



Clinical Impact of the BIOFIRE® FILMARRAY® Gastrointestinal (GI) Panel

22
TARGETS
~1hr

BIOFIRE® Syndromic Testing

The right test, the first time

A significant clinical overlap is seen between pathogens causing gastrointestinal disease, making it very difficult to select the right traditional test to perform on stool samples.¹

Traditional stool testing methods

Traditional methods of pathogen identification can be time consuming and lack sensitivity.²



Fast. Easy. Comprehensive stool testing.

Syndromic testing provides a streamlined workflow and fast, comprehensive results.



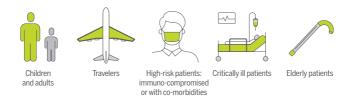
Get Faster Patient Results



An 84% reduction in time to result, and an 69% reduction in time to treatment (for pediatric patients) was demonstrated by the BIOFIRE® Gastrointestinal (GI) Panel compared to traditional testing.^{3,4}

Who Should Get Tested

According to common clinical guidelines*, stools from individuals at high risk of spreading disease to others and during known or suspected outbreaks should be tested.



The test should be performed on patients, including pediatric patients, who display one or more of the following criteria:

- Community acquired diarrhea for ≥7 days
- · Traveler's diarrhea, untreated or following treatment failure
- Diarrhea with warning signs/risk factors for severe disease
- · Suspicion of nosocomial outbreaks
- Persistent diarrhea

Aid Antimicrobial Stewardship



Improved antibiotic use

Compared to traditional testing, BIOFIRE® GI Panel patients were less likely to be prescribed antibiotics: from 40.9% to 36.2% (p<0.001)⁵ and from 71.8% to 35.3% (p<0.001) for pediatric patients.⁶



Increased targeted therapy

Clinicians increased the use of targeted therapy thanks to the BIOFIRE GI Panel compared to traditional testing.²



Superior Clinical and Economic Outcomes

Identify what traditional testing is missing

The BIOFIRE GI Panel increased the diagnostic yield by more than 30% vs traditional testing.⁷



Reduce length of stay

The length of hospital stay was shorter with the BIOFIRE GI Panel: 3 days vs 7.5 days compared to traditional testing.⁸



Decrease hospital admissions

The number of patients admitted from ED to the hospital decreased from 87.8% to 62.8% (p<0.0001) thanks to the BIOFIRE GI Panel, compared to traditional testing.⁸



Cut unneeded downstream procedures

Patients were shown to be 12.5% less likely to undergo endoscopy and 7.3% less likely to receive abdominal imaging vs traditional testing.⁵



Rule in/out infectious causes

The BIOFIRE GI Panel can help differentiate between enteric infection and relapse of inflammatory bowel disease. 9,10



Improve infection control

The BIOFIRE GI Panel enabled early adequate infection precaution and isolation in the pediatric population.⁶





1 Test. 22 Targets. ~1 Hour.

BACTERIA

Campylobacter (C. jejuni/C. coli/ C. upsaliensis) Clostridioides (Clostridium) difficile (toxin A/B)† Plesiomonas shigelloides Salmonella

Vibrio (V. parahaemolyticus/ V. vulnificus/V. cholerae) Vibrio cholerae

Yersinia enterocolitica

Diarrheagenic Escherichia coli/Shigella Enteroaggregative E. coli (EAEC) Enteropathogenic E. coli (EPEC) Enterotoxigenic E. coli (ETEC) It/st Shiga-like toxin-producing E. coli (STEC) stx1/stx2 E. coli 0157 Shigella/Enteroinvasive E. coli (EIEC)

† Selective reporting available for C. diff

VIRUSES

Adenovirus F40/41 Astrovirus Norovirus GI/GII Rotavirus A Sapovirus (I, II, IV, and V)

PARASITES

Cryptosporidium Cyclospora cayetanensis Entamoeba histolytica Giardia lamblia

FDA cleared │ C €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.













*Guidelines

- Riddle, M. S. et al. (2016). "ACG Clinical Guideline: Diagnosis, Treatment, and Prevention of Acute Diarrheal Infections in Adults." Am J Gastroenterol 111(5): 602-622.
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- Riddle, M. S. et al. (2017). "Guidelines for the prevention and treatment of travelers' diarrhea: a graded expert panel report." J Travel Med 24(suppl_1): S57-s74.
- Guarino, A., S. et al. (2014). "European Society for Pediatric Gastroenterology, Hepatology, and Nutrition/European Society for Pediatric Infectious Diseases evidence-based guidelines for the management of acute gastroenteritis in children in Europe: update 2014." J Pediatr Gastroenterol Nutr 59(1): 132-152.

References

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- 2. Cybulski R. J. Jr., et al. (2018), Clin Infect Dis 67(11): 1688-1696.
- 3. Beal S. G., et al. (2018), J Clin Microbiol 56(1).
- 4. Cotter J. M., et al. (2021), Pediatrics 147(5).
- 5. Axelrad J. E., et al. (2019), J Clin Microbiol 57(3).
- 6. Yoo, I. H., et al. (2021), Diagnostics (Basel) 11(7).
- 7. Meyer J., et al. (2020), Scand J Gastroenterol 55(12): 1405-1410.
- 8. Torres-Miranda D., et al. (2020), BMC Gastroenterol 20(1): 246.
- 9. Hong S., et al. (2021), Inflamm Bowel Dis 27(10): 1634-1640.
- 10. Axelrad J. E., et al. (2017), Inflamm Bowel Dis. 23(6): 1034-1039.
- Data on file, BioFire Diagnostics. The stated performance is the overall aggregate performance of the prospective clinical study data presented in the IFU

Performance

98.5% sensitivity and 99.2% specificity¹¹

Panel Specifications

Sample Type: stool sample in Cary Blair

Sample Volume: 0.2 mL