MicrosensDx Collaborates With Imperial Researchers To Develop Groundbreaking Sepsis Test

ST. NEOTS, UNITED KINGDOM, September 13, 2024 / EINPresswire.com/ -- MicrosensDx is excited to announce that it is working with The Mayr Group at Imperial College London to develop a novel biomarker test for the early recognition of sepsis. Based on MicrosensDx's IP and technology, and designed to fit with existing diagnostic processes, this test could potentially fill a critical gap in patient management, offering clinicians a specific, quantitative diagnostic and prognostic solution to help prioritise appropriate treatment of sepsis.

Sepsis is a very serious disease affecting 49 million people globally. It results in 13 million deaths annually – and is implicated in 20 per cent of all deaths – imposing a staggering £15.6 billion cost per year on the UK alone.1 There is a clear need for routine testing to enable more specific detection and prioritisation of sepsis treatment, as current biomarkers focus mainly on detecting inflammation, and most proposed biomarkers have limitations. A successful test to profile the risk of sepsis could therefore improve treatment, enable more timely and appropriate interventions, and reduce costs.

MicrosensDx and Imperial are applying their joint expertise and experience in infectious diseases to address this challenge, with the aim of developing a groundbreaking sepsis test based on the detection of P Complex, which increases during serious infection, with high levels linked to poor patient outcomes. The team is working on an early stage project to evaluate the efficacy of specific antibodies against P Complex, as part of a programme to establish the first all-in-one test to stratify the risk of patients developing severe sepsis and septic shock.

"We're really excited to collaborate on a potential solution to mitigate the devastating impact of sepsis. There is a pressing need for an early warning test that can not only rule in and rule out

sepsis, but also help to stratify patients based on disease severity. We hope that this project will establish an innovative predictive test for sepsis, enabling earlier and more precise treatment decisions to be made," commented Simon Walker, CEO of MicrosensDx.

"The sepsis biomarkers currently in clinical use lack specificity, highlighting the need for new markers with the ability to effectively stratify individual patients according to their severity of risk in a dynamic and timely fashion. Together with MicrosensDx, we aim to provide proof-of-concept for a new test, which could later be evaluated to determine its ability to accurately assess patient risk and guide targeted treatment strategies," added Professor Manuel Mayr, British Heart Foundation (BHF) Professor for Cardiovascular Proteomics at the National Heart and Lung Institute, and Co-director of the BHF Centre of Research Excellence at Imperial.

1. The Sepsis Manual. (2024). The UK Sepsis Trust. Accessed 8th August 2024. https://sepsistrust.org/wp-content/uploads/2024/01/Sepsis-Manual-7th-Edition-2024-V1.0.pdf

About MicrosensDx

MicrosensDx develops sample collection, enrichment and preparation services and products for diagnostic companies and testing laboratories. The company has novel IP and a deep know-how in sample preparation, inflammation/sepsis and protein aggregation, and has proficient R&D and product development capabilities. Uniquely, MicrosensDx's sample prep methodology is designed to operate universally with all sample types at every scale, so it can be tuned for optimal performance with even the most complex samples.

MicrosensDx is using this expertise to empower diagnostic testing, providing insights into sepsis prognosis and optimised sample content for:

- scientists – by influencing improved diagnostic test utility and performance;
- clinicians – by providing more specific, sensitive and actionable results;
- patients – by enabling earlier and more specific treatment.

MicrosensDx has a rich legacy of invention – including the development of protein aggregation IP licensed by a veterinary diagnostics leader and COVID-19 testing products that were used extensively during the pandemic – and is applying this substantive experience in developing diagnostics to make improvements in healthcare both possible and universally deployable.

All MicrosensDx services and products mentioned are currently in the research and development phase. These products have not yet been approved for sale or clinical use. MicrosensDx is working towards obtaining necessary regulatory approvals before any commercial release.

Lauren Owen, Account Manager
kdm communications limited
+44 1480 405 333
laureno@kdm-communications.com