg/kg (Q2W)
DL3 data based on 2nd/3rd dose cycle
Graphs show mean ± SEM

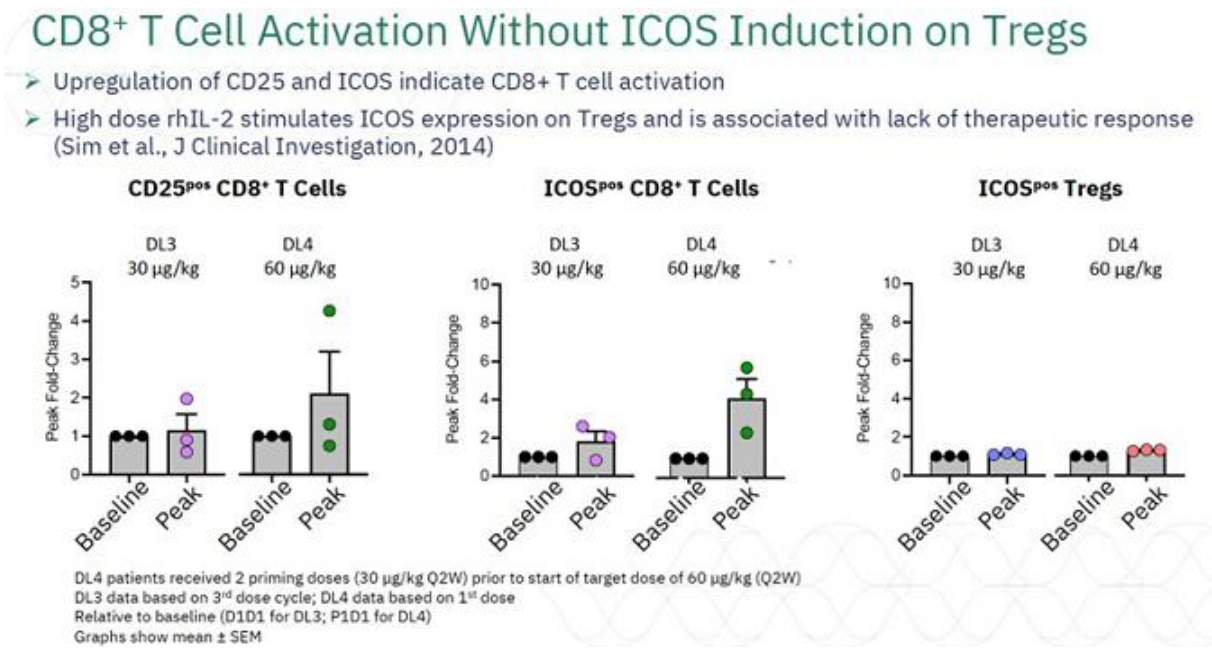
MDNA11 Preferentially Expanded CD8⁺ T & NK Cells Over Tregs

- Increase in number of CD8+ T and NK cells with minimal change in Treg counts



DL4 patients received 2 priming doses (30 µg/kg Q2W) prior to start of target dose of 60 µg/kg (Q2W)
DL3 data based on 3rd dose cycle; DL4 data based on 1st dose
Graphs show mean ± SEM

- MDNA11 treatment potently activated anti-cancer $CD8^+$ T cells as shown by increases in both $CD25^+$ and $ICOS^+$ $CD8^+$ T cells.
- Unlike IL-2, MDNA11 has not induced increases in $ICOS^+$ Treg cells. $ICOS^+$ Treg cells are highly immunosuppressive and associated with lack of response to high dose IL-2 immunotherapy.

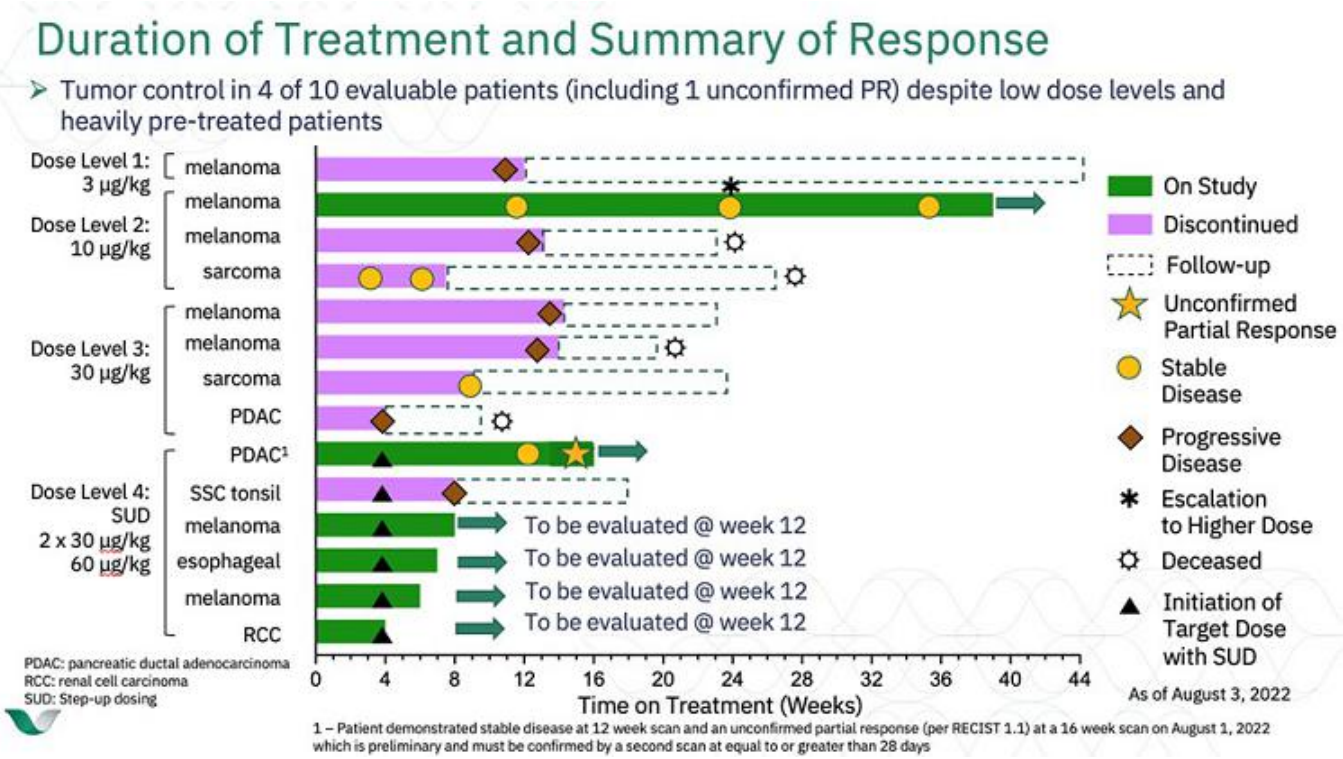


Anti-tumor Activity:

- Of the ten (10) evaluable patients with at least one on-treatment imaging scan, four (4) patients have 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 divided doses of 30 µg/kg), unconfirmed partial response.

As per RECIST 1.1 guidelines, the patient with PDAC in Dose Level 4 had stable disease at the 12-week scan and a further reduction in tumor size at week 16 (³ 30% relative to baseline scan) consistent with an unconfirmed partial response. The unconfirmed partial response is preliminary and subject to further review. As per protocol and RECIST 1.1, a second scan at ³ 28 days after the most recent scan is required to confirm a partial response in this patient. The preliminary data from this scan are subject to change if tumor reduction of at least ³ 30% relative to baseline scan is not maintained or a new tumor lesion is identified or the patient has clinical progression and is unable to continue the study or is unable to receive a confirmatory scan. As a result, the preliminary data from this scan are subject to change and not predictive of the final results. There can be no assurance that, upon completion of the confirmatory scan, that the patient will have a partial response. See “Risks and Uncertainties” below.



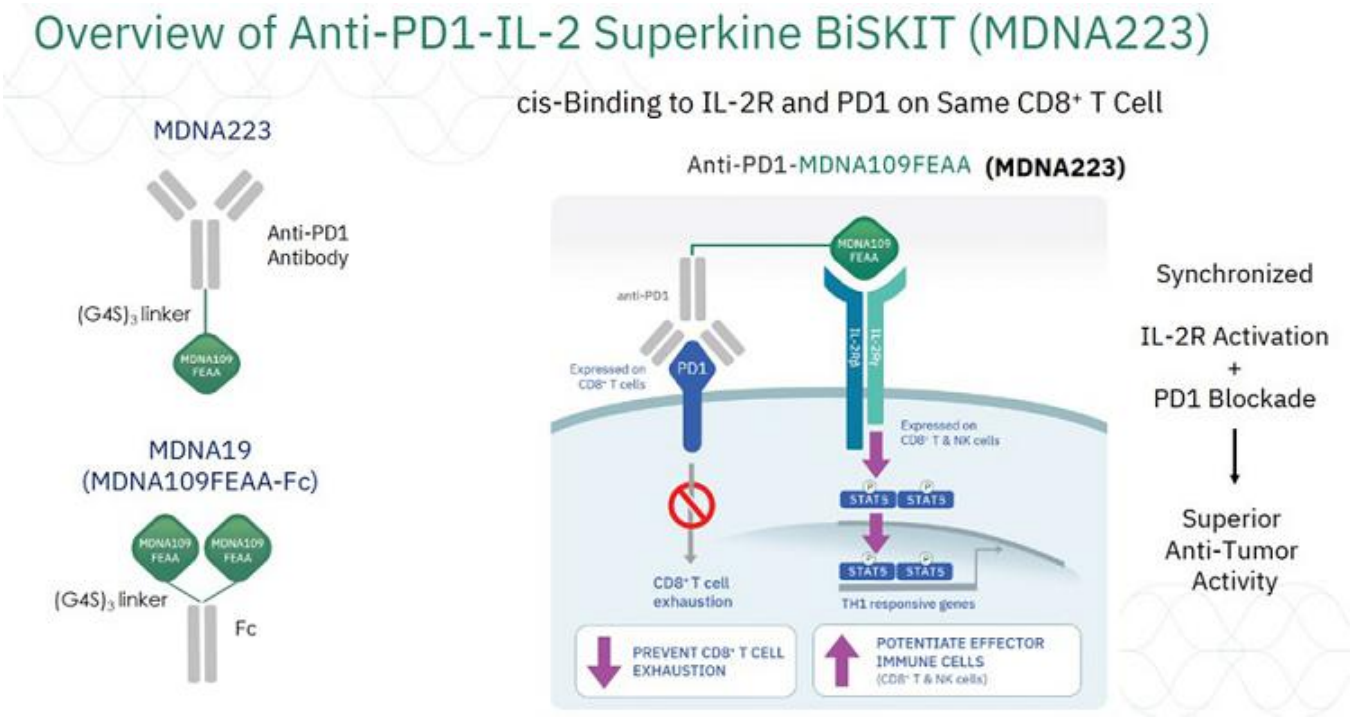
Medicenna anticipates completing the following upcoming milestones related to the MDNA11 ABILITY Study:

1) Fourth Dose Cohort Initial Anti-Tumor Activity Data - September 2022;
2) Fifth Dose Cohort Initial Anti-Tumor Activity Data - Q4-2022;
3) Single Agent Expansion Anti-Tumor Activity Data - Mid-2023;
4) Combination Study Top-Line Anti-Tumor Activity Data - 2H-2023.

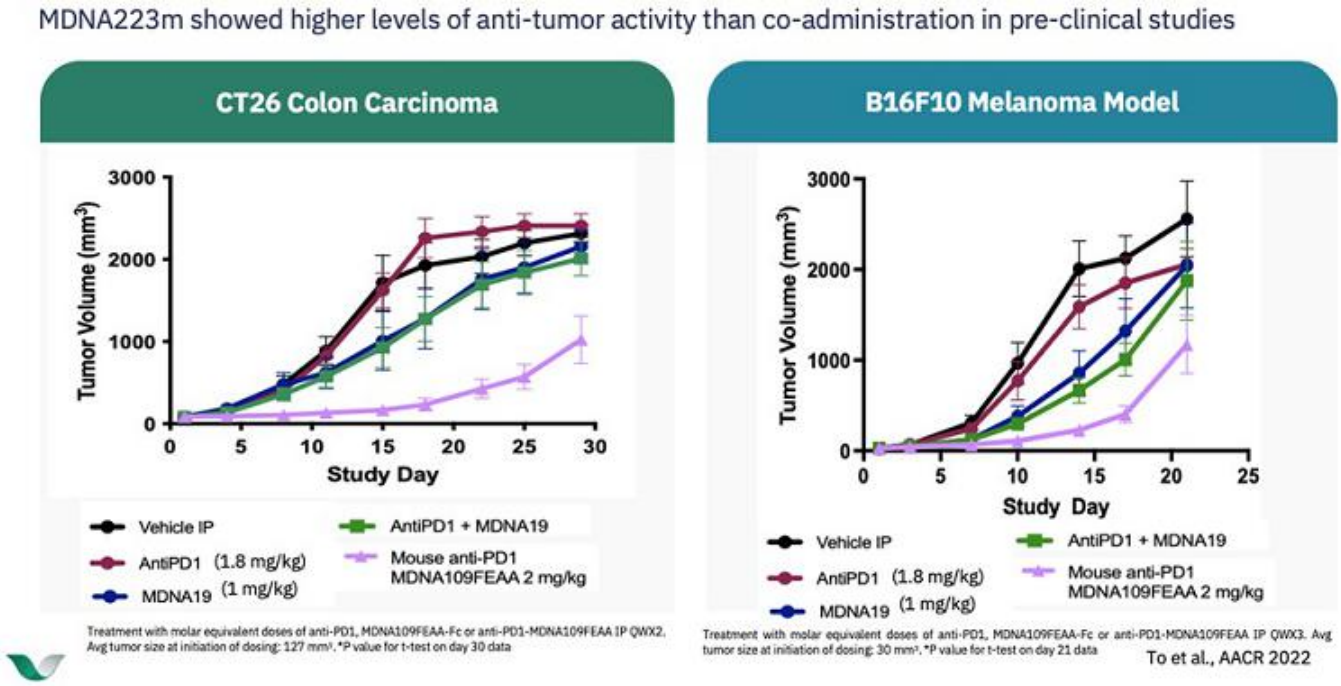
BiSKITs™ (Bi-functional SuperKine ImmunoTherapies) Platform

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).



Data from murine tumor models 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.



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 IL13Ra2. 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.

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

MDNA55

MDNA55 has been studied in 5 clinical trials in 132 patients, including 112 patients with rGBM, suggesting potentially superior efficacy when compared to the current SOC. The Company has secured Orphan Drug Status from the FDA and the EMA as well as Fast Track Designation from the FDA.

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

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, 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 MDNA55 for rGBM. 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.

SELECTED FINANCIAL INFORMATION

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

	Three months ended June 30, 2022 $	Three months ended June 30, 2021 $
General and administration	**1,919**	1,867
Research and development	**2,411**	4,349
Net loss	**(4,155)**	(6,386)
Basic and diluted loss per share	**(0.07)**	(0.12)
Total assets	**20,140**	37,336
Total liabilities	**2,147**	4,958

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

For the three months ended June 30, 2022, we reported a net loss of $4.2 million ($0.07 loss per share), compared to a net loss of $6.4 million ($0.12 loss per share) for the three months ended June 30, 2021. The decrease in net loss for the period ended June 30, 2022, compared with the period ended June 30, 2021, was primarily a result of decreased research and development expenditures related to the MDNA11 program, where GMP manufacturing and IND-enabling studies were being conducted in the prior year quarter. There was a reimbursement of $1.8 million under the grant from CPRIT in the period ended June 30, 2021 which offset R&D expenditures and no reimbursement in the current year period.

Cash utilized in operating activities for the three months ended June 30, 2022 was $2.3 million, compared to cash utilized in operating activities for the three months ended June 30, 2021 of $4.6 million. The decrease in cash utilized in the current year is primarily the result of decreased research and development expenses, and refundable tax credits of $0.7 million received in the current year quarter.

RESULTS OF OPERATIONS FOR THE THREE MONTHS ENDING JUNE 30, 2022

Research and Development ("R&D") Expenses

	Three months ended June 30, 2022	Three months ended June 30, 2021
	$	$
Research and Development Expenses		
Chemistry, manufacturing, and controls	**495**	3,392
Regulatory	**28**	214
Discovery and pre-clinical	**470**	688
Clinical	**630**	650
Salaries and benefits	**514**	654
Licensing, patent, legal fees and royalties	**161**	222
Stock based compensation	**111**	193
CPRIT grant claimed in eligible expenses (Note 6)	**-**	(1,753)
Other research and development expenses	**2**	89
	2,411	4,349

R&D expenses of $2.4 million were incurred during the three months ended June 30, 2022, compared with $4.3 million incurred in the three months ended June 30, 2021.

The decrease in R&D expenses during the current year period 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.
- 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 headcount reductions in the current year period.
- Decrease in licensing costs, due to market research studies, completed in the prior year period.

The above decreases were partially offset by the reimbursement of previously incurred expenses with respect to the CPRIT grant of $1.8 million in the three months ended June 30, 2021, compared with $nil in the three months ended June 30, 2022.

General and Administrative ("G&A") Expenses

	Three months ended June 30, 2022	Three months ended June 30, 2021
	$	$
General and Administration Expenses		
Depreciation expense	**1**	10
Stock based compensation	**295**	161
Facilities and operations	**124**	80
Public company expenses	**1,277**	1,422
Salaries and benefits	**222**	194
	1,919	1,867

G&A expenses of $1.9 million were incurred during the three months ended June 30, 2022, compared with $1.9 million during the three months period ended June 30, 2021.

G&A expenses have remained consistent quarter over quarter. The increase in stock based compensation in the current year period is due to timing and value of option grants, which was offset by lower public company expenses in the current year period due to favourable foreign exchange compared to prior year period.

SUMMARY OF QUARTERLY FINANCIAL RESULTS

	Jun. 30 2022	**Mar. 31 2022**	**Dec. 31 2021**	**Sep. 30 2021**	**Jun. 30 2021**	**Mar. 31 2021**	**Dec. 31 2020**	**Sept. 30 2020**
	$	**$**	**$**	**$**	**$**	**$**	**$**	**$**
Revenue	-	-	-	-	-	-	-	-
General and administration	1,919	1,936	1,990	1,964	1,867	2,009	2,093	1,691
Research and development	2,411	1,191	2,907	6,269	4,349	3,701	3,180	2,176
Net loss	(4,155)	(3,206)	(4,807)	(8,178)	(6,386)	(5,813)	(5,338)	(3,786)
Basic and diluted loss per share	(0.07)	(0.06)	(0.09)	(0.15)	(0.12)	(0.11)	(0.11)	(0.08)
Total assets	20,140	23,456	26,107	30,093	37,336	42,252	36,323	37,640
Total liabilities	2,147	2,621	2,351	5,431	4,958	4,107	2,216	1,656

R&D expenses fluctuate quarter over quarter based on activities ongoing during that period. During the quarter ended June 30, 2021 there was a $1.8 million reimbursement received from CPRIT which offset increased R&D expenses, primarily due to manufacturing and pre-clinical costs associated with MDNA11. The increase in expenditures from the quarter ended December 31, 2020 onwards, is primarily related to activities associated with the MDNA11 program and establishment of the BiSKITs™ program. One-time higher CMC costs, associated with the scale-up GLP and GMP manufacturing of MDNA11 was completed in the quarter ended September 30, 2021, resulting in a decrease in R&D expenses from the quarter ended December 31, 2021 onwards. Refundable tax credits of $0.7million contributed to decreased R&D expenses during the quarter ended March 31, 2022.

G&A expenses began to increase in the quarter ended December 31, 2020, due to increased in directors and officers liability insurance premiums. Directors and officers liability insurance premiums are amortized for 2 months in the quarter ended September 30, 2020, with 3 months each subsequent quarter.

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 $75.1 million as of June 30, 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 MDNA55, MDNA11 and the BiSKITs^{TM} platform and the commercialization of MDNA55 is dependent upon our ability to successfully finance and complete our research and development programs through a combination of equity financing and revenues from strategic partners. We have no current sources of revenues from strategic partners.

The accompanying interim condensed consolidated financial statements have been prepared on a going concern basis in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). The going concern basis contemplates the realization of assets and the settlement of liabilities in the normal course of business as they come due for the foreseeable future. Management has forecasted that the Company's current level of cash is expected to be able to fund operations into Q1 of fiscal 2024. Subsequent to quarter end, the Company completed a financing which raised an additional US$20 million. This additional cash is expected to fund operations into Q1 of calendar 2024. For further details, see Note 10 in interim condensed consolidated financial statements.

CASH POSITION

At June 30, 2022, we had a cash, cash equivalents and marketable securities balance of $19.3 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 June 30, 2022 was $17.9 million (March 31, 2022 - $20.8 million).

On December 30, 2020, we announced that we entered into the ATM Agreement with SVB Leerink acting as sales agent for our ATM offering of up to US$25.0 million. We plan to use the net proceeds of the ATM Facility for general corporate purposes including, but not limited to working capital expenditures, research and development expenditures, and clinical trial expenditures. As of June 30, 2022, a total of 3,803,613 common shares have been sold under the ATM Facility for total gross proceeds of $12.0 million (US$9.7 million). As of June 30, 2022, approximately $19.1 million (US$15.3 million) remained available under the ATM Facility.

We do not expect to generate positive cash flow from operations for the foreseeable future due to additional R&D expenses, including expenses related to drug discovery, preclinical testing, clinical trials, chemistry, manufacturing and controls and operating expenses associated with supporting these activities. It is expected that negative cash flow from operations will continue until such time, if ever, that we receive marketing authorization to commercialize any of our 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 MDNA55. 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 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.

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 June 30, 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 June 30, 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	$193	$ 1,173	$ 296	$ 1,662

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

As at the date of this report, we had obligations to make future payments, representing significant research and development and manufacturing contracts and other commitments that are known and committed in the amount of approximately $10.7 million, of which $8.6 million has been paid or accrued at June 30, 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 June 30, 2022	Three months ended June 30, 2021
	$	$
Salaries and wages	**253**	391
Board fees	**76**	72
Stock option expense	**342**	207
	671	670

As at June 30, 2022, the Company had trade and other payables in the normal course of business, owing to directors and officers of $0.1 million (2021: $0.2 million) related to accrued bonuses, board fees and accrued vacation.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The significant accounting policies of the Company are described in note 2 of the Annual Financial Statements and available on SEDAR 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 in the 2020 Public Offering along with amounts actually expended. Following completion of the 2020 Public Offering, Medicenna selected MDNA11 as its lead IL-2 candidate over MDNA19 to progress to the clinic and, as such, proceeds from the 2020 Public Offering, which were initially allocated to the development of MDNA19, have been re-directed to the development of MDNA11 in the same proportions. As of June 30, 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	$ 5,186	-	$ 7,964
General corporate and working capital purposes	$ 11,350	$ 11,350	-	-
Total	**$ 32,200**	**$ 24,236**	**$ -**	**$ 7,964**

ATM FACILITY

On December 30, 2020, the Company entered into the ATM Agreement with SVB Leerink acting as sales agent, pursuant to which the Company may, from time to time sell, through ATM offerings, on the Nasdaq such number of common shares as would have an aggregate offering price of up to US$25.0 million. During the three month period ended June 30, 2022, the Company has issued 656,656 common shares, raising total gross proceeds of $1.0 million under the ATM Facility. As at June 30, 2022, there were approximately US$15.3 million ($19.1 million) available to use on 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-month period ended June 30, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

As of June 30, 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	16,297,876
Stock options	5,580,353
Total	**91,515,698**

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.

FORM 52-109F2
CERTIFICATION OF INTERIM FILINGS
FULL CERTIFICATE

I, Fahar Merchant, Chairman, President and Chief Executive Officer of Medicenna Therapeutics Corp. ("Medicenna") certify the following:

1. ***Review:*** I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of Medicenna (the "issuer") for the interim period ended June 30, 2022.

2. ***No misrepresentations:*** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.

3. ***Fair presentation:*** Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.

4. ***Responsibility:*** The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*, for the issuer.

5. ***Design:*** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer's other certifying officer(s) and I have, as at the end of the period covered by the interim filings

A. designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that

   I. material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared; and

   II. information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

B. designed ICFR, or caused it to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP.

5.1 ***Control framework:*** The control framework the issuer's other certifying officer(s) and I used to design the issuer's ICFR is Internal Control – Integrated Framework (COSO 2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

5.2 ***ICFR – material weakness relating to design:*** N/A

5.3 ***Limitation on scope of design:*** N/A

6. ***Reporting changes in ICFR:*** The issuer has disclosed in its interim MD&A any change in the issuer's ICFR that occurred during the period beginning on April 1, 2022 and ended on June 30, 2022 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

Date: **August 15 2022**

/s/ Fahar Merchant
Fahar Merchant
Chairman, President and Chief Executive Officer

FORM 52-109F2
CERTIFICATION OF INTERIM FILINGS
FULL CERTIFICATE

I, Elizabeth Williams, Chief Financial Officer of Medicenna Therapeutics Corp. ("Medicenna") certify the following:

1. ***Review:*** I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of Medicenna (the "issuer") for the interim period ended June 30, 2022.

2. ***No misrepresentations:*** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.

3. ***Fair presentation:*** Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.

4. ***Responsibility:*** The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*, for the issuer.

5. ***Design:*** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer's other certifying officer(s) and I have, as at the end of the period covered by the interim filings

A. designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that

   I. material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared; and

   II. information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

B. designed ICFR, or caused it to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP.

5.1 ***Control framework:*** The control framework the issuer's other certifying officer(s) and I used to design the issuer's ICFR is Internal Control – Integrated Framework (COSO 2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

5.2 ***ICFR – material weakness relating to design:*** N/A

5.3 ***Limitation on scope of design:*** N/A

6. ***Reporting changes in ICFR:*** The issuer has disclosed in its interim MD&A any change in the issuer's ICFR that occurred during the period beginning on April 1, 2022 and ended on June 30, 2022 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

Date: **August 15, 2022**

/s/ Elizabeth Williams
Elizabeth Williams
Chief Financial Officer

Exhibit 99.5

Medicenna Reports First Quarter Fiscal 2023 Financial Results and Operational Highlights

-- Extended Cash Runway Into 2024 With US$20 Million Raise To Complete Phase 1/2 ABILITY Study And Advance Pipeline

-- New MDNA11 Data From Dose Escalation in ABILITY Study Shows Tumor Control In Four Of Ten Evaluable Patients Including Unconfirmed Partial Response In Pancreatic Cancer Patient

-- ABILITY Study Commences Enrolling In Its Fifth Dose Escalation Cohort With No Dose-Limiting Toxicities Reported To Date

-- Additional Clinical Results Including Tumor Control Data From Fourth And Fifth Dose Escalation Cohorts Expected During The Second Half Of Calendar 2022

-- Management Hosting Conference Call And Webcast Today At 8:30 am EDT

TORONTO and HOUSTON, Aug. 15, 2022 (GLOBE NEWSWIRE) -- Medicenna Therapeutics Corp. ("Medicenna" or "the Company") (NASDAQ: MDNA, TSX: MDNA), a clinical stage immunotherapy company, today announced its financial results and operational highlights for the quarter ended June 30, 2022. Dollar amounts are in Canadian currency unless otherwise noted.

"We are off to a solid start in fiscal 2023 with a stronger balance sheet and promising anti-tumor activity of MDNA11 monotherapy in the ABILITY study," said Dr. Fahar Merchant, President and CEO of Medicenna. "Whereas single agent activity with next-generation IL-2s has been elusive, we are encouraged with early signs of tumor control in patients with "immunologically cold" tumors including an unconfirmed partial response in a patient with advanced pancreatic cancer. These findings have accompanied desirable pharmacokinetic and pharmacodynamic characteristics, suggesting that MDNA11's rational design and 'beta-only' binding profile are facilitating selective stimulation of anti-cancer immune cells while avoiding the liabilities associated with native IL-2 and competing IL-2 programs. We look forward to building on these preliminary data as we continue to evaluate higher doses of MDNA11 as a single agent and plan to report new data from the ABILITY study during the coming weeks and months."

Recent Clinical Highlights

In July 2022, Medicenna presented clinical data at the Cytokine Based Drug Development Summit in Boston ("Cytokine Summit") on safety, pharmacodynamics, and anti-tumor activity from the first four (low and mid) dose escalation cohorts of the Phase 1/2 ABILITY study of MDNA11, the Company's long-acting IL-2 superagonist. Treatment was administered via intravenous (IV) infusion every two weeks in all dose cohorts. These data provide preliminary evidence of MDNA11's single agent anti-tumor activity, as tumor control was achieved in four of ten evaluable patients with advanced solid tumors unresponsive to other treatments. Patients achieving tumor control included one sarcoma patient and one metastatic melanoma patient from the second dose escalation cohort (10 µg/kg dose), one sarcoma patient from the third dose escalation cohort (30 µg/kg dose), and one pancreatic cancer patient from the fourth dose escalation cohort (two 30 µg/kg "priming" doses followed by step-up to a fixed 60 µg/kg dose). An additional four patients from the fourth dose escalation cohort are awaiting their first post-baseline scan and are not yet evaluable for response to MDNA11. All fourteen patients enrolled in the ABILITY study to date failed between one to four lines of prior systemic therapy, including eleven who relapsed on, could not tolerate, or did not respond to at least one prior immunotherapy with a checkpoint inhibitor.

Following the presentation at the Cytokine Summit, a patient with pancreatic cancer had further tumor shrinkage consistent with an unconfirmed partial response (uPR). The uPR is preliminary and subject to further review. As per protocol and RECIST 1.1, a second scan at 28 days after the most recent scan is required to confirm a partial response in this patient. As a result, the preliminary data from this scan are subject to change and not predictive of the final results. There can be no assurance that, upon completion of the confirmatory scan, that the patient will have a partial response.

Pharmacodynamic data from the ABIILTY study show MDNA11 treatment leading to the preferential activation and expansion of anti-cancer immune cells ($CD8^+$ T cells and natural killer cells) with limited proliferation of regulatory T cells (cause of immunosuppression) and eosinophils (cause of toxicity) typically associated with native IL-2 and "alpha-binding" IL-2 variants. In addition, MDNA11 continues to exhibit an acceptable safety profile, with no dose-limiting toxicities reported in the ABILITY study to date. The trial is currently enrolling into its fifth dose escalation cohort, which evaluates patients receiving two 30 µg/kg priming doses of MDNA11 followed by step up to a fixed dose of 90 µg/kg with each dose administered at 2 week intervals.

Expected Upcoming Milestones

Additional anti-tumor activity data from the ABILITY study's fourth dose escalation cohort are expected in late September 2022.

Initial safety, PK, PD and anti-tumor activity data from the ABILITY study's fifth dose escalation cohort are expected in the fourth quarter of calendar 2022.

Anti-tumor activity data from the ABILITY study's single agent expansion phase are expected in the middle of calendar 2023.

Top-line anti-tumor activity data from the ABILITY study's combination arm are expected in the second half of calendar 2023.

Financial Results

"We are pleased to start fiscal 2023 with a newly strengthened balance sheet from our raise of US$20 million, attracting new healthcare focused institutional investors despite the challenging capital markets, which allows us to extend our cash runway into 2024. Our increased cash position will help us to complete the Phase 1/2 ABILITY Study including the combination arm of the clinical trial and advance at least one BiSKIT candidate to IND readiness," said Elizabeth Williams, Chief Financial Officer of Medicenna.

Medicenna had cash, cash equivalents, and marketable securities of $19.3 million at June 30, 2022, compared to $20.5 million at March 31, 2022. Subsequent to the quarter end Medicenna raised US$20 million by way of a public offering. Funds on hand as of June 30, 2022 plus those raised in the recent offering, we believe, are sufficient capital to execute the Company's operations into calendar 2024 and through important upcoming catalysts described above.

Net loss for the quarter ended June 30 2022, was $4.2 million, or ($0.07) per share, compared to a net loss of $6.4 million, or ($0.12) per share, for the quarter ended June 30, 2021. The decrease in net loss for the quarter ended June 30, 2022, compared with the quarter ended June 30, 2021, was primarily a result of reduced research and development spending.

Research and development (R&D) expenses of $2.4 million were incurred during the quarter ended June 30, 2022, compared with $4.3 million incurred in the quarter ended June 30, 2021. The decrease in R&D expenses in the current fiscal year's quarter is primarily attributed to costs associated with the development of MDNA11 incurred in the prior year period including, IND enabling studies and manufacturing of GMP materials for the ongoing Phase 1/2 ABILITY Study, for which no comparable expenses exist in the current year period. We expect R&D expenses to increase as we continue to advance in our product pipeline.

General and administrative (G&A) expenses of $1.9 million were incurred during the quarter ended June 30, 2022, compared with $1.9 million incurred in the quarter ended June 30, 2021. G&A expenses were consistent quarter over quarter.

Medicenna's condensed consolidated interim financial statements for the quarter ended June 30, 2022, and the related management's discussion and analysis (MD&A) will be available on SEDAR at www.sedar.com and EDGAR at www.sec.gov.

Conference Call and Webcast
Medicenna will host a conference call and webcast today at 8:30 am EDT. To access the call please dial 1-877-407-9716 from the United States or 1-201-493-6779 internationally and refer to conference ID: 13731985. To access the live webcast, visit this link to the event. Following the live webcast, an archived version of the call will be available on Medicenna's website.

About the Phase 1/2 ABILITY Study
The ABILITY (**A** **B**eta-only **IL**-2 **I**mmuno**T**herap**Y**) study is designed to assess the safety, pharmacokinetics, pharmacodynamics, and anti-tumor activity of various doses of intravenously administered MDNA11 in patients with advanced, relapsed, or refractory solid tumors. The trial includes an MDNA11 monotherapy arm, as well as a combination arm designed to evaluate MDNA11 with a checkpoint inhibitor. Approximately 80 patients are expected to be enrolled into the ABILITY study. Following establishment of the recommended Phase 2 dose (RP2D) and optimal treatment schedule in the study's dose escalation phase, Medicenna plans to conduct a dose expansion phase that will enroll patients with renal cell carcinoma, melanoma, and other solid tumors in monotherapy and combination settings. For more information, see ClinicalTrials.gov Identifier: NCT05086692.

About Medicenna
Medicenna is a clinical stage immunotherapy company focused on the development of novel, highly selective versions of IL-2, IL-4 and IL-13 Superkines and first in class Empowered Superkines. Medicenna's long-acting IL-2 Superkine, MDNA11, is a next-generation IL-2 with superior CD122 (IL-2 receptor beta) binding without CD25 (IL-2 receptor alpha) affinity thereby preferentially stimulating cancer killing effector T cells and NK cells. Medicenna's early-stage BiSKITs™ program, (**Bi**functional **S**uper**K**ine **I**mmuno**T**herapie**s**) is designed to enhance the ability of Superkines to treat immunologically "cold" tumors. Medicenna's IL-4 Empowered Superkine, MDNA55, has been studied in 5 clinical trials including a Phase 2b trial for recurrent GBM, the most common and uniformly fatal form of brain cancer. MDNA55 has obtained Fast-Track and Orphan Drug status from the FDA and FDA/EMA, respectively.

Forward-Looking Statements
This news release contains forward-looking statements under applicable securities laws. Forward-looking statements are often identified by terms such as "will", "may", "should", "anticipate", "expects", "believes", "seeks", "plan" and similar expressions. All statements other than statements of historical fact, included in this release, including statements related to cash runway, the clinical potential and development and safety profile of MDNA11 and the Superkine and BISKITs platform, the ability to enroll patients in clinical trials or complete clinical trials on a timely basis, including for the ABILITY study, upcoming milestones and the sharing of additional data and out-licensing efforts for MDNA55 are forward-looking statements that are subject to risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events may differ materially from those contemplated in such statements. Important factors that could cause actual results to differ materially from the Company's expectations include the risks detailed in the annual information form and Form 20-F of the Company and in other filings (including the prospectus supplement dated August 9, 2022) made by the Company with the applicable securities regulators from time to time in Canada and the United States.

Readers are cautioned that assumptions used in the preparation of any forward-looking information may prove to be incorrect. Events or circumstances may cause actual results to differ materially from those predicted, as a result of numerous known and

unknown risks, uncertainties, and other factors, many of which are beyond the control of the Company. Readers are cautioned not to place undue reliance on any forward-looking statements. Such information, although considered reasonable by management, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement. The forward-looking statements contained in this news release are made as of the date hereof and except as required by law, we undertake no obligation to update or revise any forward-looking statements.

Contacts:

For information about the Company please contact:

Elizabeth Williams, Chief Financial Officer, 416-648-5555, ewilliams@medicenna.com

Investor Contact

For investor information, please contact:

Dan Ferry, Managing Director, LifeSci Advisors, 617-430-7576, daniel@lifesciadvisors.com