

# BioFire® FilmArray® Gastrointestinal (GI) Panel

1 Test. 22 Pathogens. ~1 Hour.

The BioFire GI Panel is a PCR based qualitative multiplexed *in vitro* diagnostic test. The BioFire GI Panel is capable of simultaneous detection and identification of multiple bacteria, viruses, and parasites from individuals with signs and/or symptoms of gastrointestinal infection.

#### **BACTERIA**

Campylobacter (jejuni, coli, and upsaliensis) Clostridium difficile (toxin A/B) Plesiomonas shigelloides Salmonella

Yersinia enterocolitica

Vibrio (cholerae, parahaemolyticus, and vulnificus) Vibrio cholerae

Diarrheagenic *E. 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)

#### **PARASITES**

Cryptosporidium Cyclospora cayetanensis Entamoeba histolytica Giardia lamblia

#### **VIRUSES**

Adenovirus F40/41 Astrovirus Norovirus GI/GII Rotavirus A

Sapovirus (I, II, IV, and V)

#### Performance:

98.5% sensitivity and 99.2% specificity<sup>8</sup>

#### Sample Requirements:

0.2 mL stool in Cary Blair transport medium

#### **Run Time:**

~1 hour

### **References**

- Shane AL, et al. 2017 Infectious Diseases Society of America clinical practice guidelines for the diagnosis and management of infectious diarrhea. Clin Infect Dis. 2017;65(12):e45—e80.
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- Cybulski R, et al. Clinical impact of a multiplex gastrointestinal PCR panel in patients with acute gastroenteritis. 2018. Clin Infect Dis. 2018 Nov. 13;67(11):1688-1696.
- Axelrad JE, et al. Impact of gastrointestinal panel implementation on health care utilization and outcomes. J Clin Microbiol. 2019 Feb. 57(3)e01775-18.
- Beal S, et al. A gastrointestinal PCR panel improves clinical management and lowers healthcare costs. J Clin Microbiol. 2018 Jan. 56:1 e01457-17.
- Spina A, et al. Spectrum of enteropathogens detected by the FilmArray GI Panel in a multicentre study of community-acquired gastroenteritis. Clin Microbiol Infect. 2015 Aug. 21(8):719-28.
- Fang FC, et al. 2017 Infectious Diseases Society of America Infectious Diarrhea Guidelines: A View From the Clinical Laboratory. Clin Infect Dis. 2017 Nov 29;65(12):1974-1976.
- 8. The stated performance is the aggregate of the prospective data from the clinical study.

biofiredx.com/filmarraygi



Syndromic Testing: The Right Test, The First Time.





22
PATHOGENS
~1hr

The BioFire®
FilmArray®
Gastrointestinal
(GI) Panel

Clinical Impact



#### PROBLEM:

## **Traditional Laboratory Diagnostics**

With overlapping symptoms, distinguishing possible causes of gastroenteritis can be challenging for any clinician. To further complicate diagnosis, traditional testing methods provide slow results while only testing for limited etiologies.<sup>2</sup> Stool testing is also insensitive and may not accurately identify what enteric pathogen could be causing illness, leaving physicians and patients with unanswered questions.<sup>2-6</sup>



e Multiple mple tests ordered



Results





Individual results in separate reports



Less than optimal care

# Guidelines from American College of Gastroenterology and Infectious Disease Society of America

#### Who to Test.

Individuals at high risk of spreading disease to others and during known or suspected outbreaks.<sup>2</sup>

#### Patients presenting with:1,2

- Dysentery
- Diarrhea with fever, severe abdominal cramps, or signs of sepsis
- Moderate to severe disease
- Symptoms lasting more than seven days
- Immunocompromised patients with diarrhea

**SOLUTION:** 

# **Syndromic Testing from BioFire**

Syndromic testing with the BioFire GI Panel groups a broad range of probable enteric pathogens into one comprehensive and rapid test. Syndromic testing also eliminates limitations from traditional testing by providing, faster, more accurate, and comprehensive results.<sup>3-6</sup> The BioFire GI Panel is the right test, the first time.







comprehensive test



Takes about an hour for results



Multiple results in one report



Better patient management

# The BioFire<sup>®</sup> FilmArray<sup>®</sup> Gastrointestinal (GI) Panel vs Traditional Stool Testing



#### Faster Patient Results.

An 84% reduction in time-toresult was demonstrated by the BioFire GI Panel compared to traditional methods.<sup>5</sup>

# Identify What Traditional Testing is Missing.

The BioFire GI Panel detects an average of 25%-36% more possible pathogens vs traditional testing. 3-6



#### Improved Antibiotic Use.

Compared to traditional testing, BioFire GI Panel patients were less likely to be prescribed antiobiotics.<sup>4</sup>





### Better Testina. Better Care.

A recent study demonstrated clinicians increased the use of targeted therapy with the BioFire GI Panel compared to traditional testing.<sup>3</sup>

### 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.<sup>4</sup>



"With the increasing availability of rapid and highly sensitive diagnostic panels, a likely microbial etiology can now be established in more patients presenting with acute diarrhea than ever before. This can facilitate appropriate treatment, avoid unnecessary antimicrobial use, and expedite recognition of foodborne and other outbreaks."

2017 Infectious Diseases Society of America Infectious Diarrhea Guidelines: A View From the Clinical Laboratory

- Clinical Infectious Diseases (Nov 2017)