MEDICENNA REPORTS FIRST QUARTER FISCAL 2019 FINANCIAL RESULTS

Toronto, Ontario and Houston, Texas, August 13, 2018 - Medicenna Therapeutics Corp. ("**Medicenna**" or the "**Company**") (TSX: MDNA; OTCQB: MDNAF), a clinical stage immuno-oncology company, today reported financial results for the three months ended June 30, 2018.

"We have commenced treating patients at the increased dose in the MDNA55 phase 2b clinical trial in recurrent glioblastoma, following a protocol amendment in May 2018, and anticipate completing enrollment in the study this year." Said Dr. Fahar Merchant, Chairman, President and CEO, "We continue to make good progress with our IL-2 superkine program particularly with respect to long-acting versions of MDNA109 and expect to select a lead candidate for future development later this year."

The following are the achievements and highlights for the quarter ending June 30, 2018 through to the date hereof:

- On May 2, 2018, Medicenna announced that half the patients in the ongoing Phase 2b study of MDNA55 in recurrent glioblastoma (rGBM) had been recruited and the data demonstrate solid safety results and early signals of efficacy based on the findings of the Safety Review and Clinical Advisory Committees. Following the recruitment milestone, the protocol was amended to implement optimal methodologies for treatment of the remaining patients.
- On June 27, 2018 we announced that we were past the mid-stage of enrolment of the Phase 2b clinical trial of MDNA55 in patients with rGBM and have seen early signs of tumor response and an impressive overall survival rate at 6 months (OS-6) of 90 percent following a single treatment at low doses of MDNA55. With exceptional drug distribution and a desirable safety profile to date, the plan is to treat the remaining patients before the end of 2018 at the higher maximum tolerated dose with an option for repeat treatment in patients showing benefit.
- On July 25, 2018, subsequent to the quarter end, Medicenna announced the allowance of a patent ("Interleukin-4 receptor-binding fusion proteins and uses thereof") issued to Medicenna that covers the composition of engineered IL-4 Superkines coupled to potent fully human cytotoxic payloads.
- Subsequent to the quarter end, on August 2, 2018, we announced preliminary pre-clinical data on MDNA109, the only IL-2 in development with high affinity to CD122 to boost cancer fighting T cells, showing that fusions of MDNA109 with inactive protein scaffolds are long-acting and provide the convenience of easier dosing without sacrificing its safety and efficacy.
- On August 10, 2018, Medicenna received US$1,219,857 from the Cancer Prevention and Research Institute of Texas (CPRIT) for the reimbursement of previously incurred expenses.

Financial Results

For the three months ended June 30, 2018, Medicenna reported a net loss of $1,038,217 or $0.04 per share compared to a loss of $2,255,672 or $0.09 per share for the three months ended June 30, 2017. The decrease in net loss in the three months ended June 30, 2018 compared with the three months ended June 30, 2017 was primarily a result of decreased travel, regulatory and clinical expenses for MDNA55 due to reduced patient recruitment during the period the protocol amendment was being prepared and approved as well as a higher level of expenses offset by CPRIT eligible expenses related to MDNA55. These reductions were offset by additional spending on the pre-clinical pipeline, specifically MDNA109.

Research and Development Expenses

Research and development ("R&D") expenses of $634,973 were incurred during the three months ended June 30, 2018, compared with $1,804,790 incurred in the three months ended June 30, 2017. The decrease in R&D

expenses in the three month period ended June 30, 2018 compared with the same periods in the prior year can be primarily attributed to reduced clinical expenses due to reduced patient recruitment costs, as the protocol amendment was prepared and sent to each clinical site for approval during the period as well as reduced R&D travel expenses and an increase in CPRIT eligible expenses of $1,408,936 which were offset against R&D expenses during the current period compared with $359,502 in the prior period. These reductions were partially offset by increased discovery and pre-clinical activities associated with the Superkine programs particularly with respect to development and testing of long acting versions of MDNA109, increased licensing fees, patent costs, royalties and consulting expenses associated with pipeline review and development strategy.

General and Administrative Expenses

General and administrative ("G&A") expenses of $414,551 were incurred during the three months ended June 30, 2018, compared with $438,091 incurred during the three months ended June 30, 2017. The decrease over the prior period is due to lower salary and benefit costs due to headcount reductions and a bonus accrual in the prior year as well as lower legal, professional and finance expenses in the current period due to expenses related to the TSX main board graduation incurred in the prior year period. These decreases were partially offset by increased stock option expenses in the current year period, as well as one-time costs associated with the launch of a new website, logo and corporate presentation.

CPRIT Update

Of the US$14.1 million grant approved by CPRIT, Medicenna has received US$8.8 million to date and up to US$1.2 million may be reimbursed for a total of approximately US$10 million. Further, up to approximately US$4.1 million may be reimbursed to Medicenna in the event the Company successfully completes all the funded projects to the satisfaction of the Product Development Review Committee (PDRC) of CPRIT. There can be no assurance that Medicenna will be able to satisfy all the expectations of the PDRC.

Medicenna Therapeutics Corp.
Condensed Consolidated Interim Statements of Operations
(Expressed in Canadian Dollars)
(Unaudited)

	3 months ended June 30, 2018	3 months ended June 30, 2017
	$	$
Operating expenses		
General and administration	**414,551**	438,091
Research and development	**634,973**	1,804,790
Total operating expenses	**1,049,524**	2,242,881
Interest income	**(92)**	(2,300)
Foreign exchange (gain) loss	**(11,215)**	15,091
	(11,307)	12,791
Net loss for the period	**(1,038,217)**	(2,255,672)
Cumulative translation adjustment	**27,196**	(44,931)
Net loss and comprehensive loss for the period	**(1,011,021)**	(2,300,603)
Basic and diluted loss per share	**(0.04)**	(0.09)
Weighted average number of common shares outstanding	**24,578,137**	23,314,009

The press release, the financial statements and the management's discussion and analysis for the quarter ended June 30, 2018 will be available on SEDAR at www.sedar.com

About Medicenna

Medicenna is a clinical stage immunotherapy company developing novel highly selective versions of IL-2, IL-4 and IL-13 Superkines and first in class Empowered Cytokines™ (ECs). Our mission is to become the leader in the development and commercialization of ECs and Superkines for the treatment of a broad range of cancers and immune-mediated diseases. MDNA55 is Medicenna's lead EC currently enrolling in a multi-centre Phase 2 clinical trial for the treatment of recurrent glioblastoma (rGBM), the most common and uniformly fatal form of brain cancer. MDNA55 has secured Orphan Drug Status from the United States Food and Drug Administration (FDA) and the European Medicines Agency as well as Fast Track Designation from the FDA for the treatment of rGBM.

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 that Medicenna will complete enrolment in the MDNA55 clinical study this year, that Medicenna will select a lead long acting MDNA109 candidate this year, that Medicenna may receive an additional US$1.2 million from CPRIT and statements related to 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 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.

For further information about the Company please contact: Fahar Merchant, President and Chief Executive Officer, 604-671-6673, fmerchant@medicenna.com; Elizabeth Williams, Chief Financial Officer, 416-648-5555, ewilliams@medicenna.com.

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