

BIOMÉRIEUX

DON'T LET THEM MISS A **SMILE.**

BIOFIRE® Syndromic PCR Testing for Infectious Diseases in Children



PIONEERING DIAGNOSTICS



Diagnosing a sick child can be a challenge.

Pediatric patients can't always tell you their symptoms. The BIOFIRE® Panels utilize a syndromic approach—simultaneously testing for different pathogens that can cause similar symptoms. In about an hour, you'll have the actionable results you need to help put your patients, and their concerned caregivers, at ease.

6 Panels. 170+ Targets. ~1 Hour.



**BIOFIRE® FILMARRAY®
MENINGITIS/ENCEPHALITIS PANEL*†**
14 Targets. ~1 Hour.



**BIOFIRE®
RESPIRATORY 2.1 PLUS PANEL†**
23 Targets. ~45 Minutes.



**BIOFIRE® FILMARRAY®
GASTROINTESTINAL PANEL*†**
22 Targets. ~1 Hour.



**BIOFIRE®
JOINT INFECTION PANEL*†**
39 Targets. ~1 Hour.



**BIOFIRE®
BLOOD CULTURE IDENTIFICATION 2 PANEL*†**
43 Targets. ~1 Hour.



**BIOFIRE® FILMARRAY®
PNEUMONIA PLUS PANEL†**
34 Targets. ~1 Hour.

* FDA cleared † CE₂₇₉₇

Identify more clinically relevant pathogens.

Compared to standard of care, syndromic testing can detect more clinically relevant pathogens that make pediatric patients sick.

Here are some examples of clinical evidence using BIOFIRE® Panels:



**BIOFIRE® FILMARRAY®
MENINGITIS/
ENCEPHALITIS PANEL**



4x

Diagnostic yield
for bacterial pathogens¹



2.8x

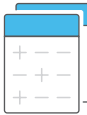
Diagnostic yield
for viruses²



**BIOFIRE®
RESPIRATORY 2.1 PLUS
PANEL**



57%
Diagnostic yield³



**BIOFIRE® FILMARRAY®
GASTROINTESTINAL
PANEL**

11%

Standard-of-care
methods

vs

40%

BIOFIRE GI Panel⁴



Shorten the time to diagnosis.

With just two minutes hands-on time and about an hour turnaround time, syndromic testing can significantly reduce the time to actionable results compared to standard of care in pediatric hospitals.

Here are some examples of clinical evidence using BIOFIRE® Panels:



**BIOFIRE® FILMARRAY®
MENINGITIS/
ENCEPHALITIS PANEL**



6 days
Standard-of-care
methods

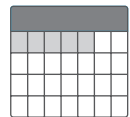
vs



2 days
BIOFIRE ME Panel⁵



**BIOFIRE®
RESPIRATORY 2.1 PLUS
PANEL**



2-5 days
Standard-of-care
methods

vs



3 hrs
BIOFIRE RP2.1 Panel⁶



**BIOFIRE® FILMARRAY®
GASTROINTESTINAL
PANEL**



31 hrs
Standard-of-care
methods

vs



4 hrs
BIOFIRE GI Panel⁴



**BIOFIRE® FILMARRAY®
PNEUMONIA PLUS
PANEL**

BIOFIRE PN^{plus} Panel



46.5 hrs
Before standard-of-
care methods⁷



Standard-of-care methods

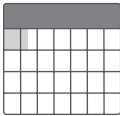
Provide faster optimal therapy to your pediatric patients.

Syndromic testing has shown a significant decrease in time to optimal therapy in pediatric patients.

Here are some examples of clinical evidence using BIOFIRE® Panels:



**BIOFIRE® FILMARRAY®
GASTROINTESTINAL
PANEL**



35 hrs
Standard-of-care
methods

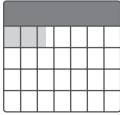
vs



11 hrs
BIOFIRE GI Panel⁴



**BIOFIRE®
BLOOD CULTURE
IDENTIFICATION 2 PANEL**



60 hrs
Standard-of-care
methods

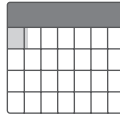
vs



27 hrs
BIOFIRE BCID Panel^{8,*}



**BIOFIRE® FILMARRAY®
MENINGITIS/
ENCEPHALITIS PANEL**



28 hrs
Standard-of-care
methods

vs



18 hrs
BIOFIRE ME Panel⁹

*Data obtained with the previous version of the BIOFIRE BCID2 Panel.



Improve your patient management.



Syndromic testing results when combined with appropriate antimicrobial stewardship (AMS) interventions can help inform patient management decisions like stopping or altering therapy, reducing length of stay (LOS), or moving the patient into or out of isolation.

Here are some examples of clinical evidence using BIOFIRE® Panels:



**BIOFIRE® FILMARRAY®
GASTROINTESTINAL
PANEL**



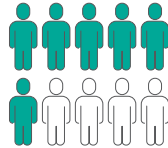
23%
of pediatric patients
received revised medical
management¹⁰



36%
reduction
in antibiotic use¹¹



**BIOFIRE® FILMARRAY®
PNEUMONIA PLUS
PANEL**



60%
of pediatric patients had
a change in antibiotics¹²



**BIOFIRE® FILMARRAY®
MENINGITIS/
ENCEPHALITIS PANEL**



8.8-day
LOS reduction^{1*}



**BIOFIRE®
BLOOD CULTURE
IDENTIFICATION 2 PANEL**



**Children could be discharged earlier
compared to standard-of-care methods^{13,†}**

*When pathogen was identified.
†Data obtained with the previous version of the BIOFIRE BCID2 Panel.

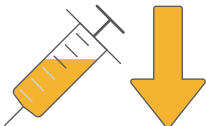
Reduce unnecessary testing and procedures.

Using a syndromic approach to test for a broad grouping of probable pathogens, syndromic testing can reduce unnecessary testing in pediatric patients, like repeat lumbar punctures, chest radiographs, and imaging studies.

Here are some examples of clinical evidence using BIOFIRE® Panels:



**BIOFIRE® FILMARRAY®
MENINGITIS/
ENCEPHALITIS PANEL**

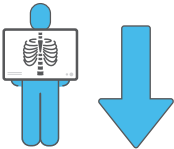


15.1%

Decrease in lumbar punctures where a clinical guideline was in place plus mPCR* testing using the ME and RP Panels.¹⁴



**BIOFIRE®
RESPIRATORY 2.1 PLUS
PANEL**



59%

Less chest radiographs¹⁵



**BIOFIRE® FILMARRAY®
GASTROINTESTINAL
PANEL**

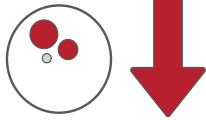


Up to
53%

Reduction in use of imaging studies^{16,17}



**BIOFIRE®
BLOOD CULTURE
IDENTIFICATION 2 PANEL**



21%

Fewer repeat blood cultures among inpatients^{18,†}

*mPCR=multiplex polymerase chain reaction †Data obtained with the previous version of the BIOFIRE BCID2 Panel.

Increase confidence with accurate results.

The following BIOFIRE® Panels are either FDA cleared and/or CE marked. BIOFIRE technology is based on nested multiplex PCR results with high sensitivity and specificity.



BIOFIRE® FILMARRAY® MENINGITIS/ENCEPHALITIS PANEL

94.2% sensitivity, 99.8% specificity¹⁹



BIOFIRE® RESPIRATORY 2.1 PLUS PANEL

Overall Performance: 97.1% sensitivity, 99.3% specificity²⁰
SARS-CoV-2 Performance: 98.4% PPA, 98.9% NPA²¹



BIOFIRE® FILMARRAY® GASTROINTESTINAL PANEL

98.5% sensitivity, 99.2% specificity²²



BIOFIRE® JOINT INFECTION PANEL

91.7% sensitivity, 99.8% specificity²³



BIOFIRE® BLOOD CULTURE IDENTIFICATION 2 PANEL

99.0% sensitivity, 99.8% specificity²⁴



BIOFIRE® FILMARRAY® PNEUMONIA PLUS PANEL

BAL-like: 96.2 % sensitivity, 98.4% specificity²⁵
Sputum-like: 96.3% sensitivity, 97.3% specificity²⁵



Introducing the BIOFIRE® Joint Infection (JI) Panel, a new syndromic panel from bioMérieux.

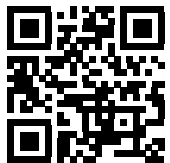
The BIOFIRE JI Panel has a broad panel menu of 31 pathogens and 8 AMR genes that includes targets commonly associated with pediatric septic arthritis like *Kingella kingae*, *Staphylococcus aureus*, *Streptococcus agalactiae*, *Streptococcus pneumoniae*, & *Streptococcus pyogenes*. With a turnaround time of about an hour, the BIOFIRE JI Panel can provide fast accurate results that may aid clinicians in pathogen guided patient management.²⁶



**BIOFIRE®
JOINT INFECTION
PANEL**

BIOFIRE syndromic testing can improve pediatric care.

BIOFIRE® Panels can make a significant impact on pediatric patient care. Syndromic testing provides accurate, reliable results that can alleviate anxiety for parents and providers.



**ADD THE BIOFIRE PANELS TO YOUR
PEDIATRIC WORKFLOW TODAY.**





References

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19. Overall performance based on prospective clinical study for the BIOFIRE® FILMARRAY® Meningitis/Encephalitis Panel, data on file, BioFire Diagnostics.
20. Overall performance based on prospective clinical study for the BIOFIRE® FILMARRAY® Respiratory 2 *plus* Panel, data on file, BioFire Diagnostics
21. Overall performance based on prospective SARS-CoV-2 clinical study for the BIOFIRE® Respiratory 2.1 *plus* Panel in comparison to 3 EUA tests, data on file, BioFire Diagnostics.
22. Overall performance based on prospective clinical study for the BIOFIRE® FILMARRAY® Gastrointestinal Panel, data on file, BioFire Diagnostics.
23. Overall performance based on prospective clinical study for the BIOFIRE® Joint Infection Panel, data on file, BioFire Diagnostics.
24. Overall performance is the aggregate of the prospective, archived, and seeded data from the clinical studies. Data on file, BioFire Diagnostics.
25. Overall performance based on prospective clinical study for the BIOFIRE® FILMARRAY® Pneumonia *plus* Panel, data on file, BioFire Diagnostics.
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Product availability varies by country. Please contact your local bioMérieux representative for details.



*“Syndromic testing
has changed the way
I practice medicine.”*

- Dr Jaime Fergie, MD, FAAP, FIDSA
Director of Pediatric Infectious Diseases
Driscoll Children's Hospital, Texas, USA



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