

T2Resistance™ Panel

Results two days faster
than current methods

Enables targeted therapy two days faster, reducing antimicrobial resistance

The T2Resistance Panel is the only direct-from-blood diagnostic assay for the detection of antibiotic resistance genes associated with sepsis-causing pathogens. Using the same T2Dx® Instrument as the T2Bacteria® Panel and the T2Candida® Panel, the T2Resistance Panel identifies many of the most serious resistance genes on the antibiotic-resistance threat list published by the Centers for Disease Control and Prevention (CDC), including genes indicating resistance to common empiric antibiotic therapies such as carbapenems, vancomycin, penicillin and more.

- Results direct from a whole blood sample
- Sensitivity ≥ 91% and specificity ≥ 98%¹
- 53.2 hours faster than with standard blood culture methods¹
- Limit of detection 3-11 CFU/mL

Gram-negative marker

- KPC
- OXA-48
- NDM
- VIM
- IMP
- CTX-M 14
- CTX-M 15
- AmpC (CMY)
- AmpC (DHA)

Gram-positive marker

- *vanA*
- *vanB*
- *mecA*
- *mecC*

Early Clinical Data¹

A recent study was conducted in which 57 patients were enrolled based on the criteria of having symptoms consistent with those of a bloodstream infection. The data showed that the T2Resistance Panel has a clinical sensitivity of $\geq 91\%$ and specificity of $\geq 98\%$ and that the average time to result was 4.1 hours, which was **53.2 hours faster** than with standard blood culture methods.

Potential patient populations that may benefit from the T2Resistance Panel

- Patients with a history of infection or colonization with antimicrobial resistant organisms
- Patients not responding to broad-spectrum antibiotic therapy
- Patients with risk factors for antimicrobial resistance
- Patients with positive T2Bacteria result or positive blood culture

Available Products

T2Dx[®] Instrument

- LoD as low as 1 CFU/mL
- Easy to operate
- Minimal hands-on time
- Results in 3 to 5 hours



T2Resistance[™] Panel

Sensitivity $\geq 91\%$ and specificity $\geq 98\%$ ¹

Gram-negative marker

- KPC
- OXA-48
- NDM
- VIM
- IMP
- CTX-M 14
- CTX-M 15
- AmpC (CMY)
- AmpC (DHA)

Gram-positive marker

- *vanA*
- *vanB*
- *mecA*
- *mecC*



T2Bacteria[®] Panel

90% Sensitivity^{2*} | 98% Specificity²

- *Enterococcus faecium*
- *Staphylococcus aureus*
- *Klebsiella pneumoniae*
- *Acinetobacter baumannii*
- *Pseudomonas aeruginosa*
- *Escherichia coli*

T2Candida[®] Panel

91% Sensitivity³ | 99% Specificity³

- *Candida albicans*
- *Candida tropicalis*
- *Candida krusei*
- *Candida glabrata*
- *Candida parapsilosis*

To learn more about the T2Resistance Panel, email info@t2biosystems.com or visit www.t2biosystems.com

*A combination of samples was run in both the prospective and contrived arms of the study. T2Bacteria showed an overall average sensitivity of 90% in the prospective arm of the study, with an overall average PPA of 97% in the contrived arm of the study.

1. T2Resistance Data on File 2. Nguyen, M. H., et al. Performance of the T2Bacteria Panel for Diagnosing Bloodstream Infections. A Diagnostic Accuracy Study. *Annals of Internal Medicine*, 2019. 3. Mylonakis, E., Clancy, C. J., Ostrosky-Zeichner, L., Garey, et al. T2 magnetic resonance assay for the rapid diagnosis of candidemia in whole blood: a clinical trial. *Clinical Infectious Diseases*, 60(6), 892-899, 2015.

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