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**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 December 2020**

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 [  ]

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): [  ]

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## 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: December 9, 2020

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

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EXHIBIT INDEX

**Exhibit Number** **Description**

[99.1](#) [Press Release dated December 9, 2020](#)

## Medicenna Announces Oral Presentation at the 2nd Annual Glioblastoma Drug Development Summit

- Presentation taking place today, December 9, 2020 at 10:50 AM ET

TORONTO and HOUSTON, Dec. 09, 2020 (GLOBE NEWSWIRE) -- Medicenna Therapeutics Corp. ("Medicenna" or "the Company") (NASDAQ: MDNA TSX: MDNA), a clinical stage immuno-oncology company, today announced that Dr. Fahar Merchant, President and CEO of Medicenna and Dr. Ruthie Davi of Acorn AI will be presenting an oral presentation as part of the 2<sup>nd</sup> Annual Glioblastoma Drug Development Summit, which is being held virtually today through December 10, 2020.

The presentation will include updated data from the Phase 2b trial (MDNA55-05) evaluating MDNA55 in recurrent glioblastoma (rGBM) patients, as well as an overview of a planned MDNA55 Phase 3 registration trial. Following the End of Phase 2 Meeting, the United States Food and Drug Administration (FDA) has agreed that this registration trial can utilize an innovative open-label hybrid design that allows use of matched external control for two-thirds of the trial's control arm. Such a design should provide the opportunity to accelerate trial timelines and reduce costs when compared with a traditional randomized control trial.

Details on the oral presentation are shown below:

**Title:** MDNA55, an IL4-Guided Toxin in Recurrent GBM: Phase 2b Results & Use of an External Control Arm in a Registration Trial

**Session Name:** Immuno-oncology & Therapy

**Presentation Date & Time:** Today, December 9, 2020 at 10:50 AM ET

Slides from the presentation will be posted to the "Events and Presentations" page of Medicenna's website following the conference.

### ***Upcoming Key Opinion Leader (KOL) Call on MDNA55 for the Treatment of rGBM***

MDNA55-05 trial data and the proposed Phase 3 registration trial design will also be the subject of an upcoming KOL call being hosted by Medicenna. Details on the KOL call are shown below:

**Featured KOLs:** Dr. David Reardon, MD, Harvard Medical School; Dr. John Sampson, MD, PhD, Duke School of Medicine; Dr. Ruthie Davi, PhD, Acorn AI; and Dr. Amy McKee, MD, Parexel

**Date & Time:** Friday, December 11, 2020 at 11:00 AM ET

**Registration:** To register, please click [here](#)

### **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 for the treatment of a broad range of cancers. Medicenna's long-acting IL2 Superkine asset, MDNA11, is a next-generation IL-2 with superior CD122 binding without CD25 affinity and therefore preferentially stimulates cancer killing effector T cells and NK cells when compared to competing IL-2 programs. Medicenna's lead IL4 Empowered Superkine, MDNA55, has completed a Phase 2b clinical trial for rGBM, the most common and uniformly fatal form of brain cancer. MDNA55 has been studied in five clinical trials involving 132 subjects, including 112 adults with rGBM. MDNA55 has obtained Fast-Track and Orphan Drug status from the FDA and FDA/EMA, respectively. For more information, please visit [www.medicenna.com](http://www.medicenna.com).

### **Forward-Looking Statement**

This news release contains forward-looking statements under applicable securities laws and relate to the future operations of the Company and other statements that are not historical facts. Forward-looking statements are often identified by terms such as "will", "may", "should", "anticipate", "expects", "believes" and similar expressions. All statements other than statements of historical fact, included in this release, including the future plans and objectives of the Company, are forward-looking statements that involve 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 of the Company dated May 14, 2020 and in other filings made by the Company with the applicable securities regulators from time to time in Canada and the United States.

The reader is cautioned that assumptions used in the preparation of any forward-looking information may prove to be incorrect and that study results could change over time as the study is continuing to follow up all subjects and new data are continually being received which could materially change study results. 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 at the time of preparation, 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 of this news release and the Company will update or revise publicly any of the included forward-looking statements only as expressly required by Canadian and United States securities law.

## Further Information

For further information about the Company please contact:

Elizabeth Williams, Chief Financial Officer, 416-648-5555, [ewilliams@medicenna.com](mailto:ewilliams@medicenna.com)

## Investor Contact

For more investor information, please contact:

Dan Ferry, Managing Director, LifeSci Advisors, 617-430-7576, [daniel@lifesciadvisors.com](mailto:daniel@lifesciadvisors.com)