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 March 2022

Commission File Number: 001-39458

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

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

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F. Form 20-F [$\,$] 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: March 9, 2022 By: <u>/s/ Elizabeth Williams</u>

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

EXHIBIT INDEX

Exhibit Number Description

99.1 Press Release dated March 9, 2022

Medicenna Announces Upcoming Poster Presentations at the AACR Annual Meeting

TORONTO and HOUSTON, March 09, 2022 (GLOBE NEWSWIRE) -- Medicenna Therapeutics Corp. ("Medicenna" or "the Company") (NASDAQ: MDNA TSX: MDNA), a clinical stage immuno-oncology company, today announced the publication of two abstracts that have been accepted for electronic poster presentations at the American Association for Cancer Research (AACR) Annual Meeting, which is taking place both virtually and in-person at the Ernest N. Morial Convention Center in New Orleans, Louisiana from April 8-13, 2022.

The full texts of the published abstracts can be found on the AACR Annual Meeting website. Details on the corresponding electronic posters, which will be available to registered attendees starting at 1:00 pm ET on April 8, 2022 and on Medicenna's website following the meeting, are shown below:

Poster Title: An 'Anti-PD1-IL2 Beta-Only Super-Agonist' Displays Potent Anti-Tumor Efficacy

Session Category: Immunology

Session Title: Preclinical Immunotherapy

Location: On-line only

Abstract Number: 5532

This poster will describe preclinical studies evaluating a therapeutic candidate derived from Medicenna's BiSKITs™ program (**Bi**functional SuperKine ImmunoTherapies). The evaluated bifunctional Superkine is designed to activate anti-cancer immune cells while limiting their exhaustion, and is composed of an anti-PD-1 antibody linked to an IL-2 Superkine exhibiting enhanced affinity for IL-2 receptor beta, and no binding to IL-2 receptor alpha.

Poster Title: Characterization of a Long-Acting IL-13 Super-Antagonist Engineered to Target Tumor Associated Macrophages and Myeloid Cells

Session Category: Immunology

Session Title: Preclinical Immunotherapy

Location: On-line only

Abstract Number: 5542

This poster will describe preclinical studies evaluating a long-acting IL-4/IL-13 super-antagonist that targets the IL-13 receptor alpha-1 component of type II IL-4 receptor expressed on tumor associated macrophages and myeloid derived suppressor cells. Inhibition of this receptor with the super-antagonist is intended to prevent tumor growth by promoting a pro-inflammatory tumor microenvironment.

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 Statements

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", "seeks" 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 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 and Form 40-F of the Company 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. 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

For further information about the Company please contact:

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Investor Contact

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