



Another Breakthrough-- Asep Inc.'s A.I.-Based Sepsis Technology Identifies COVID-19 Severity from a Blood Sample

A recent study led by Asep Inc.'s Founder, Chair and CEO, Dr. Robert E. W. Hancock, concludes that there is hope for improved clinical management of COVID-19 patients by better assessing the severity of sepsis, a deadly disease that impacts many COVID-19 patients.

VANCOUVER, BC, July 14, 2023 /CNW/ - Asep **Medical Holdings Inc.** ("**Asep Inc.**" or the "**Company**") (CSE: ASEP) (OTCQB: SEPSF) (FSE: JJ8) is pleased to announce the results of a recent scientific study led by Asep Inc.'s Founder, Chair and CEO, Dr. Robert Hancock, that concluded that severe COVID-19 is a form of sepsis based on analysis of blood gene expression signatures. Importantly, this study highlights the potential benefits of a rapid diagnostic test for sepsis, such as the Company's Sepset^{ER} (TM) sepsis diagnostic test, that could identify COVID-19 patients at risk of developing severe sepsis as well as providing a path to a precision medicine approach to enable individualized treatment for the disease. Asep Inc. is an innovator on the front lines of sepsis diagnosis. In advanced development, the Company's technology could significantly benefit the fight against sepsis in future pandemics, not just COVID-19. The study results were published on January 23, 2023, in the scientific journal *Scientific Reports*.

The study's introduction states, "In the ongoing COVID-19 pandemic (2020 – 2022), it is increasingly evident that many of the millions of individuals who die with severe disease succumb due to sepsis, a life-threatening dysfunctional response to infection. In addition, the characterization of COVID-19 disease as a type of sepsis has important clinical implications for the prognosis and treatment of severely-afflicted COVID-19 patients."¹ The study analyzed the blood of 124 early (1–5 days post-hospital admission) and late (6–20 days post-hospital admission) sampled patients with confirmed COVID-19 infections from hospitals in Quebec, Canada.

According to Dr. Hancock, "The results of this study can make a big difference to those treating the most severe and deadly cases of COVID-19 and emphasizes that severe COVID is essentially a form of severe sepsis. It also underscores the importance of early identification of sepsis in patients as they enter the emergency room. Our Sepset^{ER} test is fast, efficient and highly accurate at identifying those patients at the highest risk of progressing to severe sepsis. We are in the process of setting up subsequent clinical trials to demonstrate the utility of applying the Sepset^{ER} test on sepsis patients and identifying those patients at greatest risk of developing severe sepsis. The results of these clinical trials will be used to support our regulatory filings with the FDA to get the test cleared for use in hospitals."

Asep Inc.'s Chief Scientific Officer Evan Haney commented, "Since sepsis is the major reason underlying the most severe consequences in every pandemic to date, the Sepset^{ER} test will also have an important role in future pandemics, identifying those patients who need treatment from those with mild or asymptomatic disease."

The full scientific paper can be accessed here www.nature.com/articles/s41598-023-28259-y

ABOUT ASEP MEDICAL HOLDINGS INC.

Asep Medical Holdings Inc. (asepmedical.com) is dedicated to addressing the global issue of antibiotic failure by developing novel solutions for significant unmet medical needs in human medicine. The Company is a consolidation of three existing private companies, all with technology in advanced development — Sepset Biosciences Inc. (proprietary diagnostic tools to enable the early and timely identification of sepsis), ABT Innovations Inc. (broad-spectrum therapeutic agents to address multi-drug resistant biofilm infections), and SafeCoat Medical Inc. (an antibacterial peptide medical device coating technology).

Sepset Biosciences Inc. (sepset.ca) is in the final stages of preparation for clinical studies and commercialization of an *in vitro* diagnostic test that involves a patient gene expression signature that helps assess the development of severe sepsis, one of the significant diseases leading to antibiotic failure since antibiotics are the primary initial treatment for sepsis. Sepsis was responsible for nearly 20% of all deaths on the planet in 2017 and essentially all deaths due to COVID-19 and other pandemics. The Sepset^{ER} test is a blood-based gene expression assay that is straightforward to implement, and results are obtained about an hour after taking a blood sample in the emergency room or intensive care unit. This proprietary diagnostic technology differs from current diagnostic tests, enabling the risk assessment for progression to severe sepsis within ~60 minutes of initiating the test. Bacterial culture, the gold standard, provides results after ~15 hours but can be as long as three days. Asep Inc. believes its test will enable critical early decisions to be made by physicians regarding appropriate therapies and thus reduce overall morbidity and mortality due to sepsis.

ABT Innovations Inc.'s (abtinnovations.ca) peptide technology covers a broad range of therapeutic applications, including bacterial biofilm infections (dental, wound, sinusitis, skin, medical device infections, chronic infections, lung, bladder, ear-nose and throat, orthopaedic, etc.), anti-inflammatories, anti-infective immune-modulators and vaccine adjuvants. The company is in the pre-clinical development phase with promising data for the first three indications.

SafeCoat Medical Inc.'s (safecoatmedical.com) technology encompasses self-assembling polymers combined with conjugated antimicrobial peptides, which can be applied to various surfaces as antimicrobial and anti-fouling coatings. In particular, the invention relates to coatings that may be applied to multiple medical devices and implants, and feasibility has been demonstrated in animal models. The company's expertise also encompasses the methods for manufacturing and applying these anti-bacterial coatings.

FORWARD-LOOKING STATEMENTS —

*This news release contains certain "forward-looking statements" within the meaning of such statements under applicable securities law. Forward-looking statements are frequently characterized by words such as "anticipates," "plan," "continue," "expect," "project," "intend," "believe," "anticipate," "estimate," "may," "will," "potential," "proposed," "positioned" and other similar words, or statements that certain events or conditions "may" or "will" occur. These statements include but are not limited to the successful clinical testing of our Sepsis *in vitro* diagnostic test and its intended filing for regulatory market authorization; the Company not receiving regulatory market authorization as planned or at all; the undertaking of pre-clinical studies on our lead therapeutic, with the expectation that this will lead to fast-track clinical trials; the timeframe for identification of sepsis with the company's products; the potential opportunities for the generation of revenue; the therapeutic benefits of the company's products; and other statements regarding the company's proposed business plans. Various assumptions were used in drawing conclusions or making the predictions contained in the forward-looking statements throughout this news release. Forward-looking statements are based on the opinions and estimates of management at the date the statements are made and are subject to a variety of risks including the risk that the company's products may not perform as expected; that the company may not receive the requisite regulatory market authorization or results of testing; the Company's testing of the products may not be successful and market authorization may not be obtained in the estimated timelines or at all; the company may not be able to generate revenue from its products as expected or at all; the market for the company's products may not be as described in this news release; and various other risk factors identified in the Asep Medical Inc.'s prospectus dated November 9, 2021, and in the company's management discussion and analysis, available for review under the Company's profile at www.sedar.com and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. Asep Medical Inc. is under no obligation and expressly disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as expressly required by applicable law.*

ENDNOTES

¹ Vincent, J. L. COVID-19: It's all about sepsis. *Future Microbiol.* 16(3), 131–133 (2021).

View original content to download multimedia:

<https://www.prnewswire.com/news-releases/another-breakthrough-asep-incs-ai-based-sepsis-technology-identifies-covid-19-severity-from-a-blood-sample-301877>

SOURCE ASEP Medical Holdings Inc.

View original content to download multimedia: <http://www.newswire.ca/en/releases/archive/July2023/14/c8346.html>

%SEDAR: 00053132E

For further information: Chris Dallin, Marketing Director, Asep Medical Holdings Inc., E. chris@asepmedical.com, T. +1 (604) 362-3654

CO: ASEP Medical Holdings Inc.

CNW 19:00e 14-JUL-23