



Clinical Impact of the BIOFIRE[®] Blood Culture Identification 2 (BCID2) Panel

43

TARGETS

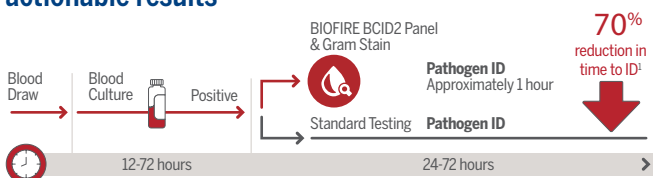
~1^{hr}

BIOFIRE® Syndromic Testing

The right test, the first time

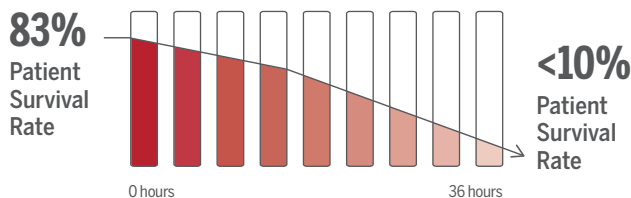
BIOFIRE syndromic testing allows fast identification of infectious agents that produce similar symptoms in patients.

Streamline workflow and provide fast, actionable results

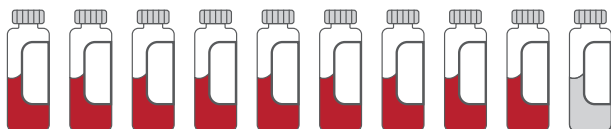


Early Bloodstream Infection (BSI) Pathogen Identification is Essential

For every hour of delay in initiation of effective antimicrobial treatment following onset of hypotension in patients with septic shock, patient survival declines 7.6%.²

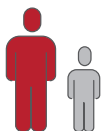


In about an hour, the BIOFIRE® Blood Culture Identification 2 (BCID2) Panel identifies pathogens in more than 9 out of 10 positive blood cultures.³



Who Should Get Tested

Positive blood cultures from adult and pediatric patients with monomicrobial or polymicrobial bloodstream infections.



Children
and adults



Elderly patients



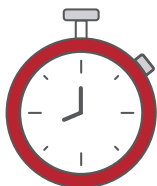
High-risk patients:
immuno-compromised
or with co-morbidities



Critically ill
patients

Timely, Accurate Diagnosis Leads to Better BSI Outcomes

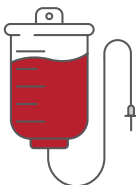
In combination with appropriate antimicrobial stewardship, the BIOFIRE® Blood Culture Identification 2 (BCID2) Panel:



Decreases time
to effective therapy.^{4,5}



Reduces hospital costs,⁶
including by reducing repeat blood
cultures and length of stay.⁷



Improves time to antimicrobial
de-escalation.^{1,8,9}



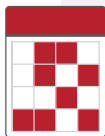
Lessens unnecessary
antibiotic use.^{4,6,7,8,10}

Fast Identification Improves Antimicrobial Stewardship

OPTIMIZE DIAGNOSTICS.
OPTIMIZE THERAPY.
With our complete solution
for antimicrobial stewardship.



Fast organism
identification



Local
antibiogram



Treatment
guidelines

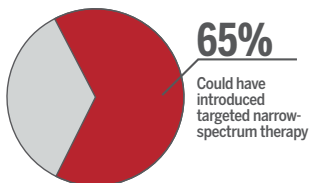
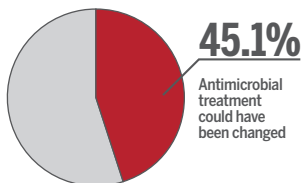


Appropriate
treatment decisions

Recommendations Result In Appropriate Therapy

The fast results provided by BIOFIRE® Blood Culture Identification 2 (BCID2) Panel have a substantial impact on decision making:

“Antimicrobial treatment could have been changed in nearly half (23/51, 45.1%) of the cases, leading either to the introduction of a broader-range antibiotic (7/51, 13.7%) to improve therapy or the use of antibiotic with a narrower spectrum of activity, supporting good antimicrobial stewardship practice.”¹¹





BIOFIRE® BLOOD CULTURE IDENTIFICATION 2 (BCID2) PANEL

1 Test. 43 Targets. ~1 Hour.

GRAM-NEGATIVE BACTERIA

Acinetobacter calcoaceticus-baumannii complex
Bacteroides fragilis
Enterobacterales
 Enterobacter cloacae complex
 Escherichia coli
 Klebsiella aerogenes
 Klebsiella oxytoca
 Klebsiella pneumoniae group
 Proteus spp.
 Salmonella spp.
 Serratia marcescens
Haemophilus influenzae
Neisseria meningitidis
Pseudomonas aeruginosa
Stenotrophomonas maltophilia

GRAM-POSITIVE BACTERIA

Enterococcus faecalis
Enterococcus faecium
Listeria monocytogenes
Staphylococcus spp.
 Staphylococcus aureus
 Staphylococcus epidermidis
 Staphylococcus lugdunensis
Streptococcus spp.
 Streptococcus agalactiae
 Streptococcus pneumoniae
 Streptococcus pyogenes

YEAST

Candida albicans
Candida auris
Candida glabrata
Candida krusei
Candida parapsilosis
Candida tropicalis
Cryptococcus (*C. neoformans*/
C. gattii)

ANTIMICROBIAL RESISTANCE GENES

Carbapenemases

IMP
KPC
OXA-48-like
NDM
VIM

Colistin Resistance

mcr-1

ESBL

CTX-M

Methicillin Resistance

mecA/C
mecA/C and MREJ (MRSA)

Vancomycin Resistance

vanA/B

US FDA-cleared |  2797

Product availability varies by country. Consult your bioMérieux representative.

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Learn more about the BIOFIRE range of commercially-available panels for syndromic infectious disease diagnostics.



BMX1169100/9329442 007/GB/C

PIONEERING DIAGNOSTICS

Guidelines

- Evans, L. et al. Surviving sepsis campaign: international guidelines for management of sepsis and septic shock 2021. *Intensive Care Med.* 2021; 47:1181-1247.
- Barlam, T et al. Implementing an Antibiotic Stewardship Program: Guidelines by the Infectious Disease Society of America and the Society for Healthcare Epidemiology of America. *Clin Infect Dis.* 2016; 62(10)e51-77.

Additional guidelines can be found on the Surviving Sepsis Campaign website: <https://www.sccm.org/survivingsepsiscampaign/guidelines>

References

1. MacVane S and Nolte F. *J Clin Microbiol.* 2016 Oct;54(10):2455-63.
2. Kumar A, et al. *Crit Care Med.* 2006; 34(6):1589-96.
3. Lu, et al., ID Week 2019, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6811262/>
4. Chiasson J, et al. *J Pharm Prac.* 2021; 35(5):722-729.
5. Verroken A., et al. (2019). *PLOS ONE*: 14(9): e0223122
6. Pardo J, et al. *Diagn Microbiol Infect Dis.* 2016; 84(2):159-164.
7. Hughes J and Barone S. *Hosp Pediatr.* 2021;11(5): 472-477.
8. Banerjee R, et al. *Clin Infect Dis* (2015) 61 (7):1071-1080.
9. Kim J, et al. Poster presented at: American Society of Microbiology; May 30—June 2, 2015; New Orleans, LA. Poster 1071.
10. Messacar K., et al. (2016). *J Pediatric Infect Dis Soc*: pp1-9.
11. Sparks R, et al. *Pathology.* 2021; 53(7): 889-895.
12. Overall performance is the aggregate of the prospective, archived, and seeded data from the clinical studies. Data on file, BioFire Diagnostics.

Performance

99.0% sensitivity and 99.7% specificity¹²

Panel Specifications

Sample Type: positive blood culture

Sample Volume: 0.2 mL