Asep Medical Inc. Announces its Antibiofilm/Anti-inflammatory Peptide Technology is in Advanced Development for Wound Dressings with US Army Funding1

VANCOUVER, BC, Feb. 16, 2022 /CNW/ - Asep Medical Holdings Inc. ("Asep Inc." or the "Company") (CSE: ASEP) is dedicated to addressing antibiotic failure by developing novel solutions for significant unmet medical needs, including both proprietary diagnostic tools, enabling the early and timely identification of severe sepsis, as well as broad-spectrum therapeutic agents to address multidrug-resistant biofilm infections. The Company announces that its novel antibiofilm peptide technology is in advanced development through its collaboration with its pre-clinical partner, iFyber, LLC, and grant funding from the United States Army Medical Research and Materiel Command (USAMRMC)[1].

The Company's ongoing collaboration with iFyber, LLC is focused on developing wound dressings that incorporate Asep Inc.'s novel peptide technology. iFyber is a preclinical contract research organization based in Ithaca, NY, with expertise in antimicrobial wound dressings, biomaterials and wound care management. The partner companies are making great strides in incorporating Asep Inc.'s antibiofilm and anti-inflammatory peptide technology into advanced, effective wound dressings to prevent and treat biofilm-associated wounds as well as burn and soft tissue infections. Beyond preventing and treating bacterial biofilm infections, the dressings are expected to promote wound healing which is essential when treating injuries in the field[2]. Beyond this military application, there were 8.4 million purulent skin and soft tissue infections in the USA in 2015[3]. Staggeringly there is not a single FDA-approved treatment for biofilm infections. Asep Inc. is addressing this medical shortcoming head-on.

Asep Inc. holds, through its majority-owned subsidiary ABT Innovations Inc., an exclusive global licence to a patented technology developed by world-leading microbiologist Dr. Robert E.W. Hancock and his team at the University of British Columbia (UBC). This technology is a proprietary peptide that can preferentially attack biofilms formed from all medically significant bacteria. New data reveals that the peptides work well in animal and human tissue models and enhance the action of conventional antibiotics. These peptides can also suppress inflammation that causes many medical complications due to chronic biofilm infections.

Antibiotic resistance is a major worldwide health problem and has led the World Health Organization (WHO) to term it a "fundamental threat" since it leads to higher medical costs, prolonged hospital stays and increased mortality. One of the most extreme threats is biofilm infections since they represent, according to the FDA, 65% of all infections. Biofilms are communities of bacteria that can grow on any tissue surface or medical device, and they are encased in a protective polysaccharide matrix. They have altered growth characteristics that make them highly resistant to the effects of antibiotics.

Dr. Robert Hancock, Co-Founder, Director and COO of ASEP Medical Inc., said, "We are pleased to have such an outstanding partnership with iFyber and look forward to working with them as we advance these therapies into the clinic. The data generated to date is certainly exciting, and we hope it will yield a viable treatment for a prevalent disease with minimal treatment options."

Rudy Mazzocchi, Asep Inc.'s Chairman and CEO, stated, "This collaboration with iFyber along with the non-dilutive DoD funding further validates that Asep Inc. has several important and viable medical technologies in advanced development. The extensive size of our global market opportunities fighting infections, and our ABT peptide technology is just one of many parallel development efforts related to additional clinical applications."

Greg Mouchka, president of iFyber, LLC, added, "The relationship between iFyber and Asep really exemplifies how a successful collaboration in the field of wound care can work. The novel peptides developed by Dr. Hancock, combined with iFyber's expertise in applied materials know-how, test methods, and product development, provide a way to get new innovative products evaluated, optimized, and ready to take to the FDA for review. We look forward to our continued collaboration with Dr. Hancock, ABT, and Asep."

ABOUT ASEP MEDICAL HOLDINGS INC.

Asep Inc. is dedicated to addressing antibiotic failure by developing novel solutions for significant unmet medical needs. The Company is a consolidation of two existing private companies (Sepset Biosciences Inc. and ABT Innovations Inc.) that are both in the advanced development of both proprietary diagnostic tools, enabling the early and timely identification of severe sepsis as well as broad-spectrum therapeutic agents to address multidrug-resistant biofilm infections.

Sepset Biosciences Inc. is developing a diagnostic technology that involves a patient gene expression signature that predicts severe sepsis, one of the significant diseases leading to antibiotic failure since antibiotics are the primary treatment for sepsis. Despite this, sepsis is responsible for nearly 20% of all deaths on the planet. The Sepset^{ER} test is a blood-based gene expression assay that is straightforward to implement, and results are obtained in about an hour in the emergency room or intensive care unit. This proprietary diagnostic technology differs from current diagnostic tests in enabling diagnosis of severe sepsis within 1-2 hours of first clinical presentation (i.e., in the emergency room), while other diagnostics only provide diagnosis after 24-36 hours. Asep Inc. believes this will enable critical early decisions to be made by physicians regarding appropriate therapies and reduce overall morbidity and mortality due to sepsis.

ABT Innovations Inc.'s peptide technology covers a broad range of therapeutic applications, including bacterial biofilm infections (medical device infections, chronic infections, lung, bladder, wound, dental, skin, ear-nose and throat, sinusitis, orthopaedic, etc.), anti-inflammatories, anti-infective immune-modulators and vaccine adjuvants.

ABOUT IFYBER, LLC

iFyber is a preclinical contract research organization that offers custom research and development services to companies that operate at the interface of chemistry, biology, and materials science. iFyber is unique in providing clients direct access to top scientists that can creatively solve problems and propose application-specific models that best reflect the product's real-world intended use. For more information, visit ifyber.com.

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. Forward-looking statements in this news release include, but are not limited to the completion of successful clinical testing of our peptide technology and its intended filing for regulatory approval; the undertaking of pre-clinical studies on our peptide technology, with the expectation that this will lead to fast track clinical trials; the ability of our peptide technology to treat wounds within the stated timelines; and that early application of the peptide technology will spare expensive and unnecessary antibiotic treatment. Various assumptions were used in drawing the conclusions or making the predictions contained in the forward-looking statements throughout this news release, including the assumption that our diagnostic testing kits will be adopted and used by doctors in diagnosing and treating sepsis. 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 those risk factors identified in the Asep Medical Inc.'s prospectus dated November 9, 2021, and Asep Inc.'s most recent Management Discussion & 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 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.

Footnotes

1. (1) "The U.S. Army Medical Research Acquisition Activity, 820 Chandler Street, Fort Detrick MD 21702-5014 is the awarding and administering acquisition office" and (2) "This work was supported by the Office of the Assistant Secretary of Defense for Health Affairs, through the Defense Medical Research and Development Program, under Award No. W81XWH-18-2-0028. Opinions, interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the Department of Defense." (3) "In conducting research using animals, the investigator(s) adheres to the laws of the United States and regulations of the Department of Agriculture."
2. https://health.mil/News/Articles/2021/04/01/Skin-Soft-Tissue-MSMR-2021#:~:text=ABSTRACT,years%20(p%2Dyrs). 210,000 SSTI in US military personnel in 9 months of 2020
3. https://www.healio.com/news/infectious-disease/20191025/ssti-incidence-plateaus-overall-in-us-declines-in-children

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CNW 08:00e 16-FEB-22