

# quickMIC®

Ultra-rapid phenotypic AST



Speeding up blood diagnostics for the treatment of sepsis

# The technology behind QuickMIC provides **precise MIC values in record time**

### Linear gradient for increased resolution and reproducibility

Our unique technology utilizes a continuous linear antibiotic gradient to ensure high sensitivity around clinical breakpoints (SIR). Narrowing the variability range allows for higher resolution, precision and accuracy than methods based on 2-fold broth microdilution (BMD).



#### MIC distribution of wildtype and resistant bacteria

### Visualization of bacterial microcolony growth in real-time

Bacteria from positive blood cultures are exposed to a linear antibiotic gradient and the growth rate of microcolonies is monitored over time. The high sensitivity of the system combined with a custom analysis software allows QuickMIC to deliver precise MIC values within 2-4 hours.



# QuickMIC<sup>®</sup> is an ultra-rapid system for phenotypic **antibiotic susceptibility testing**

Our product is designed to offer personalized treatment options for sepsis patients, thereby contributing to increased survival, reduced healthcare costs and lower antibiotic resistance.

- Reports precise MIC values in 2-4 hours
- Directly from positive blood cultures
- Antibiotic panels for G- bacteria





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Instruments can be stacked for increased capacity, making QuickMIC suitable for small and larger laboratories.

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QuickMIC determines MIC values directly from positive blood cultures **in 2-4 hours** 

### The power of precise MIC values for treating sepsis patients

Precise MIC values allow for more specific PK/PD targeted antibiotic dosing, resulting in more informed treatment decisions for the benefit of sepsis patients. By minimizing the variability range of 2-fold broth dilution methods, QuickMIC provides the clinical team with the opportunity to target personalized blood antibiotic concentrations.

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One instrument analyzes one patient sample against a panel of **12 antibiotics per run** 





#### References

Malmberg et al., Front. Cell. Infect. Microbiol., 2022; 12:758262 Wistrand-Yuen et al., mBio, 2020; 11(1):e03109-19 Malmberg et al., PLoS One, 2016;11(12):e0167356 Hou et al., Lab Chip, 2014;14, 3409-3418

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Our mission is to supply our customers with high-quality products that are conceptually elegant, technologically advanced, **but easy to use.** 

## Sign up for our newsletter and get a free copy of our eBook!

Receive product news and updates on new developments in next-generation ultra-rapid diagnostics for precise MIC determination. Scan the QR code or visit **gradientech.se/newsletter** 





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