



MDNA55 Shows Promising Results in Models of Ovarian Cancer

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TORONTO and HOUSTON, June 26, 2019 /CNW/ - Medicenna Therapeutics Corp. ("Medicenna" or the "Company") (TSX: MDNA; OTCQB: MDNAF), a clinical stage immuno-oncology company, is pleased to announce new data on MDNA55 was published in the March 2019 issue of the journal *Immunotherapy*. The authors of the publication entitled "Combination immunotherapy with IL-4- *Pseudomonas* exotoxin and IFN- α and IFN- γ mediate synergistic antitumor effects *in vitro* and in a mouse model of human ovarian cancer", are investigators in different branches of the National Institutes of Health (NIH) and FDA's Center for Biologics Evaluation & Research.

In the published pre-clinical data, MDNA55 (IL-4 fused to *Pseudomonas* exotoxin) was shown to effectively target and kill ovarian cancer cells overexpressing the IL-4 receptor (IL4R), consistent with previous data showing the antitumor effect of MDNA55. New results have now shown that MDNA55, when combined with approved drugs called interferons (IFN- α and IFN- γ), act in a highly synergistic fashion to kill tumor cells and increase survival in an aggressive mouse model of metastatic ovarian cancer without causing damage to vital organs. These data suggest that this novel combination could provide a unique and effective approach to treating ovarian cancer.

Ovarian cancer is the seventh most common cancer in women worldwide with over 250,000 new cases diagnosed annually. Ovarian cancer is a difficult and trying disease where more than half of the patients treated with conventional therapy simply do not respond. Because it is most often diagnosed in its advanced stage, the prognosis for women with ovarian cancer has been very poor. Historical progression-free survival in ovarian cancer is 10 to 12 months for first-line treatment and 6 to 8 months for second-line treatment. The IL4R is known to be expressed in 60% of patients with ovarian cancer.

IL-4-*Pseudomonas* exotoxin was developed by Dr. Raj Puri (a co-author of the publication) at the USFDA and previously licensed to Medicenna and named MDNA55, a first-in-class, fusion cytotoxin that specifically targets the IL4R which is over-expressed by 20 different cancers affecting more than a million cancer patients every year. To date MDNA55 has been used to treat over 130 patients in multiple clinical trials, including over 110 patients with recurrent Glioblastoma (rGBM), building a significant safety profile, evidence of anti-tumor effect and mechanistic dataset in patients with the most aggressive form of brain cancer. MDNA55 has been the subject of a recently completed Phase 2b open-label study in patients with rGBM at first or second relapse. Promising interim top-line results from the rGBM study were announced last week.

About Medicenna Therapeutics Corp.

Medicenna is a clinical stage immunotherapy company focused on oncology and the development and commercialization of novel, highly selective versions of IL-2, IL-4 and IL-13 Superkines and first in class Empowered Cytokines™ (ECs) for the treatment of a broad range of cancers. Supported by a US\$14.1M non-dilutive grant from CPRIT (Cancer Prevention and Research Institute of Texas), Medicenna's lead IL4-EC, MDNA55, has completed enrolling patients in a Phase 2b clinical trial for rGBM, the most common and uniformly fatal form of brain cancer, at top-ranked brain cancer centres in the US. MDNA55 has been studied in five clinical trials involving 132 patients, including 112 adults with rGBM. MDNA55 has demonstrated compelling efficacy and has obtained Fast-Track and Orphan Drug status from the FDA and FDA/EMA respectively. For more information, please visit www.medicenna.com.

This news release contains forward-looking statements relating 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" and similar expressions. All statements other than statements of historical fact, included in this release, including, without limitation, statements related to the recently completed Phase 2b clinical trial of MDNA55 for the treatment of rGBM, that the data discussed in this press release suggest that this novel combination could provide a unique and effective approach to treating ovarian cancer and the future plans and objectives of the Company, are forward-looking statements that involve 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 of the Company dated June 26, 2018 and in other filings made by the Company with the applicable securities regulators from time to time.

The reader is cautioned that assumptions used in the preparation of any forward-looking information (including, without limitation, the ability of the Company to fully replicate these interim data results) 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 at the time of preparation, 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 of this news release and the Company will update or revise publicly any of the included forward-looking statements only as expressly required by Canadian securities law.

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