



Rapid Test for Joint Infection

Bacterial joint infections are a devastating complication, causing pain, death, and costly treatments.

While current diagnostics are either slow and unreliable or expensive and complex, acib's Point-of-Care (POC) test provides fast, accurate results at low cost.

BACKGROUND

Over 110 million joint replacements occur annually, with bacterial infections as a severe complication. These infections, whether prosthetic or native joint-related, can result in revision surgeries, chronic pain, or death, imposing significant economic burdens. Conventional diagnostics rely on time-consuming microbial cultures or advanced molecular panels, such as the BIOFIRE® Joint Infection Panel. While the latter offers faster detection through multiplex PCR it recognizes only certain bacteria and its high cost, as well as dependency on laboratory infrastructure limit widespread adoption. These problems lead to delayed treatment, overtreatment with antibiotics, and the growing threat of antimicrobial resistance. There remains a pressing need for affordable, rapid, and accurate POC diagnostic tools that enable timely and precise clinical decisions.

TECHNOLOGY

acib has developed an innovative diagnostic test based on a patented enzyme biomarker linked to the early immune response itself. This biomarker technology enables the rapid and sensitive detection of bacterial infections directly at the POC. Within minutes, the test provides accurate insights into whether a bacterial infection exists and whether antibiotic intervention is necessary. Designed to be cost-effective, portable, and easy to use, the device meets the needs of healthcare providers in hospitals, outpatient settings, and veterinary clinics. This breakthrough technology represents a significant improvement over existing diagnostics, offering enhanced accuracy, affordability, and speed without requiring specialized laboratory infrastructure.

OFFER

acib invites industry partners to collaborate in bringing this breakthrough to market. We aim to transform these excellent research results into a novel series of POC bacterial infection tests tailored for hospitals, home care, and veterinary medicine.

To achieve this, we are actively seeking industry partners for joint projects to bring this groundbreaking technology to market. Together, we can reduce healthcare burdens, improve patient outcomes, and lead the fight against antimicrobial resistance. Reach out to explore partnership opportunities and join us in shaping the future of infection diagnostics.

Let's shape the future of infection detection – contact us now.

EXPERTS

Dr. Eva Sigl
Dr. Andrea Heinzle
Prof. Dr. Georg Gübitz

DEVELOPMENT STATUS

Technology Readiness Level 5
(technology validated in relevant environment)

KEYWORDS

- Rapid Diagnostics Test
- Prosthetic Joint Infection
- Antimicrobial Resistance
- Synovial Fluid Testing
- Point-of-Care Diagnostics
- Molecular Diagnostics
- Immune-Response Biomarkers
- Human Healthcare
- Veterinary Medicine
- Patented Technology
- R&D Partnership
- Clinical Studies
- Diagnostic Solutions

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