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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 July 2023**

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

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EXHIBIT INDEX

**Exhibit Number**    **Description**

[99.1](#)                    [Press Release dated July 25, 2023](#)

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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: July 25, 2023

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

## Medicenna Presents at National Brain Tumor Society's Research Round Table

- *Medicenna's President and CEO, Dr. Fahar Merchant, was invited to participate and present at the Brain Cancer Research Roundtable organized by the National Brain Tumor Society ("NBTS")*
- *The focus of the event was to explore ways to expedite development of novel therapies for brain cancer by leveraging real-world patient data as External Control Arms ("ECA")*

TORONTO and HOUSTON, July 25, 2023 (GLOBE NEWSWIRE) -- Medicenna Therapeutics Corp. ("Medicenna" or "the Company") (NASDAQ: MDNA TSX: MDNA), a clinical stage immunotherapy company, today announced that Dr. Fahar Merchant, the Company's President and CEO, was invited to participate and present at the Research Roundtable organized by the National Brain Tumor Society (NBTS). The event, titled "Use of External Control Data in Brain Tumor Clinical Trials" took place on July 20, 2023, in Washington, D.C.

"Medicenna has been recognized for its innovative work in the treatment of rGBM, a uniformly fatal form of brain cancer. Compelling results from the Company's MDNA55 (bizaxofusp) Phase 2b trial were recently published in the journal *Neuro-Oncology*, and when compared to a well-matched external control, bizaxofusp more than doubled the median survival in end-stage rGBM patients", said Dr. Merchant. "It was a privilege to share our pioneering efforts of leveraging data from patient registries together with promising Phase 2b results that secured Medicenna a precedent-setting FDA nod for the first-ever Phase 3 trial in rGBM using an external control arm. We believe that working alongside NBTS, together with experts from leading U.S. hospitals and pharma companies who share our vision to harness the power of external control data, may enhance the efficiency of clinical research and enable faster access to novel therapies for GBM" added Dr. Merchant.

Medicenna is actively pursuing potential partnerships to conduct the Phase 3 registration trial with bizaxofusp (**LIGHT™: Localized Infusion** for the treatment of recurrent **G**lioblastoma with **H**igh-dose bizaxofusp **T**herapy) and, if approved, its commercialization in key global markets.

The LIGHT™ Phase 3 registration trial incorporates an ECA for the majority of the control arm patients, reducing the required number of patients in the control arm by nearly 100. This unique design is intended to ensure enrolled patients have a greater opportunity to receive bizaxofusp, streamline the recruitment process, minimize patient drop-out, shorten trial timelines, reduce costs and all the while maintaining the scientific integrity of a conventional Randomized Controlled Trial ("RCT"). Further details about incorporation of an ECA in brain tumor clinical trials and more specifically, the bizaxofusp registration trial, can be found at: *The Lancet Oncology* and *Statistics in Biosciences*.

### 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, bizaxofusp (formerly 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. Bizaxofusp has obtained FastTrack and Orphan Drug status from the FDA and FDA/EMA, respectively.

### About The National Brain Tumor Society (NBTS)

Building on over 30 years of experience, the NBTS unrelentingly invests in, mobilizes, and unites the brain tumor community to discover a cure, deliver effective treatments, and advocate for patients and caregivers. Our focus on defeating brain tumors and improving the quality of patients' lives is powered by our partnerships across science, health care, policy, and business sectors. We fund treatments-focused research and convene those most critical to curing brain tumors once and for all.

### Forward-Looking Statements

*This news release contains forward-looking statements within the meaning of applicable securities laws that relate to the future operations of the Company, plans and projections and other statements, including but not limited to, statements on the development, potential and partnership potential of bizaxofusp. Forward-looking statements are often identified by terms such as "will", "may", "should", "anticipate", "expect", "believe", "seek", "potentially" and similar expressions. All statements other than statements of historical fact included in this press release 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 latest Annual Information Form and 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 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:

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

#### Media Contact

For media inquiries, please contact:

Tony Russo, Russo Partners, 212-845-4251, tony.russo@russopartnersllc.com