Medicenna Strengthens Intellectual Property Protection for Superkine Platform with Issuance of U.S. Patent

June 9, 2022

- Patent covers composition and methods of treating degenerative diseases via administration of IL-4 and IL-13 Empowered Superkines

- Delivery of selected Bcl-2 family of proteins can prevent cell death, repair cell damage and restore cellular function in various diseases.

TORONTO and HOUSTON, June 09, 2022 (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. 11,352,402 titled, “Interleukin-4 Receptor-Binding Fusion Proteins And Uses Thereof.” The patent provides intellectual property (IP) protection for composition and methods of treating degenerative diseases via administration of a fusion protein comprising an IL-4 or IL-13 Superkine and an anti-apoptotic Bcl-2 family polypeptide. The patent’s term extends into at least 2038 without accounting for any potential extensions.

“This latest patent strengthens our IP protection, diversifies our pipeline while underscoring the versatility of the Superkine platform,” said Dr. Fahar Merchant, President and CEO of Medicenna. “By utilizing directed evolution, the Superkine platform creates highly selective tunable cytokines that can be seamlessly integrated with a variety of additional therapeutic moieties. Anti-apoptotic Bcl-2 proteins are essential to maintain the integrity of mitochondria, which are powerhouses of every cell. This has allowed us to generate novel biologics targeting a broad spectrum of conditions such as autoimmune disorders and neurodegenerative diseases. Looking forward, we believe our robust IP portfolio and preclinical data leave us well positioned to pursue partnerships aimed at facilitating the advancement of these discovery-stage assets and enable us to generate value across several therapeutic areas while remaining primarily focused on oncology and our lead MDNA11 program.”

Increased programmed cell death, or apoptosis, is linked to the progression of a variety of degenerative diseases such as Alzheimer’s disease, Parkinson’s disease, stroke, muscular dystrophy, spinal cord injury and others. Medicenna’s IL-4/IL-13 Superkine empowered with Bcl-2 family of fusion proteins are designed to treat these and other degenerative diseases by delivering anti-apoptotic peptides to cells expressing IL-4 and IL-13 receptors.

The above patent expands on Medicenna’s Empowered Superkine Platform with 3 other issued patents related to delivery of Bcl-2 proteins via IL4/IL13 receptors (US Patent No. 10,106,592, US Patent No. 11,352,402, Japanese Patent No. 6661530). In addition, US Patent No. 10,781,242 covers composition and methods for IL-2 Superkine Bcl-2 fusions that can enhance immune cell survival for cancer therapy and expand engineered immune cells for adoptive cell transfer therapy.

U.S. Patent No. 11,352,402 adds to Medicenna’s portfolio of issued and filed patents and applications providing protection for the Company’s innovative IL-4 Empowered Superkines in the U.S., Europe, Japan, China, and Canada. It is co-invented by Medicenna and the U.S. government and assigned to Medicenna.

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 statements related to IP protection and the clinical potential and applications of the Superkine platform 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:

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.