Medicenna Strengthens Intellectual Property Protection for MDNA11 and BiSKITs™ Programs with Issuance of U.S. Patent

January 5, 2023

- Patent covers methods of treating cancer with an IL-2 Superkine and PD1/PDL1 or CTLA-4 checkpoint inhibitor, administered in combination or as a single agent BiSKIT ™

TORONTO and HOUSTON, Jan. 05, 2023 (GLOBE NEWSWIRE) -- Medicenna Therapeutics Corp. ("Medicenna" or "the Company") (NASDAQ: MDNA TSX: MDNA), a clinical stage immunotherapy company, today announced that the U.S. Patent and Trademark Office (USPTO) has issued U.S. Patent No. 11,542,312 titled "IL-2 Superagonists in Combination with Anti-PD-1." The patent provides intellectual property (IP) protection for methods of treating cancer with an IL-2 Superkine such as MDNA11 and a PD1 (for example, pembrolizumab), PDL1 or CTLA-4 checkpoint inhibitor in combination, as planned in the on-going ABILITY clinical trial, or as a single agent using our BiSKIT™ (Bifunctional SuperKine for ImmunoTherapy) platform. The patent's term extends into at least 2039 without accounting for any potential extensions.

"MDNA11 has displayed promising anti-cancer activity during dose escalation in our ABILITY study and we expect further improvements at the optimal dose in the expansion cohort as well as the combination arm designed to evaluate the synergistic potential of pembrolizumab," said Dr. Fahar Merchant, President and CEO of Medicenna. "Whereas checkpoint inhibitors have been shown to benefit less than a third of cancer patients while generating annual sales of over $30B, we believe that combinations with MDNA11 and our BiSKIT™ platform, as in MDNA223, may significantly improve outcomes and provide hope to cancer patients that do not respond to checkpoint inhibitors. As patents on checkpoint inhibitors expire from 2028 onwards, the added IP protection provided by this latest patent could allow us to maximize the value of our lead MDNA11 program, while leaving us better positioned to leverage preclinical BiSKIT™ data to pursue value accretive collaborations and partnerships."

MDNA11 is a "beta-only" long-acting IL-2 super-agonist that is being evaluated in patients with advanced solid tumors in the Phase 1/2 ABILITY study. MDNA223 is a preclinical-stage BiSKIT consisting of an anti-PD1 antibody linked to an IL-2 super-agonist (MDNA109FEAA). Both MDNA11 and MDNA109FEAA are designed to selectively stimulate anti-cancer immune cells without activating cells associated with pro-tumor immune pathways or extreme toxicity. PD1/PDL1 and CTLA4 checkpoint inhibitors are designed to prevent the exhaustion of anti-cancer immune cells and are approved as treatments for a number of cancer indications.

This newly issued patent adds to Medicenna's portfolio of issued and filed patents and applications providing protection for the Company's innovative IL-2 Superkines, including MDNA11, in the U.S., Europe, Japan, China, Canada, India, and Australia.

About the Phase 1/2 ABILITY Study
The ABILITY (**A** **B**eta-only **IL**-2 **I**mmuno**T**herap**Y**) study is designed to assess the safety, pharmacokinetics, pharmacodynamics, and anti-tumor activity of various doses of intravenously administered MDNA11 in patients with advanced, relapsed, or refractory solid tumors. The trial includes an MDNA11 monotherapy arm, as well as a combination arm designed to evaluate MDNA11 with KEYTRUDA® (pembrolizumab). Approximately 100 patients are expected to be enrolled into the ABILITY Study. Following establishment of the recommended Phase 2 dose (RP2D) and optimal treatment schedule in the study's dose escalation phase, Medicenna plans to conduct a dose expansion phase that will enroll patients with renal cell carcinoma, melanoma, and other solid tumors in monotherapy and combination settings. For more information, see ClinicalTrials.gov Identifier: NCT05086692.

KEYTRUDA® is a registered trademark of Merck Sharp & Dohme LLC, a subsidiary of Merck & Co., Inc., Rahway, NJ, USA.

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, (**Bi**functional **S**uper**K**ine **I**mmuno**T**herapies) 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 within the meaning of applicable securities laws that relate to the future operations of the Company, plans and projections and other statements that are not historical facts including, but not limited to, statements related to the potential extensions of the term of the patent, the potential value created as a result of the patent and around the Company's IP portfolio generally, the clinical potential, safety profile and development of MDNA11, the potential of MDNA11 in combination and the expected timing and milestones for the presentation of new data related thereto. 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 release, including, but not limited to, MDNA11's ultimate treatment potential, enrolling patients for ABILITY study and 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 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

Investor Contact

For more investor information, please contact:

Dan Ferry, Managing Director, LifeSci Advisors, 617-430-7576, daniel@lifesciadvisors.com

Source: Medicenna Therapeutics Corp.