

# Rapid Sepsis Diagnostics

acib has developed a new diagnostic tool for early sepsis detection through novel biomarkers based on circulating-free nucleic acids. The test allows for detection of sepsis 2-3 days before first symptoms occur and shows >80% accuracy.

# **BACKGROUND**

Sepsis, more commonly known as blood poisoning, is a life-threatening disease that occurs when the immune response to infections causes widespread damage throughout the body. The risk of dead is high with approx. 30% and with more than 10 mio. estimated deaths per year it is responsible for almost 20% of all global deaths. The major difficulty today is to detect the onset of sepsis early enough, since early administration of antibiotics reduce mortality by more than 7% per hour. With the long duration of blood culture tests valuable time is passing by and there is a high demand for fast and accurate tests.

# **TECHNOLOGY**

acib has identified almost 30 different sepsis-biomarkers based on cell-free or circulating-free DNA (cfDNA) and has chosen the best ones for patient studies with 500+ participants and could show accuracy of >80%. We are now conducting two final blind studies with 100+ participants each in Austria (with the Medical University of Graz) and Germany (with the Charité Berlin). The assay requires a small aliquot of cell-free patient blood and can deliver the test results within 3-4 hours.

acib's expertise on cfDNA-biomarkers would also allow for detection of other diagnostic tools including bioinformatic predictions for disease severity and risk of death for e.g. SARS-CoV-2, myocardial infection, trauma, transplant graft rejection, cancer,...

acib has ample expertise in providing R&D services to various companies – check also our other offers: <a href="https://acib.at/offers/">https://acib.at/offers/</a>

# **OFFER**

Under protection of a CDA/NDA we can provide you with details of our sepsis diagnostics tool and/or develop new tools especially for you. IP developed in such projects would fully belong to you as our investor/industrial partner.

# acib-EXPERTS:

Dr. Petra Heidinger
Dr. Daniel Schwendenwein

#### **AVAILABLE FOR:**

- Investments
- Joint Research Projects
- Contract Research

#### **DEVELOPMENT STATUS:**

Technology Readiness Level 5 (Technology validated in relevant environment)

#### IPR:

Will be generated for you as our industrial partner / investor

### **KEYWORDS:**

cfDNA Biomarkers Early Diagnosis Sepsis

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