

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 November 2021

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 [ ] Form 40-F [ X ]

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: November 12, 2021

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

## EXHIBIT INDEX

| <b><u>Exhibit</u></b>       | <b><u>Description</u></b>                                                                           |
|-----------------------------|-----------------------------------------------------------------------------------------------------|
| <a href="#"><u>99.1</u></a> | <a href="#"><u>Interim Financial Statements for the period ended September 30, 2021</u></a>         |
| <a href="#"><u>99.2</u></a> | <a href="#"><u>Management's Discussion and Analysis for the period ended September 30, 2021</u></a> |
| <a href="#"><u>99.3</u></a> | <a href="#"><u>Form 52- 109F2 Certification of Interim Filings Full Certificate – CEO</u></a>       |
| <a href="#"><u>99.4</u></a> | <a href="#"><u>Form 52- 109F2 Certification of Interim Filings Full Certificate – CFO</u></a>       |
| <a href="#"><u>99.5</u></a> | <a href="#"><u>News release dated November 12, 2021</u></a>                                         |



Interim condensed consolidated financial statements of

**Medicenna Therapeutics Corp.**

(Expressed in Canadian Dollars)

For the three and six months ended September 30, 2021

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# 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

|                                             | September 30,<br>2021 | March 31,<br>2021 |
|---------------------------------------------|-----------------------|-------------------|
|                                             | \$                    | \$                |
| <b>Assets</b>                               |                       |                   |
| Current assets                              |                       |                   |
| Cash and cash equivalents (Note 2d)         | 16,689                | 30,375            |
| Marketable securities (Note 2d)             | 10,000                | 10,010            |
| Prepays and deposits                        | 2,891                 | 1,354             |
| Other receivables                           | 430                   | 410               |
|                                             | <b>30,010</b>         | <b>42,149</b>     |
| Intangible assets (Note 10)                 | 69                    | 71                |
| Right-of-use assets (Note 5)                | 14                    | 32                |
|                                             | <b>30,093</b>         | <b>42,252</b>     |
| <b>Liabilities</b>                          |                       |                   |
| Current liabilities                         |                       |                   |
| Accounts payable and accrued liabilities    | 5,414                 | 4,073             |
| Current portion of lease liability (Note 5) | 17                    | 34                |
|                                             | <b>5,431</b>          | <b>4,107</b>      |
| <b>Shareholders' Equity</b>                 |                       |                   |
| Common shares (Note 6)                      | 80,075                | 79,587            |
| Contributed surplus (Notes 7 and 8)         | 7,287                 | 6,680             |
| Accumulated other comprehensive income      | 220                   | 234               |
| Deficit                                     | (62,920)              | (48,356)          |
|                                             | <b>24,662</b>         | <b>38,145</b>     |
|                                             | <b>30,093</b>         | <b>42,252</b>     |

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)

|                                                                      | 3 months<br>ended<br>September 30,<br>2021 | 3 months<br>ended<br>September 30,<br>2020 | 6 months<br>ended<br>September 30,<br>2021 | 6 months<br>ended<br>September 30,<br>2020 |
|----------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|
|                                                                      | \$                                         | \$                                         | \$                                         | \$                                         |
| <b>Operating expenses</b>                                            |                                            |                                            |                                            |                                            |
| General and administration (Note 12)                                 | 1,964                                      | 1,691                                      | 3,831                                      | 2,423                                      |
| Research and development (Note 12)                                   | 6,269                                      | 2,176                                      | 10,618                                     | 3,989                                      |
| <b>Total operating expenses</b>                                      | <b>8,233</b>                               | <b>3,867</b>                               | <b>14,449</b>                              | <b>6,412</b>                               |
| Finance income                                                       | (21)                                       | (95)                                       | (44)                                       | (241)                                      |
| Foreign exchange (gain) loss                                         | (34)                                       | 14                                         | 159                                        | (34)                                       |
|                                                                      | <b>(55)</b>                                | <b>(81)</b>                                | <b>115</b>                                 | <b>(275)</b>                               |
| <b>Net loss for the period</b>                                       | <b>(8,178)</b>                             | <b>(3,786)</b>                             | <b>(14,564)</b>                            | <b>(6,137)</b>                             |
| Cumulative translation adjustment                                    | (10)                                       | (3)                                        | (14)                                       | (11)                                       |
| <b>Comprehensive loss for the period</b>                             | <b>(8,188)</b>                             | <b>(3,789)</b>                             | <b>(14,578)</b>                            | <b>(6,148)</b>                             |
| <b>Basic and diluted loss per share for the period</b>               | <b>(0.15)</b>                              | <b>(0.08)</b>                              | <b>(0.27)</b>                              | <b>(0.13)</b>                              |
| <b>Weighted average number of common shares outstanding (Note 6)</b> | <b>53,737,577</b>                          | <b>48,845,373</b>                          | <b>53,646,735</b>                          | <b>48,594,484</b>                          |

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)

|                                                           | Six months<br>ended<br>September 30,<br>2021 | Six months<br>ended<br>September 30,<br>2020 |
|-----------------------------------------------------------|----------------------------------------------|----------------------------------------------|
|                                                           | \$                                           | \$                                           |
| <b>Operating activities</b>                               |                                              |                                              |
| Net loss for the period                                   | (14,564)                                     | (6,137)                                      |
| Items not involving cash                                  |                                              |                                              |
| Depreciation                                              | 20                                           | 19                                           |
| Stock based compensation                                  | 761                                          | 403                                          |
| Unrealized foreign exchange                               | 121                                          | (24)                                         |
| Accrued interest                                          | (30)                                         | (27)                                         |
| Changes in non-cash working capital                       |                                              |                                              |
| Other receivables and deposits                            | (1,557)                                      | (3,150)                                      |
| Accounts payable and accrued liabilities                  | 1,340                                        | (174)                                        |
|                                                           | (13,909)                                     | (9,090)                                      |
| <b>Investing activities</b>                               |                                              |                                              |
| Acquisition of marketable securities                      | (10,000)                                     | (15,000)                                     |
| Disposition of marketable securities                      | 10,040                                       | 20,003                                       |
|                                                           | 40                                           | 5,003                                        |
| <b>Financing activities</b>                               |                                              |                                              |
| Repayment of lease liabilities                            | (17)                                         | (18)                                         |
| Issuance of share capital, net of issuance costs (Note 6) | -                                            | 4,852                                        |
| Warrant and option exercises (Notes 7 and 8)              | 335                                          | 729                                          |
|                                                           | 318                                          | 5,563                                        |
| Effect of foreign exchange on cash                        | (135)                                        | 13                                           |
| Net decrease in cash                                      | (13,686)                                     | 1,489                                        |
| Cash, beginning of period                                 | 30,375                                       | 22,698                                       |
| <b>Cash, end of period</b>                                | <b>16,689</b>                                | <b>24,187</b>                                |
| Other non-cash transactions                               |                                              |                                              |
| Broker warrants issued                                    | \$ -                                         | \$ 69                                        |

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        |                     |                                        |                 |                            |
|                                    |                                      | \$            | \$                  | \$                                     | \$              | \$                         |
| <b>Balance, March 31, 2020</b>     | <b>46,799,828</b>                    | <b>56,577</b> | <b>10,390</b>       | <b>248</b>                             | <b>(31,067)</b> | <b>36,148</b>              |
| Stock based compensation           | -                                    | -             | 403                 | -                                      | -               | 403                        |
| Warrant and option exercises       | 441,022                              | 955           | (226)               | -                                      | -               | 729                        |
| Issued on April over allotment     | 1,693,548                            | 4,783         | 69                  | -                                      | -               | 4,852                      |
| Cumulative translation adjustment  | -                                    | -             | -                   | (11)                                   | -               | (11)                       |
| Net loss for the period            | -                                    | -             | -                   | -                                      | (6,137)         | (6,137)                    |
| <b>Balance, September 30, 2020</b> | <b>48,934,398</b>                    | <b>62,315</b> | <b>10,636</b>       | <b>237</b>                             | <b>(37,204)</b> | <b>35,984</b>              |
| <b>Balance, March 31, 2021</b>     | <b>53,547,709</b>                    | <b>79,587</b> | <b>6,680</b>        | <b>234</b>                             | <b>(48,356)</b> | <b>38,145</b>              |
| Stock based compensation           | -                                    | -             | 761                 | -                                      | -               | 761                        |
| Warrant and option exercises       | 296,076                              | 488           | (154)               | -                                      | -               | 334                        |
| Cumulative translation adjustment  | -                                    | -             | -                   | (14)                                   | -               | (14)                       |
| Net loss for the period            | -                                    | -             | -                   | -                                      | (14,564)        | (14,564)                   |
| <b>Balance, September 30, 2021</b> | <b>53,843,785</b>                    | <b>80,075</b> | <b>7,287</b>        | <b>220</b>                             | <b>(62,920)</b> | <b>24,662</b>              |

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



# Medicenna Therapeutics Corp.

Notes to the interim condensed consolidated financial statements (unaudited)  
For the Three and Six months ended September 30, 2021 and 2020  
(Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

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## 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 five wholly owned subsidiaries, Medicenna Therapeutics Inc. ("MTI") (British Columbia), Medicenna Biopharma Inc. ("MBI") (Delaware), Medicenna Biopharma Inc. ("MBI") (British Columbia), Medicenna Australia PTY Ltd ("MAL") (Australia) and Medicenna Therapeutics UK Limited ("MTU"). Medicenna is traded on both the Toronto Stock Exchange and the Nasdaq Capital Market ("NASDAQ") under the symbol "MDNA". On March 30, 2021, the company set up its wholly owned subsidiary MAL and on April 15, 2021 set up its wholly owned subsidiary MTU.

As at September 30, 2021, 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 \$62.9 million as of September 30, 2021. With current revenues only consisting of interest earned on excess cash, cash equivalents and marketable securities, losses are expected to continue while the Company's R&D programs are advanced.

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

Management has forecasted that the Company's current level of cash will be sufficient to execute its current planned expenditures for more than the next 12 months without further financing, including proceeds from the ATM Facility, being obtained. However, we do plan to raise additional capital through the sale of equity in the next year to continue to be able to fund our operations over the longer term.

### 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").

# Medicenna Therapeutics Corp.

Notes to the interim condensed consolidated financial statements (unaudited)  
For the Three and Six months ended September 30, 2021 and 2020  
(Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

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## 3. Basis of presentation and significant accounting policies cont'd

### a) *Statement of compliance cont'd*

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, 2021.

The interim condensed consolidated financial statements were approved by the Company's Board of Directors and authorized for issue on November 11, 2021.

### 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 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, 2021. 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 six months ended September 30, 2021 are not necessarily indicative of the results that may be expected for the full year ended March 31, 2022. For further information, see the Company's audited consolidated financial statements including notes thereto for the year ended March 31, 2021.

### d) *Cash and cash equivalents and marketable securities*

#### Cash and cash equivalents

Cash equivalents include guaranteed investment certificates with a maturity of 90 days or less and are readily redeemable for cash. The Company has classified its cash and cash equivalents at fair value through profit or loss.

#### Marketable securities

Marketable securities consist of guaranteed investment certificates with a maturity of greater than 90 days and less than one year. The Company has classified its marketable securities at fair value through profit or loss.

# Medicenna Therapeutics Corp.

Notes to the interim condensed consolidated financial statements (unaudited)  
For the Three and Six months ended September 30, 2021 and 2020  
(Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

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## 3. Capital disclosures

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

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

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

## 4. Financial risk management

### (a) Fair value

The Company's financial instruments recognized on the interim condensed consolidated statements of financial position consist of cash and cash equivalents, marketable securities, government and other receivables, and accounts payable and accrued liabilities. The fair value of these instruments, approximate their carrying values due to their short-term maturity.

#### *Classification of financial instruments*

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

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

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

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

The Company classifies its financial assets and liabilities depending on the purpose for which the financial instruments were acquired, their characteristics, and management intent as outlined below:

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

Other receivables and prepaids and deposits are measured at amortized cost less impairments.

Accounts payable and accrued liabilities are measured at amortized cost.

The Company has exposure to the following risks from its use of financial instruments: credit, interest rate, currency, and liquidity risk. The Company reviews its risk management framework on a quarterly basis and makes adjustments as necessary.

### (b) Credit risk

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

The Company manages credit risk associated with its cash and cash equivalents and marketable securities by maintaining minimum standards of R1-med or A-high investments.

# Medicenna Therapeutics Corp.

Notes to the interim condensed consolidated financial statements (unaudited)  
For the Three and Six months ended September 30, 2021 and 2020  
(Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

## 4. Financial risk management cont'd

### (c) Interest rate risk

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

### (d) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company currently settles all of its financial obligations out of cash and cash equivalents. The ability to do so relies on the Company maintaining sufficient cash in excess of anticipated needs. As at September 30, 2021, the Company's liabilities consist of accounts payable and accrued liabilities that have contracted maturities of less than one year.

### (e) Currency risk

Currency risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company is exposed to currency risk from employee costs as well as the purchase of goods and services primarily in the United States and cash and cash equivalent balances held in foreign currencies. Fluctuations in the US dollar exchange rate could have a significant impact on the Company's results. Assuming all other variables remain constant, a 10% depreciation or appreciation of the Canadian dollar against the US dollar would result in an increase or decrease in loss and comprehensive loss for the period ended September 30, 2021 of \$313 thousand (September 30, 2020 - \$12 thousand).

Balances in US dollars are as follows:

|                                          | September 30,<br>2021 | March 31,<br>2021 |
|------------------------------------------|-----------------------|-------------------|
|                                          | \$                    | \$                |
| Cash and cash equivalents                | 5,027                 | 9,593             |
| Accounts payable and accrued liabilities | (2,572)               | (2,147)           |
|                                          | 2,455                 | 7,446             |

## 5. Right-of-use asset and lease liability

The Company recognized a right-of-use asset based on the amount equal to the lease liability, adjusted for any related prepaid and accrued lease payments previously recognized. The lease liability was recognized based on the present value of remaining lease payments, discounted using the incremental borrowing rate at the date of initial application. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or rate, and amounts expected to be paid under residual value guarantees. The variable lease payments that do not depend on an index or a rate are recognized as expense in the year as incurred.

The carrying amounts of the Company's right-of-use asset and lease liability and movements during the period ended September 30, 2021 were as follows:

# Medicenna Therapeutics Corp.

Notes to the interim condensed consolidated financial statements (unaudited)  
 For the Three and Six months ended September 30, 2021 and 2020  
 (Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

## 5. Right-of-use asset and lease liability cont'd

|                                      | Right-of-Use<br>Asset | Lease<br>Liability |
|--------------------------------------|-----------------------|--------------------|
|                                      | \$                    | \$                 |
| <b>Balance, March 31, 2021</b>       | <b>32</b>             | <b>34</b>          |
| Depreciation                         | (18)                  | -                  |
| Lease payments                       | -                     | (19)               |
| Lease interest                       | -                     | 2                  |
| <b>Balance, September 30, 2021</b>   | <b>14</b>             | <b>17</b>          |
| Classification:                      |                       |                    |
| Current portion of lease liability   | -                     | 17                 |
| Long-term portion of lease liability | -                     | -                  |
|                                      | -                     | <b>17</b>          |

## 6. 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. As of September 30, 2021, the Company has issued 1,398,357 common shares raising total gross proceeds of \$7.1 million to date. During the three and six months ended September 30, 2021 no shares were issued under the ATM.

### Calculation of loss per share

Loss per common share is calculated using the weighted average number of common shares outstanding. For the three and six months ended September 30, 2021 and 2020, the calculation was as follows:

|                                                           | Three months ended<br>September 30, |                   | Six months ended<br>September 30, |                   |
|-----------------------------------------------------------|-------------------------------------|-------------------|-----------------------------------|-------------------|
|                                                           | 2021                                | 2020              | 2021                              | 2020              |
| Common shares issued and outstanding, beginning of year   | 53,716,955                          | 48,797,983        | 53,547,709                        | 46,799,828        |
| Shares issued on over allotment                           | -                                   | -                 | -                                 | 1,554,733         |
| Effect of warrants and options exercised                  | 20,622                              | 47,390            | 99,026                            | 239,923           |
| <b>Weighted average shares outstanding, end of period</b> | <b>53,737,577</b>                   | <b>48,845,373</b> | <b>53,646,735</b>                 | <b>48,594,484</b> |

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.

# Medicenna Therapeutics Corp.

Notes to the interim condensed consolidated financial statements (unaudited)  
 For the Three and Six months ended September 30, 2021 and 2020  
 (Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

## 7. Warrants

### Warrant continuity:

|                                                   | Number of<br>Warrants |           | Weighted<br>average<br>exercise<br>price |
|---------------------------------------------------|-----------------------|-----------|------------------------------------------|
| <b>Warrants outstanding at March 31, 2020</b>     | <b>7,315,711</b>      | <b>\$</b> | <b>1.86</b>                              |
| Broker warrants issued in overallotment           | 118,548               |           | 3.10                                     |
| Warrants exercised during the period              | (283,184)             |           | 1.92                                     |
| <b>Warrants outstanding at June 30, 2020</b>      | <b>7,151,075</b>      | <b>\$</b> | <b>1.88</b>                              |
| Warrants exercised during the period              | (73,915)              |           | 2.01                                     |
| <b>Warrants outstanding at September 30, 2020</b> | <b>7,077,160</b>      | <b>\$</b> | <b>1.88</b>                              |
| Warrants exercised during the period              | (1,605,725)           |           | 1.94                                     |
| <b>Warrants outstanding at December 31, 2020</b>  | <b>5,471,435</b>      | <b>\$</b> | <b>1.86</b>                              |
| Warrants exercised during the period              | (1,452,442)           |           | 1.99                                     |
| <b>Warrants outstanding at March 31, 2021</b>     | <b>4,018,993</b>      | <b>\$</b> | <b>1.82</b>                              |
| Warrants expired during the period                | (18,000)              |           | 2.00                                     |
| Warrants exercised during the period              | (169,246)             |           | 1.59                                     |
| <b>Warrants outstanding at June 30, 2021</b>      | <b>3,831,747</b>      | <b>\$</b> | <b>1.83</b>                              |
| Warrants exercised during the period              | (41,950)              |           | 1.57                                     |
| <b>Warrants outstanding at September 30, 2021</b> | <b>3,789,797</b>      | <b>\$</b> | <b>1.83</b>                              |

The following warrants were exercised during the six months ended September 30, 2021:

| Number of Warrants | Exercise Price | Proceeds       | Expiry Date       |
|--------------------|----------------|----------------|-------------------|
|                    | \$             | \$             |                   |
| 50,000             | 1.20           | 60,000         | December 21, 2023 |
| 16,650             | 1.30           | 21,645         | October 17, 2021  |
| 144,546            | 1.75           | 252,955        | October 17, 2022  |
| <b>211,196</b>     |                | <b>334,600</b> |                   |

At September 30, 2021, warrants were outstanding and exercisable, enabling holders to acquire common shares as follows:

| Number of Warrants | Exercise Price | Expiry Date       |
|--------------------|----------------|-------------------|
|                    | \$             |                   |
| 55,094             | 1.30           | October 17, 2021  |
| 770,161            | 3.10           | March 17, 2022    |
| 1,661,542          | 1.75           | October 17, 2022  |
| 1,303,000          | 1.20           | December 21, 2023 |
| <b>3,789,797</b>   |                |                   |

# Medicenna Therapeutics Corp.

Notes to the interim condensed consolidated financial statements (unaudited)  
 For the Three and Six months ended September 30, 2021 and 2020  
 (Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

## 8. Stock options

During the six months ended September 30, 2021, the Company granted 968,056 stock options at an average exercise price of \$3.72 per share. 812,706 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. 135,350 options were granted to Directors of the Company at a price of \$3.14 and vest 50% upon issuance and 50% after 1 year and have a five-year life.

There were no stock options granted in the six months ended September 30, 2020.

Stock option transactions for the six months ended September 30, 2021 and 2020 are set forth below:

|                                                  | Number of<br>options |           | Weighted<br>average<br>exercise<br>price |
|--------------------------------------------------|----------------------|-----------|------------------------------------------|
| <b>Balance outstanding at March 31, 2020</b>     | <b>4,130,000</b>     | <b>\$</b> | <b>1.56</b>                              |
| Forfeited                                        | (3,577)              |           | 1.00                                     |
| Exercised                                        | (21,423)             | \$        | 1.00                                     |
| <b>Balance outstanding at June 30, 2020</b>      | <b>4,105,000</b>     | <b>\$</b> | <b>1.56</b>                              |
| Forfeited                                        | (160,361)            | \$        | 1.72                                     |
| Exercised                                        | (52,139)             |           | 1.29                                     |
| <b>Balance outstanding at September 30, 2020</b> | <b>3,892,500</b>     |           | <b>1.56</b>                              |
| Granted                                          | 280,084              |           | 5.11                                     |
| Forfeited                                        | (4,971)              |           | 1.00                                     |
| Exercised                                        | (20,029)             |           | 1.00                                     |
| <b>Balance outstanding at December 31, 2020</b>  | <b>4,147,584</b>     |           | <b>1.80</b>                              |
| Granted                                          | 170,000              |           | 5.19                                     |
| Forfeited                                        | (15,381)             |           | 1.00                                     |
| Exercised                                        | (147,119)            |           | 1.67                                     |
| <b>Balance outstanding at March 31, 2021</b>     | <b>4,155,084</b>     |           | <b>1.96</b>                              |
| Granted                                          | 370,000              |           | 4.66                                     |
| Forfeited                                        | (62,480)             |           | 5.11                                     |
| <b>Balance outstanding at June 30, 2021</b>      | <b>4,462,604</b>     |           | <b>2.14</b>                              |
| Granted                                          | 598,056              |           | 3.14                                     |
| Forfeited                                        | (84,880)             |           | 1.47                                     |
| Exercised                                        | (302,640)            |           | 3.28                                     |
| <b>Balance outstanding at September 30, 2021</b> | <b>4,673,140</b>     | <b>\$</b> | <b>2.17</b>                              |

The following table summarizes information about stock options outstanding at September 30, 2021:

| Exercise<br>Prices | Options Outstanding |                                                |                                    | Options Exercisable |                                    |
|--------------------|---------------------|------------------------------------------------|------------------------------------|---------------------|------------------------------------|
|                    | Options             | Weighted average<br>remaining contractual life | Weighted average<br>exercise price | Options             | Weighted average<br>exercise price |
| \$                 |                     | Years                                          | \$                                 |                     | \$                                 |
| 1.00-1.99          | 1,955,000           | 6.74                                           | 1.17                               | 1,390,000           | 1.15                               |
| 2.00-2.99          | 1,550,000           | 5.20                                           | 2.06                               | 1,600,000           | 2.09                               |
| 3.00-5.19          | 1,168,140           | 6.85                                           | 4.00                               | 31,310              | 5.11                               |
|                    | <b>4,673,140</b>    | <b>6.27</b>                                    | <b>2.17</b>                        | <b>3,021,310</b>    | <b>1.69</b>                        |

# Medicenna Therapeutics Corp.

Notes to the interim condensed consolidated financial statements (unaudited)  
For the Three and Six months ended September 30, 2021 and 2020  
(Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

## 8. Stock options cont'd

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

|                                                                  | September 30,<br>2021 | March 31,<br>2021 |
|------------------------------------------------------------------|-----------------------|-------------------|
| Exercise price                                                   | \$3.14-4.85           | \$5.11-5.19       |
| Grant date share price                                           | \$3.14-4.85           | \$5.11-5.19       |
| Risk free interest rate                                          | 1.0%                  | 1.0%              |
| Expected life of options (years)                                 | 5                     | 5                 |
| Expected volatility                                              | 90%                   | 103%              |
| Expected dividend yield                                          | -                     | -                 |
| Forfeiture rate                                                  |                       |                   |
| Weighted average fair value of options granted during the period | \$ 2.58               | \$ 4.01           |

## 9. 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 September 30, 2021, the grant with CPRIT is complete.

Of the US\$14.1 million grant approved by CPRIT, Medicenna received US\$14.1 million from CPRIT as at September 30, 2021. Amounts received (US\$1.1 million) were recorded as a reduction in research and development expenses in the six months period ended September 30, 2021 (Note 12).

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%. 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.

## 10. 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 September 30, 2021, the Company's intangible assets have a remaining capitalized net book value of \$69 thousand (March 31, 2021 - \$71 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 September 30, 2021, the Company is obligated to pay the following:



# Medicenna Therapeutics Corp.

Notes to the interim condensed consolidated financial statements (unaudited)  
For the Three and Six months ended September 30, 2021 and 2020  
(Tabular amounts expressed in thousands of Canadian Dollars, except for share and per share amounts)

## 10. Commitments cont'd

- Patent licensing costs due within 12 months totaling \$254 thousand.
- Patent licensing costs, including the above, due within the next five years totaling \$1.7 million.
- Given the current development plans and expected timelines of the Company it is assumed that project milestones of US\$0.3 million will be due in the next five years.
- Project milestone payments, assuming continued success in the development programs, of uncertain timing totaling US\$2.0 million and an additional US\$2.0 million in sales milestones.
- A liquidity payment of \$0.3 million is due to the National Institute of Health (“NIH”), which represents the remaining payments resulting from the Company’s liquidity event in March 2017.

| Contractual obligations | Less than | 1-3 years | 3-5 years | Total |
|-------------------------|-----------|-----------|-----------|-------|
|                         | 1 year    |           |           |       |
|                         | \$        | \$        | \$        | \$    |
| Patent licensing costs  | 254       | 864       | 584       | 1,702 |
| Lease payments          | 17        | -         | -         | 17    |
| Liquidity event payment | 333       | -         | -         | 333   |

As at September 30, 2021, 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 \$13.8 million, of which \$9.9 million has been paid or accrued as at September 30, 2021. Most of these agreements are cancellable by the Company with notice. These commitments include agreements for manufacturing and preclinical studies.

## 11. 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, Chief Medical Officer and Chief Scientific Officer) and directors, earned the following compensation for the following periods:

|                      | Three months ended    |      | Six months ended      |      |
|----------------------|-----------------------|------|-----------------------|------|
|                      | September 30,<br>2021 | 2020 | September 30,<br>2021 | 2020 |
|                      | \$                    | \$   | \$                    | \$   |
| Salaries and wages   | 508                   | 265  | 761                   | 488  |
| Board fees           | 68                    | 36   | 140                   | 65   |
| Stock option expense | 339                   | 207  | 546                   | 365  |
|                      | 915                   | 508  | 1,447                 | 918  |

### (b) Amounts payable to related parties

As at September 30, 2021, the Company had trade and other payables in the normal course of business, owing to directors and officers of \$0.1 million, (2020 - \$0.1 million) related to board fees and accrued vacation.

## 12. Components of Expenses

|                                            | Three months ended<br>September 30, |       | Six months ended<br>September 30, |       |
|--------------------------------------------|-------------------------------------|-------|-----------------------------------|-------|
|                                            | 2020                                | 2021  | 2020                              | 2021  |
| <b>General and Administration Expenses</b> | \$                                  | \$    | \$                                | \$    |
| Depreciation expense                       | 10                                  | 10    | 20                                | 20    |
| Stock based compensation                   | 283                                 | 128   | 444                               | 224   |
| Facilities and operations                  | 102                                 | 62    | 182                               | 133   |
| Public company expenses                    | 1,343                               | 1,355 | 2,765                             | 1,783 |
| Salaries and benefits                      | 226                                 | 136   | 420                               | 263   |
|                                            | <b>1,964</b>                        | 1,691 | <b>3,831</b>                      | 2,423 |

|                                                   | Three months ended<br>September 30, |       | Six months ended<br>September 30, |       |
|---------------------------------------------------|-------------------------------------|-------|-----------------------------------|-------|
|                                                   | 2021                                | 2020  | 2021                              | 2020  |
| <b>Research and Development Expenses</b>          | \$                                  | \$    | \$                                | \$    |
| Chemistry, manufacturing, and controls            | 3,023                               | 554   | 6,415                             | 1,030 |
| Regulatory                                        | 175                                 | 205   | 389                               | 348   |
| Discovery and pre-clinical                        | 1,612                               | 416   | 2,300                             | 713   |
| Clinical                                          | 372                                 | 380   | 1,022                             | 728   |
| Salaries and benefits                             | 656                                 | 252   | 1,310                             | 523   |
| Licensing, patent, legal fees and royalties       | 306                                 | 231   | 528                               | 416   |
| Stock based compensation                          | 125                                 | 88    | 317                               | 179   |
| CPRIT grant claimed in eligible expenses (Note 9) | -                                   | -     | (1,753)                           | -     |
| Other research and development expenses           | -                                   | 50    | 90                                | 52    |
|                                                   | <b>6,269</b>                        | 2,176 | <b>10,618</b>                     | 3,989 |



MEDICENNA

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

***For the Three and Six Months Ended  
September 30, 2021***

**DATE OF REPORT: November 11, 2021**

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## MANAGEMENT'S DISCUSSION AND ANALYSIS

The following management's discussion and analysis ("MD&A") has been prepared as at November 11, 2021 for the three and six months ended September 30, 2021 and should be read in conjunction with the unaudited interim condensed consolidated financial statements of Medicenna Therapeutics Corp. for the three and six months ended September 30, 2021 and 2020, and the annual audited consolidated financial statements and accompanying notes for the years ended March 31, 2021 and 2020 (the "Annual Financial Statements"), which have been prepared by management in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). Our IFRS accounting policies are set out in note 2 of the Annual Financial Statements and all dollar amounts are expressed in Canadian dollars unless otherwise noted.

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

### FORWARD-LOOKING STATEMENTS

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

- requirements for, and the ability to obtain, future funding on favourable terms or at all;
- business strategy;
- the potential impact of the COVID-19 pandemic on our business;
- projected financial position and estimated cash burn rate, and the sufficiency of the Company's financial resources to support its activities;
- expected future loss and accumulated deficit levels;
- expectations about the timing of achieving milestones and the cost of the Company's development programs;
- observations and expectations regarding the clinical development, potential safety and effectiveness of the Superkine Platform, MDNA11, the BiSKITs<sup>TM</sup> Platform, MDNA55 and other product candidates and the potential benefits to patients;
- ability to secure strategic partnerships with larger pharmaceutical and biotechnology companies;
- expectations regarding the progress, and the successful and timely completion, of the various stages of the regulatory approval and clearance processes;
- ability to initiate, progress, and successfully and timely complete various preclinical and manufacturing activities associated with future clinical trials and studies;
- expectations regarding the Company's ability to arrange for the manufacturing of the Company's products and technologies;
- expectations regarding the filing and acceptance and approval, if required of various submissions by regulatory agencies regarding the conduct of new clinical trials and studies;
- strategy to acquire and develop new product candidates and technologies and to enhance the potential safety and efficacy of existing product candidates and technologies;
- plans to market, sell and distribute the Company's products and technologies, if granted marketing authorization;

- expectations regarding the acceptance of the Company's products and technologies by the market, if granted marketing authorization;
- ability to retain and access appropriate staff, management, and expert advisers;
- expectations with respect to existing and future corporate alliances and licensing transactions with third parties, and the receipt and timing of any payments to be made by the Company or to the Company in respect of such arrangements; and
- strategy with respect to the protection of the Company's intellectual property.

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

The forward-looking information in this MD&A does not include a full assessment or reflection of the unprecedented impacts of the COVID-19 pandemic and the ongoing and developing indirect global and regional economic impacts. The Company 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 ("CROs"), contract development and manufacturing organizations ("CDMOs") and suppliers to assess any impacts and risks. The Company believes that ongoing COVID-19 restrictions could impact the planned clinical development timelines of the MDNA11 Phase 1/2a clinical trial including patient recruitment although it is not aware of any delays at this time.

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

- the effect of continuing operating losses on the Company's ability to obtain, on satisfactory terms, or at all, the capital required to maintain the Company as a going concern;
- the ability to obtain sufficient and suitable financing to support operations, preclinical development, manufacturing, clinical trials of our product candidates, and commercialization of products;
- the risks associated with the development of novel compounds at early stages of development in the Company's intellectual property portfolio;
- the risks of reliance on third parties for the planning, conduct and monitoring of clinical trials and for the manufacture of our product candidates;
- the risks of reliance on third parties for timely completion of ongoing clinical trial activities, conduct of statistical analysis, imaging analysis, preparation of study reports and regulatory submissions;
- the risks associated with the development of the Company's product candidates including the demonstration of efficacy and safety;
- the risks related to clinical trials including potential delays, cost overruns and the failure to demonstrate efficacy and safety;
- the risks of delays and inability to complete clinical trials due to difficulties in securing Institutional Review Board (IRB) or ethics committee approval and enrolling subjects;

- the risks associated with the Company's inability to successfully develop companion diagnostics for the Company's development candidates;
- the risks associated with the Company's inability to successfully access or develop drug delivery technology or materials and components required for drug delivery;
- the risks associated with reliance on third parties for proper storage, packaging and shipment of active ingredients or other components required for preclinical or clinical trials;
- the risks associated with product loss or degradation or failure of manufacturing batches and not meeting specifications for use in preclinical or clinical trials;
- delays or negative outcomes from the regulatory approval and clearance processes;
- the Company's ability to successfully compete in the Company's targeted markets;
- the Company's ability to attract and retain key personnel, collaborators and advisors;
- the risks relating to the increase in operating costs from expanding existing programs, acquisition of additional development programs and increased staff;
- risk of negative results of clinical trials or adverse safety events by the Company or others related to the Company's product candidates;
- the potential for product liability claims;
- the Company's ability to achieve the Company's forecasted milestones and timelines on schedule;
- the financial risks related to the fluctuation of foreign currency rates and expenses denominated in foreign currencies;
- the Company's ability to adequately protect proprietary information and technology from competitors;
- risks related to changes in patent laws and their interpretations;
- the Company's ability to source and maintain licenses from third-party owners;
- the risk of patent-related litigation and the ability to protect trade secrets; and
- the Company's internal computer systems, or those used by its contractors or consultants, may fail or suffer security breaches.

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

Any forward-looking statements represent the Company's estimates only as of the date of this MD&A and should not be relied upon as representing the Company's estimates as of any subsequent date. The Company undertakes no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events, except as may be required by securities laws.

## COMPANY OVERVIEW

The Company's principal business activity is the development and commercialization of Superkines and Empowered Superkines for the treatment of cancer, inflammation and immune-mediated diseases. Medicenna has five wholly owned subsidiaries, Medicenna Therapeutics Inc. (British Columbia), Medicenna Biopharma Inc. (Delaware), Medicenna Biopharma Inc. (British Columbia), Medicenna Australia PTY Ltd (Australia) ("MAL") and Medicenna Therapeutics UK Limited ("MTU"). On November 13, 2017, Medicenna continued under the *Canada Business Corporations Act*. On August 24, 2020, Medicenna began trading on the Nasdaq Capital Market ("NASDAQ") under the symbol "MDNA". On March 30, 2021, the Company set up its wholly owned subsidiary MAL and on April 15, 2021 the Company set up its wholly owned subsidiary MTU.

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

Medicenna has built a deep pipeline of Superkine candidates such as IL-2 agonists (MDNA109), IL-2 antagonists (MDNA209), dual IL-4/IL-13 antagonists (MDNA413) and IL-13 Superkine (MDNA132) all in-licensed from Leland Stanford Junior University (“Stanford”).

The most advanced of these programs is the MDNA109 platform which is the only genetically engineered IL-2 Superkine designed to specifically bind to CD122 (IL-2R $\beta$ ) with high affinity. To further enhance its selectivity, 2 additional mutations (FEAA) were incorporated in MDNA109 to abolish binding to CD25. However, as in the case of recombinant human IL-2 (rhIL-2), marketed as Proleukin<sup>®</sup>, MDNA109 has a similar size and therefore is associated with poor pharmacokinetic (“PK”) properties resulting in a short half-life which would require an inconvenient daily dosing regimen for cancer patients. To address this issue, Medicenna fused MDNA109 variants to inactive protein scaffolds such as Fc (MDNA19) or human albumin (MDNA11), effectively increasing the size of the Superkine and improving its half-life.

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

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

Our BiSKITs<sup>™</sup> 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<sup>™</sup>. Medicenna is working towards selecting a lead BiSKIT<sup>™</sup> candidate before the end of calendar 2021.

Complementing our Superkine platform is MDNA55, Medicenna’s Empowered Superkine, for the treatment of recurrent glioblastoma (“rGBM”), the most common and uniformly fatal form of brain cancer. MDNA55 is a fusion of a circularly permuted version of IL-4, fused to a potent fragment of the bacterial toxin, Pseudomonas exotoxin (“PE”), and is designed to preferentially target tumor cells that over-express the interleukin 4 receptor (“IL-4R”). MDNA55 has been studied in 5 clinical trials in 132 patients, including 112 patients with rGBM, the results of which support our belief that it has superior efficacy when compared to the current standard of care (“SOC”). MDNA55 has secured Orphan Drug Status from the United States Food and Drug Administration (“FDA”) and the European Medicines Agency (“EMA”) as well as Fast Track Designation from the FDA for the treatment of rGBM and other types of high grade glioma. We are currently pursuing a strategic partnership to pursue a Phase 3 registration trial and commercialization of MDNA55.

## ACHIEVEMENTS & HIGHLIGHTS

The following are the achievements and highlights for the quarter ended September 30, 2021 through to the date hereof:

- In June 2021, Medicenna received US\$0.9 million as a grant from the Cancer Prevention Research Institute of Texas (“CPRIT”), and an additional US\$0.5 million was received in August 2021. The Funds from the grant are now fully received.
- On September 14, 2021, Medicenna announced the initiation of dosing of patients in the ABILITY Study. The study is designed to assess the safety, PK, PD, and anti-tumor activity of various doses of intravenously administered MDNA11 in patients with advanced solid tumors and includes an MDNA11 monotherapy arm, as well as a combination arm designed to evaluate MDNA11 with a checkpoint inhibitor.
- On September 20, 2021, Medicenna announced that the US Patent and Trademark Office (“USPTO”) has issued U.S. Patent No. 11,117,943, titled “Superagonists and Antagonists of Interleukin-2.” The patent provides intellectual property (“IP”) protection for methods of treating a wide range of cancers specified in the claims with IL-2 variants such as MDNA11, which is Medicenna’s selective, long-acting and novel IL-2 super-agonist. The patent’s term extends into at least 2032, without accounting for any potential extensions.
- On September 23, 2021, Medicenna announced the election of John H. Sampson, MD, PhD, MBA, a world-renowned clinician-scientist to its Board of Directors
- Subsequent to the quarter end, on October 7, 2021, Medicenna announced the presentation of new preclinical data from its MDNA11 program in a virtual poster session at the AACR-NCI-EORTC Virtual International Conference on Molecular Targets and Cancer Therapeutics (the “Triple Conference”). Data presented in the poster and corresponding abstract were from murine studies evaluating the anti-tumor activity of MDNA11 as monotherapy and in combination with anti-PD1 checkpoint inhibition in MC38 tumor model and NHP studies evaluating safety, PK and PD of MDNA11.
- Subsequent to the quarter end, on October 27, 2021, Medicenna announced that the FDA is allowing it to proceed with the ABILITY Study and begin enrolling patients in the United States under its Investigational New Drug (“IND”) application..

## FINANCING UPDATE

### *Six months ended September 30, 2021*

On December 30, 2020, the Company entered into an at-the-market (“ATM”) agreement with SVB Leerink acting as sales agent (the “ATM Agreement”), pursuant to which the Company may, from time to time sell, through ATM offerings, on the NASDAQ such number of common shares as would have an aggregate offering price of up to US\$25.0 million (the “ATM Facility”). The ATM Facility will remain in place until the earlier of the maximum number of shares being sold, August 28, 2022 or the ATM Agreement being terminated. Total costs associated with the offering are recorded as a reduction in share capital when common shares are issued, net of gross proceeds received in the same period. During the first six months of fiscal 2022, no share was sold under the ATM Facility. As at September 30, 2021, there is approximately \$24.0 million (US\$19.2 million) available to use under the ATM Facility.

During the six months ended September 30, 2021, 211,196 warrants were exercised for proceeds of \$0.3 million, the details of which are described below:

| <b>Number of Warrants</b> | <b>Exercise Price</b> | <b>Proceeds</b> | <b>Expiry Date</b> |
|---------------------------|-----------------------|-----------------|--------------------|
|                           |                       | \$              | \$                 |
| 50,000                    | 1.20                  | 60,000          | December 21, 2023  |
| 16,650                    | 1.30                  | 21,645          | October 17, 2021   |
| 144,546                   | 1.75                  | 252,955         | October 17, 2022   |
| <b>211,196</b>            |                       | <b>334,600</b>  |                    |



## ***Six months ended September 30, 2020***

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

During the six months ended September 30, 2020, 357,099 warrants were exercised for proceeds of \$0.7 million.

## **RESEARCH & DEVELOPMENT UPDATE**

### **Superkine Platform**

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

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

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

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

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

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

### **MDNA11**

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

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

Further modifications were made to MDNA109 in its extended half-life forms to enhance pharmacodynamics and further enhance selectivity in order to reduce binding to CD25 which is associated with the toxic side effect profile of Proleukin<sup>®</sup>. These modifications have provided us with two candidates in development, MDNA19 and MDNA11 of which MDNA11 has been selected as the lead candidate for clinical development.

On June 23, 2021, we announced that we had submitted a clinical trial application to a Human Research Ethics Committee in Australia to initiate a Phase 1/2 clinical study of MDNA11. Medicenna's Phase 1/2 ABILITY Study is designed to assess the safety, PK, PD, and anti-tumor activity of various doses MDNA11 administered intravenously every 2 weeks, in patients with advanced solid tumors. The basket, dose finding study includes a dose escalation phase followed by a dose expansion phase with both an MDNA11 monotherapy arm as well as a combination arm designed to evaluate MDNA11 with a checkpoint inhibitor. The study will include patients with melanoma and renal cell carcinoma where Proleukin<sup>®</sup> is known to have clinical activity, as well as cluster of other tumor types in order to fully explore the pan-tumor potential of MDNA11. The study also permits alternative dosing schedules, as well as options for intra-patient dose escalation.

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

Subsequent to the quarter end, on October 27, 2021, Medicenna announced that the FDA is allowing it to proceed with the ABILITY Study and begin enrolling patients in the United States under its IND.

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

Subsequent to the quarter end, on October 7, 2021, Medicenna announced the presentation of new MDNA11 preclinical data at the Triple Conference. Data presented in the poster and corresponding abstract were from murine studies evaluating the anti-tumor activity of MDNA11 as monotherapy and in combination with anti-PD1 checkpoint inhibition in MC38 colon cancer model and NHP studies evaluating safety, PK, and PD of MDNA11.

Key data and conclusions presented include:

***NHP studies:***

- Dose proportional increases in exposure as measured by both  $C_{max}$  and area under the curve were observed with increasing doses of MDNA11.
- Serum levels of MDNA11 generally were near or reached the lower limit of quantification within 4-5 days after dosing, with PD effects lasting more than 7 days after dosing.
- MDNA11 preferentially induced durable proliferation and expansion of anti-cancer immune effector cells (non-Treg CD4<sup>+</sup> T-cells, CD8<sup>+</sup> T-cells and NK cells), with limited stimulation of pro-tumor Treg cells.

- MDNA11 exhibited a favorable safety profile. No signs of cytokine release syndrome or anti-drug antibodies were observed at any dose level. No clinical or histological evidence of pulmonary edema or vascular leak syndrome was observed at any dose level.
- The main safety observations were loss of appetite, reduced activity, and diarrhea, which was observed at the highest dose level and were also transient in nature.

### ***Murine studies***

- Treatment with MDNA11 alone or in combination with anti-PD-1 therapy led to tumor growth inhibition and durable complete responses in a murine MC38 tumor model even though tumor growth was not inhibited by anti-PD-1 monotherapy.
- Initial treatment with MDNA11 alone or in combination with anti-PD-1 protected against subsequent tumor re-challenge by inducing long-term, antigen-specific CD8+ T-cells.

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

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

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

Medicenna’s IL-4 and IL-13 Superkines are engineered versions of wild type cytokines which possess enhanced affinity and selectivity for either the Type 1 or Type 2 IL4 receptors or dedicated IL13 receptors such as 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).

One promising IL-13 Superkine antagonist is MDNA413. Compared to wild type IL-13, MDNA413 has been engineered to have 2,000-fold higher selectivity for the Type 2 IL4R and which potently blocks IL-4 and IL-13 signaling (Moraga et al., 2015). Blocking of Type 2 IL4R by MDNA413 may be relevant not only for targeting solid tumors that overexpress this receptor, but also the Th2 biased tumour microenvironment, which shields the cancer from the immune system. As part of our BiSKITs™ platform, MDNA413 has been fused with MDNA19 (a long acting Fc-IL2 Superkine) and was the basis of data presented at 2021 American Association for Cancer Research (AACR) Annual Meeting as described below.

On April 12, 2021, we announced new preclinical data demonstrating the immune modulatory effects of MDNA19-413, an IL-2/IL-13 dual specific cytokine derived from the Company’s BiSKITs™ platform. The data were featured in a poster presentation at the 2021 AACR Annual Meeting. Data presented in the poster suggest that this molecule simultaneously activates a pro-inflammatory anti-tumor response, due to its highly selective binding and signaling via the intermediate affinity IL-2 receptor (CD122/CD132), while inhibiting pro-tumoral immune pathways by blocking IL4/IL13 signaling via the Type 2 IL-4 receptor (IL-4Ra/IL-13Ra1). We believe that MDNA19-413’s ability to simultaneously facilitate IL-2 activity while blocking IL-4/IL-13 signaling has the potential to address a significant unmet medical need for effective therapies against immunologically cold tumors which are often resistant to checkpoint inhibitors and other immunotherapeutic agents due to their immunosuppressive TME.

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

### **MDNA55**

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

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

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

On September 29, 2020, Medicenna had an End of Phase 2 (EOP2) meeting with the FDA to discuss future development and commercialization of MDNA55 for rGBM. On October 15, 2020, we announced positive outcomes following the EOP2 meeting with the FDA. The FDA agreed that we could conduct an innovative open-label hybrid Phase 3 trial that allows use of a substantial number of patients (two-thirds) from a matched external control arm (ECA) to support marketing authorization of MDNA55 for rGBM. The proposed Phase 3 clinical trial design includes a concurrent 3:1 randomized cohort (3 subjects receiving MDNA55 for every 1 subject receiving SOC) and an additional matched ECA. The primary endpoint of overall survival (OS) will be determined by a 1:1 analysis of the MDNA55 arm versus the pooled control arm, which will consist of ECA and subjects randomized to SOC. This hybrid trial design will also reduce the overall number of subjects needed to enroll in the study to achieve the primary endpoint, and notably reduce the number of subjects that would be randomized to SOC treatment under a conventional 1:1 randomization. By reducing the need to enroll control subjects, an ECA can increase efficiency, reduce delays, lower trial costs, and speed lifesaving therapies to market. The Company demonstrated promising results for MDNA55 in a Phase 2b clinical trial when compared to a retrospective and a well-balanced ECA. Medicenna is pursuing strategic partnerships to assist with additional clinical development of MDNA55, as well as preparing the program for commercialization and its subsequent launch in various countries where marketing authorization has been granted. In addition to development and marketing authorization of MDNA55, see “Risk and Uncertainties” below.

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

Results presented in the peer-reviewed paper show that the median overall survival (OS) of radiographically evaluable patients in the trial irrespective of dose or IL4R expression was 11.8 months, which is longer than what would be expected from currently approved drugs. Notably, the data also show a potential link between patients experiencing radiographic progression and those exhibiting insufficient MDNA55 penetration into the tumor, suggesting that at least a portion of patients who did not respond well to MDNA55 may have benefited from higher drug concentrations.

These analyses supplement previously presented findings observed in Medicenna’s proposed patient population showing an 81% tumor control rate (26/32) based on mRANO and a median OS of 15.7 months, which represents a >100% improvement compared to an external control arm (median OS of 7.2 months). The proposed patient population included all MDNA55-treated trial participants with high IL4R expression and participants with low IL4R expression that received a high dose of MDNA55 treatment.

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

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

## SELECTED FINANCIAL INFORMATION

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

|                                  | Three months ended |         | Six months ended |         |
|----------------------------------|--------------------|---------|------------------|---------|
|                                  | September 30,      |         | September 30,    |         |
|                                  | 2021               | 2020    | 2021             | 2020    |
|                                  | \$                 | \$      | \$               | \$      |
| General and Administration       | 1,964              | 1,691   | 3,831            | 2,423   |
| Research and Development         | 6,269              | 2,176   | 10,618           | 3,989   |
| Net Loss                         | (8,178)            | (3,786) | (14,564)         | (6,148) |
| Basic and Diluted Loss per Share | (0.15)             | (0.08)  | (0.27)           | (0.13)  |
| Total Assets                     | 30,093             | 37,640  | 30,093           | 37,640  |
| Total Liabilities                | 5,431              | 1,656   | 5,431            | 1,656   |

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 and six months ended September 30, 2021, we reported a net loss of \$8.2 million (\$0.15 loss per share) and \$14.6 million (\$0.27 loss per share), compared to a net loss of \$3.8 million (\$0.08 loss per share), and \$6.1 million (\$0.13 loss per share) for the three and six months ended September 30, 2020 respectively. The increase in net loss for the three and six months period ended September 30, 2021 compared with the period ended September 30, 2020 was primarily a result of increased research and development expenditures related to the MDNA11 program as well as costs associated with the NASDAQ listing, in particular directors and officers insurance in the current period. There was a reimbursement of \$1.8 million under the grant from the CPRIT in the current six-month period (2020 - \$nil).

Cash utilized in operating activities for the six months ended September 30, 2021 was \$13.9 million, compared to cash utilized in operating activities for the six months ended September 30, 2020 of \$9.1 million. The increase in cash utilized in the current year is primarily the result of increased research and development expenses, offset by the receipt of \$1.8 million on the grant from CPRIT.

**RESULTS OF OPERATIONS FOR THE THREE AND SIX MONTHS ENDED SEPTEMBER 30, 2021**

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

|                                            | Three months ended<br>September 30, |              | Six months ended<br>September 30, |              |
|--------------------------------------------|-------------------------------------|--------------|-----------------------------------|--------------|
|                                            | 2021                                | 2020         | 2021                              | 2020         |
|                                            | \$                                  | \$           | \$                                | \$           |
| Chemistry, manufacturing and controls      | 3,023                               | 554          | 6,415                             | 1,030        |
| Regulatory                                 | 175                                 | 205          | 389                               | 348          |
| Discovery and pre-clinical                 | 1,612                               | 416          | 2,300                             | 713          |
| Clinical                                   | 372                                 | 380          | 1,022                             | 728          |
| Salaries and benefits                      | 656                                 | 252          | 1,310                             | 523          |
| Licensing, patent legal fees and royalties | 306                                 | 231          | 528                               | 416          |
| Stock based compensation                   | 125                                 | 88           | 317                               | 179          |
| CPRIT grant claimed on eligible expenses   | -                                   | -            | (1,753)                           | -            |
| Other research and development expenses    | -                                   | 50           | 90                                | 52           |
|                                            | <b>6,269</b>                        | <b>2,176</b> | <b>10,618</b>                     | <b>3,989</b> |

R&D expenses of \$6.3 million and \$10.6 million were incurred during the three months and six months ended September 30, 2021, compared with \$2.2 million and \$4.0 million incurred in the three and six months ended September 30, 2020.

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

- One-time higher chemistry, manufacturing and controls (CMC) costs, associated with the first scale-up GLP and GMP manufacturing of MDNA11 required to supply adequate drug product for IND-enabling studies and Phase 1/2 ABILITY clinical trial which is now predominantly complete.
- Increased discovery and pre-clinical expenses associated with the one-time GLP compliant MDNA11 IND enabling studies, which are now predominantly complete, as well as discovery work on the BiSKITs™ platform.
- Increased clinical costs in the six month period due to activities associated with the initiation of the MDNA11 Phase 1/2 ABILITY study in the current quarter. Prior year activity was related to close-out of the MDNA55 Phase 2b clinical program.
- Higher salary and benefits costs associated with a higher headcount necessary to support increased activities. Higher stock based compensation associated with C-level executives.

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

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

|                           | Three months ended |              | Six months ended |              |
|---------------------------|--------------------|--------------|------------------|--------------|
|                           | September 30,      |              | September 30,    |              |
|                           | 2021               | 2020         | 2021             | 2020         |
|                           | \$                 | \$           | \$               | \$           |
| Depreciation expense      | 10                 | 10           | 20               | 20           |
| Stock based compensation  | 283                | 128          | 444              | 224          |
| Facilities and operations | 102                | 62           | 182              | 133          |
| Public company expenses   | 1,343              | 1,355        | 2,765            | 1,783        |
| Salaries and benefits     | 226                | 136          | 420              | 263          |
|                           | <b>1,964</b>       | <b>1,691</b> | <b>3,831</b>     | <b>2,423</b> |

G&A expenses of \$2.0 million and \$3.8 million were incurred during the three and six months ended September 30, 2021, compared with \$1.7 million and \$2.4 million during the three and six month period ended September 30, 2020.

The increase in G&A expenditures in the three month period is primarily due to increased stock based compensation expense due to timing and value of option grants. The increase in G&A expenditures in the six month period ended September 30, 2021 is primarily attributed to increased directors and officers liability insurance premiums due to six months of expense in the current year period compared with two months of expense in the prior year period, offset by higher costs in the prior year period associated with initiation of the NASDAQ listing. Salaries and benefit expenses have also increased in the three and six month periods due to increased headcount to support ongoing operations.

## SUMMARY OF QUARTERLY FINANCIAL RESULTS

|                                  | Sep. 30<br>2021 | Jun. 30<br>2021 | Mar. 31<br>2021 | Dec. 31<br>2020 | Sept. 30<br>2020 | June 30<br>2020 | Mar. 31<br>2020 | Dec. 31<br>2019 |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|
|                                  | \$              | \$              | \$              | \$              | \$               | \$              | \$              | \$              |
| Revenue                          | -               | -               | -               | -               | -                | -               | -               | -               |
| General and administration       | 1,964           | 1,867           | 2,009           | 2,093           | 1,691            | 732             | 529             | 742             |
| Research and development         | 6,269           | 4,349           | 3,701           | 3,180           | 2,176            | 1,813           | 2,135           | 1,659           |
| Net loss                         | (8,178)         | (6,386)         | (5,813)         | (5,338)         | (3,786)          | (2,352)         | (2,689)         | (2,389)         |
| Basic and diluted loss per share | (0.15)          | (0.12)          | (0.11)          | (0.11)          | (0.08)           | (0.05)          | (0.07)          | (0.07)          |
| Total assets                     | 30,093          | 37,336          | 42,252          | 36,323          | 37,640           | 40,920          | 37,996          | 7,316           |
| Total liabilities                | 5,431           | 4,958           | 4,107           | 2,216           | 1,656            | 1,547           | 1,847           | 1,993           |

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 R&D expenses in the quarter ended June 30, 2021 are comparable with September 30, 2021, net of the re-imbursement. The increase in expenditures from the quarter ended September 30, 2020 onwards, is primarily related to activities associated with the MDNA11 program and establishment of the BiSKITs™ program.

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

## LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company has devoted its resources to funding R&D programs, including securing intellectual property rights and licenses, conducting discovery research, manufacturing drug supplies, initiating preclinical and clinical studies, submitting regulatory dossiers and providing administrative support to R&D activities, which has resulted in an accumulated deficit of \$62.9 million as of September 30, 2021. With current revenues only consisting of interest earned on excess cash, cash equivalents and marketable securities, losses are expected to continue while the Company's R&D programs are advanced.

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

Management has forecasted that the Company's current level of cash will be sufficient to execute its current planned expenditures for more than the next 12 months without further financing or any proceeds from the ATM Facility, being obtained. However, we do plan to raise additional capital through the sale of equity in the next year to continue to be able to fund our operations over the longer term.

### **CASH POSITION**

At September 30, 2021, we had a cash, cash equivalents and marketable securities balance of \$26.7 million, compared to \$40.4 million at March 31, 2021. We invest cash in excess of current operational requirements in highly rated and liquid instruments. Working capital at September 30, 2021 was \$24.6 million (March 31, 2021 - \$38.0 million).

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

We do not expect to generate positive cash flow from operations for the foreseeable future due to additional R&D expenses, including expenses related to drug discovery, preclinical testing, clinical trials, chemistry, manufacturing and controls and operating expenses associated with supporting these activities. It is expected that negative cash flow from operations will continue until such time, if ever, that we receive marketing authorization to commercialize any of our 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 September 30, 2021, the grant with CPRIT is complete.

Of the US\$14.1 million grant approved by CPRIT, Medicenna received US\$14.1 million from CPRIT as at September 30, 2021. Amounts received in the current year (US\$1.1 million) were recorded as a reduction in research and development expenses in the six months period ended September 30, 2021 (See note 12 in the interim condensed consolidated financial statements).



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

### **Intellectual Property**

On August 21, 2015, the Company exercised its right to enter into two license agreements with Stanford (the “Stanford License Agreements”). In connection with these licensing agreements, the Company issued 649,999 common shares with a value of \$0.1 million to Stanford and affiliated inventors. The value of these shares has been recorded as an intangible asset that is being amortized over the life of the underlying patents. As at September 30, 2021, the Company’s intangible assets have a remaining capitalized net book value of \$0.07 million.

The Company has entered into various license agreements with respect to accessing patented technology. In order to maintain these agreements, the Company is obligated to pay certain costs based on timing or certain milestones within the agreements, the timing of which is uncertain. These costs include ongoing license fees, patent prosecution and maintenance costs, royalty and other milestone payments. As at September 30, 2021, the Company is obligated to pay the following:

- Patent licensing costs due within 12 months totaling \$254 thousand.
- Patent licensing costs, including the above, due within the next five years totaling \$1.7 million.
- Given the current development plans and expected timelines of the Company it is assumed that project milestones of US\$0.3 million will be due in the next five years.
- Project milestone payments, assuming continued success in the development programs, of uncertain timing totaling US\$2.0 million and an additional US\$2.0 million in sales milestones.
- A liquidity payment of \$333 thousand, is due to the NIH which represents the remaining payments resulting from the Company’s liquidity event in March 2017.

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

### **Future commitments**

As of September 30, 2021, we have the following obligations to make future payments, representing contracts and other commitments that are known and committed:

| <b>Contractual obligations</b>                                          | <b>Payments Due by Period</b> |                  |                  |              |
|-------------------------------------------------------------------------|-------------------------------|------------------|------------------|--------------|
|                                                                         | <b>Less than 1 year</b>       | <b>1-3 years</b> | <b>3-5 years</b> | <b>Total</b> |
| Patent licensing costs, minimum annual royalties per license agreements | \$ 254                        | \$ 864           | \$ 584           | \$ 1,702     |
| Lease payments                                                          | \$ 17                         | \$ -             | \$ -             | \$ 17        |
| Liquidity event payment                                                 | \$ 333                        | \$ -             | \$ -             | \$ 333       |

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 \$13.8 million, of which \$9.9 million has been paid or accrued at September 30, 2021. Most of these agreements are cancellable by the Company with notice. These commitments include agreements for manufacturing and preclinical studies.

## OFF-BALANCE SHEET ARRANGEMENTS

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

## TRANSACTIONS WITH RELATED PARTIES

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

|                      | Three months ended<br>September 30, |      | Six months ended<br>September 30, |      |
|----------------------|-------------------------------------|------|-----------------------------------|------|
|                      | 2021                                | 2020 | 2021                              | 2020 |
|                      | \$                                  | \$   | \$                                | \$   |
| Salaries and wages   | 508                                 | 265  | 761                               | 488  |
| Board fees           | 68                                  | 36   | 140                               | 65   |
| Stock option expense | 339                                 | 207  | 546                               | 365  |
|                      | 915                                 | 508  | 1,447                             | 918  |

As at September 30, 2021, the Company had trade and other payables in the normal course of business, owing to directors and officers of \$0.1 million (2020: \$0.1 million) related to accrued bonuses, board fees and accrued vacation.

## CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The significant accounting policies of the Company are described in note 2 of the audited consolidated financial statements for the year ended March 31, 2021 and available on SEDAR ([www.sedar.com](http://www.sedar.com)) and EDGAR at [www.sec.gov](http://www.sec.gov).

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

## FINANCIAL INSTRUMENTS

### (a) Fair value

We recognize financial instruments on the consolidated statements of financial position, which consist of cash, cash equivalents, marketable securities, government grant receivable, other receivables, accounts payable and accrued liabilities, and license fee payable. The fair value of these instruments, approximate their carry values due to their short-term maturity.

## *Classification of financial instruments*

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

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

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

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

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

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

Other receivables and prepaid and deposits are measured at amortized cost less impairments.

Accounts payable, accrued liabilities are measured at amortized cost.

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

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

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

#### *i. Credit risk*

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

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

#### *ii. Interest rate risk*

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

#### *iii. Liquidity risk*

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. We currently settle all of our financial obligations out of cash. The ability to do so relies on maintaining sufficient cash in excess of anticipated needs. As at September 30, 2021, the Company's liabilities consist of trade and other payables that have contracted maturities of less than one year.

iv. *Currency risk*

Currency risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company is exposed to currency risk from employee costs as well as the purchase of goods and services primarily in the United States and the cash balances held in foreign currencies. Fluctuations in the US dollar exchange rate could have a significant impact on the Company's results. Assuming all other variables remain constant, a 10% depreciation or appreciation of the Canadian dollar against the US dollar would result in a \$0.3 million (September 30, 2020 - \$0.0 million) increase or decrease in loss and comprehensive loss for the three months ended September 30, 2021.

Balances in thousands of US dollars are as follows:

|                                          | September 30, 2021 | March 31, 2021 |
|------------------------------------------|--------------------|----------------|
|                                          | US\$               | US\$           |
| Cash and cash equivalents                | 5,027              | 9,593          |
| Accounts payable and accrued liabilities | (2,572)            | (2,147)        |
|                                          | 2,455              | 7,446          |

**(c) Managing Capital**

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

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

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

**2020 PUBLIC OFFERING AND USE OF PROCEEDS**

The following table provides an update on the anticipated use of proceeds raised in the 2020 Public Offering along with amounts actually expended. Following completion of the 2020 Public Offering, Medicenna selected MDNA11 as its lead IL-2 candidate over MDNA19 to progress to the clinic and, as such, proceeds from the 2020 Public Offering, which were initially allocated to the development of MDNA19, have been re-directed to the development of MDNA11 in the same proportions. As of September 30, 2021, the following expenditures have been incurred (in thousands of Canadian dollars):

| Item                                           | Amount to Spend  | Spent to Date    | Adjustments | Remaining to Spend |
|------------------------------------------------|------------------|------------------|-------------|--------------------|
| Preclinical development                        | \$ 3,300         | \$ 3,300         | -           | -                  |
| Manufacturing of clinical batch                | \$ 4,400         | \$ 4,400         | -           | -                  |
| Clinical development                           | \$ 13,150        | \$ 2,108         | -           | \$ 11,042          |
| General corporate and working capital purposes | \$ 11,350        | \$ 9,238         | -           | \$ 2,112           |
| <b>Total</b>                                   | <b>\$ 32,200</b> | <b>\$ 19,046</b> | <b>\$ -</b> | <b>\$ 13,154</b>   |

## ATM FACILITY

On December 30, 2020, the Company entered into the ATM Agreement with SVB Leerink acting as sales agent, pursuant to which the Company may, from time to time sell, through ATM offerings, on the NASDAQ such number of common shares as would have an aggregate offering price of up to US\$25.0 million. During the six month period ended September 30, 2021, no share was sold under the ATM Facility. As at September 30, 2021, there is approximately US\$19.2 million (\$24.0 million) available to use on the ATM Facility.

## RISKS AND UNCERTAINTIES

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

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

- We have no sources of product revenue and will not be able to maintain operations and research and development without sufficient funding.
- We are highly dependent upon certain key personnel and their loss could adversely affect our ability to achieve our business objective.
- If we breach any of the agreements under which we license rights to product candidates or technology from third parties, we can lose license rights that are important to our business. Our current license agreements may not provide an adequate remedy for breach by the licensor.
- Clinical drug development involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results and our product candidates may not have favourable results in later trials or in the commercial setting.
- There is no guarantee that FDA will grant 510(k) clearance or pre-market approval of a delivery device needed to administer MDNA55.
- We are subject to the restrictions and conditions of the CPRIT agreement. Failure to comply with the CPRIT agreement may adversely affect our financial condition and results of operations.
- If our competitors develop and market products that are more effective than our existing product candidates or any products that we may develop, or obtain marketing approval before we do, our products may be rendered obsolete or uncompetitive.
- We rely and will continue to rely on third parties to plan, conduct and monitor preclinical studies and clinical trials, and their failure to perform as required could cause substantial harm to our business.
- We rely on contract manufacturers over whom we have limited control. If we are subject to quality, cost or delivery issues with the preclinical and clinical grade materials supplied by contract manufacturers, business operations could suffer significant harm.
- Our future success is dependent primarily on the marketing authorization of a single product. MDNA55 is in the mid stages of clinical development and MDNA11 in pre-clinical development and, as a result, we will be unable to predict whether we will be able to profitably commercialize our product.
- We will be subject to extensive government regulation that will increase the cost and uncertainty associated with gaining marketing authorization of our product candidates.

- Negative results from clinical trials or studies of third parties and adverse safety events involving the targets of our products may have an adverse impact on future commercialization efforts.
- If we are unable to enroll subjects in clinical trials, we will be unable to complete these trials on a timely basis.
- We face the risk of product liability claims, which could exceed our insurance coverage and produce recalls, each of which could deplete cash resources.
- We may not achieve our publicly announced milestones according to schedule, or at all.
- Changes in government regulations, although beyond our control, could have an adverse effect on our business.
- Our significant shareholders may have material influence over our governance and operations.
- Our discovery and development processes involve use of hazardous and radioactive materials which may result in potential environmental exposure.
- Significant disruption in availability of key components for ongoing clinical studies could considerably delay completion of potential clinical trials, product testing and regulatory approval of potential product candidates.
- Even if any product candidates we develop receive marketing approval, they may fail to achieve the degree of market acceptance by physicians, patients, healthcare payors, and others in the medical community necessary for commercial success.
- Our success depends upon our ability to protect our intellectual property and its proprietary technology.
- Our potential involvement in intellectual property litigation could negatively affect our business.
- Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them.
- Product liability claims are an inherent risk of our business, and if our clinical trial and product liability insurance prove inadequate, product liability claims may harm our business.
- Our common share price has been volatile in recent years, and may continue to be volatile.
- Future sales or issuances of equity securities or the conversion of securities into Common Shares could decrease the value of the Common Shares, dilute investors' voting power, and reduce earnings per share.
- We are subject to foreign exchange risk relating to the relative value of the United States dollar.
- Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.
- Any failure to maintain an effective system of internal controls may result in material misstatements of our consolidated financial statements or cause us to fail to meet the reporting obligations or fail to prevent fraud; and in that case, shareholders could lose confidence in our financial reporting, which would harm the business and could negatively impact the price of the Common Shares.
- Our internal computer systems, or those used by our contractors or consultants, may fail or suffer security breaches.
- Failure to comply with the U.S. Foreign Corrupt Practices Act, the Canadian Corruption of Foreign Public Officials Act, and other global anti-corruption and anti-bribery laws could subject us to substantial penalties and other adverse consequences.
- If we fail to comply with healthcare laws, we could face substantial penalties and our business, operations and financial conditions could be adversely affected.
- Any future profits will likely be used for the continued growth of the business and products and will not be used to pay dividends on the issued and outstanding shares.
- We may pursue other business opportunities in order to develop our business and/or products.
- We may acquire businesses or products, or form strategic alliances, in the future, and we may not realize the benefits of such acquisitions.
- General litigation risk may compromise our ability to conduct our business.
- Our success depends on our ability to effectively manage our growth.
- If we are treated as a passive foreign investment company, United States shareholders may be subject to adverse U.S. federal income tax consequences.

- Our operations could be adversely affected by events outside of our control, such as natural disasters, wars or health epidemics.
- It may be difficult for non-Canadian investors to obtain and enforce judgments against us because of our Canadian incorporation and presence.
- As a foreign private issuer under U.S. securities laws, we are subject to different U.S. securities laws and rules than a domestic U.S. issuer, which may limit the information publicly available to our U.S. shareholders.
- We may lose foreign private issuer status in the future, which could result in significant additional costs and expenses.

## DISCLOSURE CONTROLS AND INTERNAL CONTROL OVER FINANCIAL REPORTING

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

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

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

The internal controls are not expected to prevent and detect all misstatements due to error or fraud. There were no changes in our internal control over financial reporting that occurred during the three and six months ended September 30, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

As of September 30, 2021, the Company's management has assessed the effectiveness of our internal control over financial reporting and disclosure controls and procedures using the Committee of Sponsoring Organizations of the Treadway Commission's 2013 framework. Based on their evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that these controls and procedures are effective.

## OTHER MD&A REQUIREMENTS

### Outstanding Share Data

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

|               | <b>Number</b>     |
|---------------|-------------------|
| Common shares | 53,979,576        |
| Warrants      | 3,734,703         |
| Stock options | 4,673,140         |
| <b>Total</b>  | <b>62,387,419</b> |

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

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



**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 September 30, 2021.
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, 2021 and ended on September 30, 2021 that has materially affected, or is reasonably likely to materially affect, the issuer’s ICFR.

Date: **November 12, 2021**

/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 September 30, 2021.
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, 2021 and ended on September 30, 2021 that has materially affected, or is reasonably likely to materially affect, the issuer’s ICFR.

Date: **November 12, 2021**

/s/ Elizabeth Williams  
Elizabeth Williams  
Chief Financial Officer

**Medicenna Reports Second Quarter Fiscal 2022 Financial Results and Operational Highlights**

-- Phase 1/2 ABILITY Study of MDNA11 on track for preliminary data updates in calendar 2021 and mid-calendar 2022

-- Management hosting conference call and webcast today at 8:30 am ET

**Toronto and Houston**, November 12, 2021 - Medicenna Therapeutics Corp. (“Medicenna” or “the Company”) (NASDAQ: MDNA TSX: MDNA), a clinical stage immuno-oncology company, today provided a business update and announced its financial results and operational highlights for the quarter ended September 30, 2021. All dollar amounts are in Canadian currency unless otherwise noted.

“Our accomplishments over the past few months have laid the foundation towards achieving key milestones that intend to provide the first set of human data of MDNA11 with the aim to show differentiated and potentially superior clinical activity of our lead IL-2 Superkine asset,” said Fahar Merchant, PhD, President and CEO of Medicenna. “We recently began dosing patients in the ABILITY study of MDNA11 in Australia and received IND clearance to expand to sites in the United States. We believe that this will position us to present a key safety and biomarker data update late in calendar 2021 and initial efficacy data in mid-calendar 2022. Through these updates, we hope to provide clinical validation of the non-human primate data which demonstrated the advantages of MDNA11’s ‘beta-only’ approach of stimulating cancer fighting T-cells without the toxic side effects of native IL-2.”

Dr. Merchant continued, “Alongside our progress with MDNA11, the MDNA55 Phase 3 clinical trial hybrid design was highlighted in a peer-reviewed manuscript published in *The Lancet Oncology* and we continue to engage in active discussions in pursuit of a strategic partnership for this asset. We are particularly enthusiastic about advancing our preclinical assets derived from our BiSKITs and Superkine platforms, and expect to declare a lead candidate by calendar year end. In concert with the progress of our Phase 1/2 MDNA11 ABILITY study, our programs are designed to fuel sustained growth of our pipeline as we endeavor to advance innovative cytokine-based therapies for patients with unmet medical needs.”

Program highlights for the quarter ended September 30, 2021, along with recent developments include:

**MDNA11: IL-2 Superkine Program**

- o On September 14, 2021, Medicenna announced the initiation of subject dosing in the Phase 1/2 ABILITY Study of MDNA11, the Company’s “beta-only” and long-acting IL-2 super-agonist. The study is designed to assess the safety, pharmacokinetics (PK), pharmacodynamics (PD), and anti-tumor activity of MDNA11 in patients with advanced solid tumors. It includes a monotherapy dose escalation phase, which will be followed by an expansion phase for both the MDNA11 monotherapy arm at the recommended phase 2 dose (RP2D), and a combination arm designed to evaluate MDNA11 with a checkpoint inhibitor.
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- o Medicenna continues to advance the ABILITY study at trial sites in Australia and, subsequent to the quarter end, received IND clearance from the U.S. Food and Drug Administration to expand the trial to sites in the United States. The Company also intends to expand the ABILITY study to additional sites in the UK and Canada and expects to complete the remaining regulatory submissions for these jurisdictions in calendar 2021.
- o Subsequent to the quarter end, Medicenna announced the presentation of new preclinical data from murine and IND-enabling non-human primate (NHP) studies of MDNA11 at the AACR-NCI-EORTC Virtual International Conference On Molecular Targets and Cancer Therapeutics (Triple Meeting). Data from NHP studies showed that MDNA11 did not lead to the safety issues typically associated with IL-2 and preferentially induced durable proliferation and expansion of anti-cancer immune cells with limited stimulation of pro-tumor Treg cells. In a murine cancer model, MDNA11 alone or in combination with a PD-1 checkpoint inhibitor resulted in 100% tumor control and long-term protection against tumor re-challenge by inducing antigen-specific CD8<sup>+</sup> T cells.
- o Results based on independent research were published in a peer-reviewed publication in *Frontiers in Immunology* featuring data on MDNA109, the Company's IL-2 Superkine platform that forms the basis for MDNA11. The data highlight the ability of an MDNA109-armed oncolytic virus to reverse immunosuppressive tumor microenvironments (TME) and its potential to treat immunologically "cold" tumors such as pancreatic cancer. Collectively, we believe these findings provide external validation of the versatility of our Superkine platform.

#### **MDNA55: Empowered IL-4 Superkine Program**

- o In October 2021, the design of the planned open-label hybrid Phase 3 trial of MDNA55 in recurrent glioblastoma (rGBM) was highlighted in a peer-reviewed manuscript published in *The Lancet Oncology*, and in an oral presentation at the Society for Neuro-Oncology and American Society of Clinical Oncology's First Annual Conference on CNS Clinical Trials. Unlike conventional randomized control trials, the hybrid trial design will reduce the overall number of patients needed in the study to achieve the primary endpoint as well as potentially reduce the cost and timelines associated with completing the trial. Medicenna is currently in active discussions in pursuit of a partnership to facilitate MDNA55's further development and commercialization.

#### **Operational Highlights**

- o On September 20, 2021, Medicenna announced the issuance of a U.S. patent providing added intellectual property protection for its MDNA11 program. Claims in the patent cover methods of treating a variety of specified cancers with IL-2 variants such as MDNA11. The patent's term extends into at least 2032, without accounting for potential extensions.
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- o On September 23, 2021, Medicenna announced the appointment of John H. Sampson, MD, PhD, MBA, to its Board of Directors. Dr. Sampson is the Robert H. and Gloria Wilkins Distinguished Professor of Neurosurgery at Duke University School of Medicine, President of Private Diagnostic Clinic, Duke's physician practice with revenue of over \$1 billion, and a member of the prestigious National Academy of Medicine.

### **Expected Upcoming Milestones**

- o Complete regulatory submissions to expand the ABILITY study to additional sites in the UK and Canada by the end of calendar 2021
- o Provide preliminary update on safety, PK/PD, and biomarker data from early cohorts of patients enrolled in the dose escalation portion of the ABILITY study by the end of calendar 2021
- o Report preliminary safety and efficacy data update from the ABILITY study in mid-calendar 2022
- o Execute a collaboration or partnership for a registration trial and commercialization of MDNA55 in rGBM.
- o Declare a lead candidate from the BiSKITs program by the end of calendar 2021.

### **Financial Results**

Medicenna had cash, cash equivalents, and marketable securities of \$26.7 million at September 30, 2021. These funds provide the Company with sufficient capital to execute its current planned expenditures through the end of calendar 2022 based on its current plans and projections. Cash used in operating activities increased in the quarter ended September 30, 2021 due to one-time cash outflows associated with completing GMP manufacturing and IND enabling studies for MDNA11 during the quarter as well as paying our annual Directors & Officers liability insurance premiums. We have projected a lower quarterly cash burn in the next few quarters as these one-time high-cost activities are now complete.

Net loss for the quarter ended September 30, 2021, was \$8.2 million, or \$0.15 per share, compared to a loss of \$3.8 million, or \$0.08 per share, for the quarter ended September 30, 2020. The increase in net loss for the quarter ended September 30, 2021 compared with the quarter ended September 30, 2020 was primarily a result of increased research and development expenditures related to the MDNA11 program as well as costs associated with the NASDAQ listing, in particular directors and officers' insurance costs in the current period.

Research and development expenses of \$6.3 million were incurred during the quarter ended September 30, 2021, compared with \$2.2 million incurred in the quarter ended September 30, 2020. The increase in R&D expenses in the current year's quarter is primarily attributable to higher CMC costs associated with GLP and GMP manufacturing of MDNA11 which is now predominantly complete, increased pre-clinical expenses associated with GLP compliant MDNA11 IND enabling studies, which are also now predominantly complete, as well as discovery work on the BiSKITs platform and higher salary and benefits costs associated with a larger headcount necessary to support increased activities.

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General and administrative expenses of \$2.0 million were incurred during the quarter ended September 30, 2021, compared with \$1.7 million during the quarter ended September 30, 2020. The increase in expenditures in the current year quarter is primary attributable to increased directors' and officers' liability insurance premiums due to 3 months of amortization in the current year vs. 2 months in the prior year, increased stock based compensation expense due to timing and value of option grants and an increase in salaries and benefit expenses due to a higher headcount to support ongoing operations.

Medicenna's condensed consolidated interim financial statements for the quarter ended September 30, 2021 and the related management's discussion and analysis (MD&A) will be available on SEDAR at [www.sedar.com](http://www.sedar.com) and EDGAR at [www.sec.gov](http://www.sec.gov).

#### **Conference Call and Webcast**

Medicenna will host a conference call and webcast today at 8:30 am ET. To access the call please dial 877-407-9716 from the United States or 201-493-6779 internationally, and refer to conference ID: 13723601. 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 ABILITY Study**

Medicenna's Phase 1/2 ABILITY (A Beta-only IL-2 ImmunoTherapY Study) study of MDNA11, the Company's "beta-only" and long-acting IL-2 super-agonist, is designed to assess the safety, pharmacokinetics, pharmacodynamics, and anti-tumor activity of various doses of intravenously administered MDNA11 in patients with advanced solid tumors. The study includes a monotherapy dose escalation phase followed by an expansion phase for both the MDNA11 monotherapy arm at the recommended phase 2 dose, and a combination arm designed to evaluate MDNA11 with a checkpoint inhibitor.

#### **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, (Bifunctional SuperKine ImmunoTherapies) 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 Statement**

This news release contains forward-looking statements within the meaning of applicable securities laws that relate to the future operations of the Company and other statements that are not historical facts including, but not limited to, statements related to various expected milestones and their timeline including data updates and the reporting of results, the clinical potential and development of MDNA11, MDNA109 and MDNA55, including the expansion of studies, regulatory submissions and costs and timeline, a strategic partnership for MDNA55 and its development and commercialization, the expect patent terms of the Company's patents, the growth of the Company's pipeline and cash runway. Forward-looking statements are often identified by terms such as "will", "may", "should", "anticipate", "expect", "believe", "seek" and similar expressions. All statements other than statements of historical fact, included in this release, including statements on the future plans and objectives of the Company, 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 could differ materially from those anticipated 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 for the year ended March 31, 2021, which is available on SEDAR at [www.sedar.com](http://www.sedar.com), and Form 40-F of the Company filed with the United States Securities and Exchange Commission and in other filings made by the Company with the applicable securities regulators from time to time in Canada and the United States.

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The reader is 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. The reader is cautioned not to place undue reliance on any forward-looking information. 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 do not intend and do not assume any obligation to update or revise publicly any of the included forward-looking statements.

#### **Further Information**

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#### **Investor Contact**

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