## 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 2024

Commission File Number: 001-39458

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

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

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

### EXHIBIT INDEX

<u>Exhibit Number</u>	<b>Description</b>
<u>99.1</u>	Press Release dated March 6, 2024

#### **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 6, 2024

By: <u>/s/ Fahar Merchant, PhD</u> Name: Fahar Merchant, PhD Title: Chief Executive Officer

# Medicenna to Provide Clinical Update on the MDNA11 ABILITY-1 Trial at the Upcoming American Association for Cancer Research Annual Meeting

## Pre-clinical data on Medicenna's first-in-class Masked and Tumor Targeted Bifunctional Superkine, MDNA113, will also be presented at the Annual Meeting

TORONTO and HOUSTON, March 06, 2024 (GLOBE NEWSWIRE) -- Medicenna Therapeutics Corp. ("Medicenna" or the "Company") (TSX: MDNA, OTCQB: MDNAF), a clinical-stage immunotherapy company focused on the development of Superkines, announced today that two posters will be presented at the American Association for Cancer Research Annual Meeting 2024 (AACR 2024), taking place in San Diego, CA from April 5-10, 2024.

The Company will present an update from its Phase 1/2 ABILITY-1 Study including anti-tumor activity, safety, pharmacokinetic and pharmacodynamic data following treatment with MDNA11, the only long-acting, 'beta-enhanced not-alpha' interleukin-2 (IL-2) super-agonist in clinical development. In addition, pre-clinical data for MDNA113, a novel first-in-class tumor-targeted and tumor-activated bi-functional anti-PD1-IL-2 Superkine, will also be presented at the conference.

Details for the abstracts and poster presentations are as follows:

Title: Results from Monotherapy Dose Escalation of MDNA11, a Long-acting IL-2 Superkine, in a Phase 1/2 Trial Show Evidence of Single-agent Activity in Advanced Solid Tumors Session Title: Phase II Clinical Trials 2 Session Date and Time: Tuesday April 9, 2024; 1:30 PM – 5:00 PM Location: Poster Session 48 Poster Board Number: 18 Abstract Number: CT259

**Title:** Characterization of MDNA113, a Tumor-Targeting Anti-PD1-IL-2<sup>SK</sup> Immunocytokine with Conditional Activation to Increase Tolerability and Maximize Efficacy **Session Title:** Immune Modulation with Cytokines **Session Date and Time:** Tuesday April 9, 2024; 9:00 AM -12:30 PM **Location:** Poster Session 4 **Poster Board Number:** 4 **Abstract Number:** 4060

The full text of the abstracts will be available on the AACR 2024 website.

Following the conclusion of the AACR 2024 Meeting, a copy of the posters will be available on the "Events and Presentations" page of Medicenna's website.

## **About Medicenna Therapeutics**

Medicenna is a clinical-stage immunotherapy company focused on developing 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 affinity toward CD122 (IL-2 receptor beta) and no CD25 (IL-2 receptor alpha) binding, thereby preferentially stimulating cancer-killing effector T cells and NK cells. Medicenna's IL-4 Empowered Superkine, bizaxofusp (formerly MDNA55), has been studied in 5 clinical trials enrolling over 130 patients, including a Phase 2b trial for recurrent GBM, the most common and uniformly fatal form of brain cancer. Bizaxofusp has obtained FastTrack and Orphan Drug status from the FDA and FDA/EMA, respectively. Medicenna's early-stage BiSKITs<sup>TM</sup> (Bifunctional SuperKine ImmunoTherapies) and the T-MASK<sup>TM</sup> (Targeted Metalloprotease Activated SuperKine) programs are designed to enhance the ability of Superkines to treat immunologically "cold" tumors.

For more information, please visit www.medicenna.com, and follow us on Twitter and LinkedIn.

## **Forward-Looking Statements**

This news release may contain forward-looking statements within the meaning of applicable securities laws. Forward-looking statements include, but are not limited to, express or implied statements regarding the future operations of the Company, estimates, plans, strategic ambitions, partnership activities and opportunities, objectives, expectations, opinions, forecasts, projections, guidance, outlook or other statements that are not historical facts, such as statements on the Company's cash runway, preclinical and clinical development activities, clinical trial designs, clinical potential, expectations and beliefs around safety profiles and upcoming milestones and data reporting, including with respect to MDNA11, the ABILITY study and its expansion, bizaxofusp (MDNA55), MDNA113 and MDNA223. Forward-looking statements are often identified by terms such as "will", "may", "should", "anticipate", "expect", "believe", "seek", "potentially" and similar expressions. Forward-looking statements are based on a number of assumptions believed by the Company to be reasonable at the date of this news release. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, there can be no assurance that such statements will prove to be accurate. These statements are subject to certain risks and uncertainties and may be based on assumptions that could cause actual results and future events to differ materially from those anticipated or implied in such

statements. Important factors that could cause actual results to differ materially from the Company's expectations include the risks detailed in the latest Annual Report on Form 20-F of the Company and in other filings made by the Company with the applicable securities regulators from time to time in Canada.

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 or implied in forward-looking statements. 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.

This news release contains hyperlinks to information that is not deemed to be incorporated by reference in this news release.

#### **Investor and Media Contact:**

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