NEOSENS
Allowing every child to have a healthy start in life thanks to accurate, rapid health assessment

In a nutshell

Every year, over 120 million babies are born in low- and middle-income countries (LMICs). With limited access to clean water and medical facilities, babies born into these countries are at high risk of infection and sepsis. One of the key challenges faced by doctors in LMICs is a lack of sufficient technology and guidelines to diagnose and effectively treat infection when it occurs. Over 12% of newborns in LMICs are falsely suspected of sepsis and often receive antibiotics as a precautionary measure. This treatment leads to significant economic burden (on health systems and patients) and contributes to the global antimicrobial resistance crisis. NEOSENS is an AI-based technology which provides a timely and accurate sepsis detection from a single drop of blood.

Why is our technology important?

NEOSENS ensures newborns in LMICs receive the best possible start in life. Our technology brings together two key approaches for detecting neonatal sepsis. Traditional methods rely on observing clinical signs and risk factors, while more modern techniques measure the levels of infection indicators (known as biomarkers) in the blood.

NEOSENS merges these two approaches. We provide a point-of-care device which provides a rapid and reliable analysis, based on the detection of sepsis biomarkers (proteins found in the blood) in the infant. This is then complemented with our predictive model software trained on data from over 60,000 patients from a specialized clinical database, which calculates a precise sepsis score. This dual-analysis method enables doctors to make quick and informed decisions, preventing the overuse of antibiotics and optimising patient outcomes.

The benefits of our solution

- Cost-effective: The NEOSENS technology reduces unnecessary treatments and therefore saves health systems around 38% on their neonatal sepsis-related costs (around $220 per patient)

- Fast and delivered where needed: Our technology delivers results in 15 minutes at the patient's bedside. This allows for rapid decision making, increasing bed turnover, and enabling faster admissions for critically ill newborns

- Accurate: We project NEOSENS can prevent up to 2/3rds of unnecessary antibiotic treatments and make huge strides in precision medicine for newborns

- Reduced healthcare inequalities: Opening access to rapid and accurate diagnostics and bridging the gap in newborn healthcare outcomes

We believe with NEOSENS, we can build a world where every baby, regardless of where they're born, has a chance to fulfil their potential. Will you join us on our journey?

Keywords

Sepsis – Neonatal care – Biomarkers – LMICs – Newborn health – Antimicrobial resistance – AI-based diagnostics

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startup launchpad

Get in touch
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You can book some time with us here: info@neosens-dx.com