December 20, 2016

# DiaMedica Announces Positive Top-Line Results from DM199 Bridging Clinical Trial

## The Company has established a dose of DM199 with a similar pharmacokinetic and pharmacodynamic profile comparable to the dose regimen of the KLK1 product approved in Asia. Company to initiate Phase II DM199 clinical studies.

MINNEAPOLIS, MINNESOTA -- (Marketwired) -- 12/20/16 -- DiaMedica Inc. (the "***Company***") (TSX VENTURE:DMA)(OTCQB:DMCAF), a clinical stage biopharmaceutical company developing treatments for neurological and kidney diseases, is pleased to report positive results of its most recent clinical trial. The study identified a dose of DM199 via intravenous administration that produced pharmacokinetic and pharmacodynamic activity that were comparable to those produced by the reference drug, human urinary KLK1 (trade name Kailikang®) approved in Asia. The Company plans to use the results of this study to guide Phase II dosing in upcoming clinical trials.

The study results demonstrated the dose dependent levels of DM199, one of which was shown to be comparable to what is seen with the reference drug. The Phase I controlled trial was an open-label single ascending study, where healthy volunteers received one of four single doses of DM199 (n=12), administered as a 30-minute intravenous infusion. Plasma DM199 concentration, biomarker concentrations, and other safety and pharmacokinetic parameters were measured in the trial.

"We are delighted to have identified a dose of DM199 that could provide sustained therapeutic levels of DM199 and corresponding pharmacodynamic activity that is comparable to the approved human urinary KLK1 protein treatment for acute ischemic stroke," said Rick Pauls, President & CEO of DiaMedica. "In the coming weeks we will be initiating the second part of the clinical trial to include subcutaneous (under the skin) delivery of DM199. The objective of this phase is to further refine and identify an optimal dosing of the intravenous and subcutaneous forms of DM199, possibly superior to the human urinary and porcine derived KLK1 products approved in Asia for acute ischemic stroke and diabetic nephropathy. The optimal treatment regimen determined in the current study will be used in our upcoming Phase II clinical studies. This clinical study also provided clinically relevant safety data via intravenous delivery of DM199 for the first time at dose levels comparable to the currently approved human urinary KLK1 product, while also strengthening our clinical knowledge of DM199."

No treatment limiting adverse events were reported in any dose group. A few patients experienced mild orthostatic hypotension which is consistent with the mechanism of action and demonstrated drug activity. The Company plans to publish the full results of the study in a peer reviewed journal.

***About DM199***

DM199, is a recombinant (synthetic) human tissue kallikrein ("KLK1") protein to treat neurological and kidney diseases. DiaMedica has completed five clinical trials with DM199, including single ascending and multiple ascending doses, studies in diabetic patients, and the current bridging study. In addition to a good safety and tolerability profile, DM199 showed the anticipated activity, lowering blood pressure over the course of treatment in multiple clinical studies. The dose limiting tolerability was orthostatic hypotension at dose levels significantly greater than those anticipated to be effective for treating targeted diseases. These observations are consistent with the DM199 mechanism of action and its effect in previous clinical and pre-clinical studies.

***About KLK1 in Asia***

Two forms of the KLK1 protein are approved in Asia for the treatment of acute ischemic stroke and diabetic nephropathy (diabetic kidney disease). A human urinary KLK1 (Kailikang®) protein has been approved for acute ischemic stroke in China and porcine KLK1 (Kallidinogenase) protein has been approved in China and Japan for diabetic nephropathy, retinopathy, and hypertension. DiaMedica estimates over 150,000 patients are treated each year with the two forms of the KLK1 protein in Asia with total estimated sales of over $150 million U.S.

***About DiaMedica***

DiaMedica is a clinical stage biopharmaceutical company focused on developing novel treatments for neurological and kidney diseases. DiaMedica's shares are listed on the TSX Venture Exchange under the trading symbol "DMA" and on the OTCQB under the trading symbol "DMCAF".

***FORWARD-LOOKINGSTATEMENTS***

The statements made in this press release that are not historical facts contain forward-looking information that involves risk and uncertainties. All statements, other than statements of historical facts, which address DiaMedica's expectations, should be considered forward-looking statements. Such statements are based on management's exercise of business judgment as well as assumptions made by and information currently available to management. When used in this document, the words "may", "will", "anticipate", "believe", "estimate", "expect", "intend" and words of similar import, are intended to identify any forward-looking statements. You should not place undue reliance on these forward-looking statements. These statements reflect a current view of future events and are subject to certain risks and uncertainties as contained in DiaMedica's filings with the Canadian securities regulators, all of which are available on SEDAR (www.sedar.com). Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results could differ materially from those anticipated in these forward-looking statements. DiaMedica undertakes no obligation, and does not intend, to update, revise or otherwise publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of any unanticipated events, unless required by law. Although management believes that expectations are based on reasonable assumptions, no assurance can be given that these expectations will materialize.

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