

# Micronbrane Medical Transforms Pathogen Identification with Innovative Metagenomic Next-Generation Sequencing Technology

*Clinical Study Finds the Company's Devin™ Membrane and Metagenomic Assay More Accurate and Faster than Blood Cultures and Assays without a Host Depletion Filter*

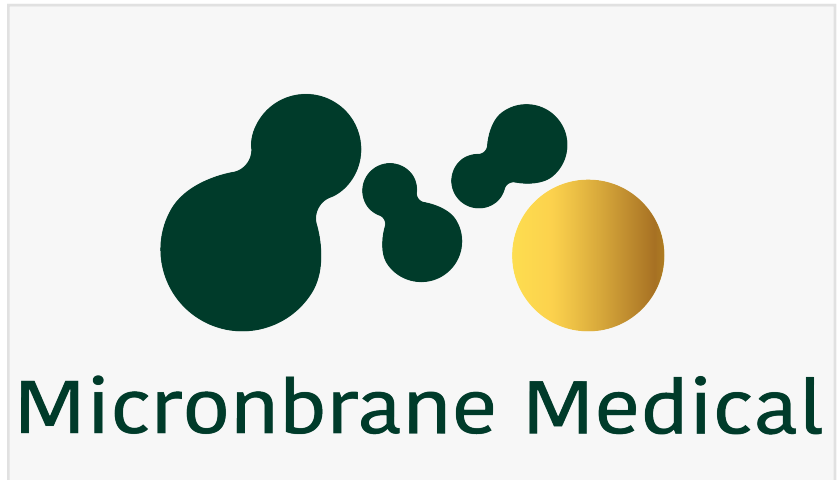
TAOYUAN CITY, TAIWAN, July 20, 2023

/EINPresswire.com/ -- Micronbrane

Medical, a metagenomic technology innovator, today announced the publication of a clinical study

demonstrating the superiority of the

company's proprietary [Devin™ Fractionation Membrane](#) and metagenomic next-generation sequencing (mNGS) assay to diagnose sepsis.



Conducted at the Taipei Veterans General Hospital, the study showed that the patented Devin

Fractionation Membrane enabled a genomic DNA (gDNA) based workflow, the [Pathogen Real-Time Identification by Sequencing](#) (PaRTI-Seq™) assay, provides a more efficient and accurate means of pathogen identification in patients with suspected sepsis compared to traditional blood cultures and mNGS methods without a host depletion filter.

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Micronbrane Medical is dedicated to revolutionizing pathogen identification through easy, accurate and cost-effective metagenomic next-generation sequencing.”

*Dr. Mengchu Wu*

Blood cultures are limited in their ability to detect viruses or mixed infections, have a low diagnostic yield, and long turnaround time. In contrast, mNGS could provide a faster

and more sensitive means of a broad range of pathogen identification if host DNA interference is effectively eliminated.

Micronbrane Medical's patented [Zwitterionic Interface Ultra-Self-assemble Coating Technology](#) (ZISC Technology) removes greater than 99% of host nucleated cells of up to 10 mL whole blood

(or other body fluids) in five minutes. The study found that the Devin Fractionation Membrane with the PaRTI-Seq workflow achieved higher positivity rates (82%) compared to mNGS without a filter (56%) or blood cultures (24%).

The gDNA-based PaRTI-Seq assay significantly increased microbial reads per million (RPM) over 100-fold and increased the average RPM over cfDNA-based mNGS (2359 compared to only 95 respectively). Moreover, Micronbrane Medical's easy and efficient workflow allows for sample to pathogen identification within 24 hours, offering a significant advantage over traditional blood cultures, which can take several days to produce results.

"Micronbrane Medical is dedicated to revolutionizing pathogen identification through easy, accurate and cost-effective metagenomic next-generation sequencing," said Mengchu Wu, Ph.D., co-founder, and CEO. "Our Devin ZISC Technology and PaRTI-Seq assay remove the barriers to widespread adoption of mNGS in both research and clinical settings to deepen our understanding of the microbial world."

With the high morbidity and mortality rates associated with sepsis, the study provides evidence that Micronbrane Medical's Devin filter and PaRTI-Seq assay are essential tools in the fight against sepsis and other infectious diseases, potentially saving millions of lives worldwide.

#### About Micronbrane Medical

At Micronbrane Medical, our mission is to develop genomic innovations that enrich our understanding of microorganisms to benefit human health and sustainability. The company's proprietary technologies include host DNA depletion, optimized reagents and consumables, advanced metagenomic sequencing assays, plus rapid bioinformatic analysis software. The combined Micronbrane Medical solution enables fast and accurate identification and monitoring of a broad range of microorganisms, including bacteria, fungi, viruses, and parasites. Headquartered in Taiwan, the company has partnerships and collaborations with leading academic institutions, health systems, and clinical laboratories worldwide, underscoring its commitment to transforming our relationship with the microbial world. For more information visit <https://micronbrane.com/>.

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