



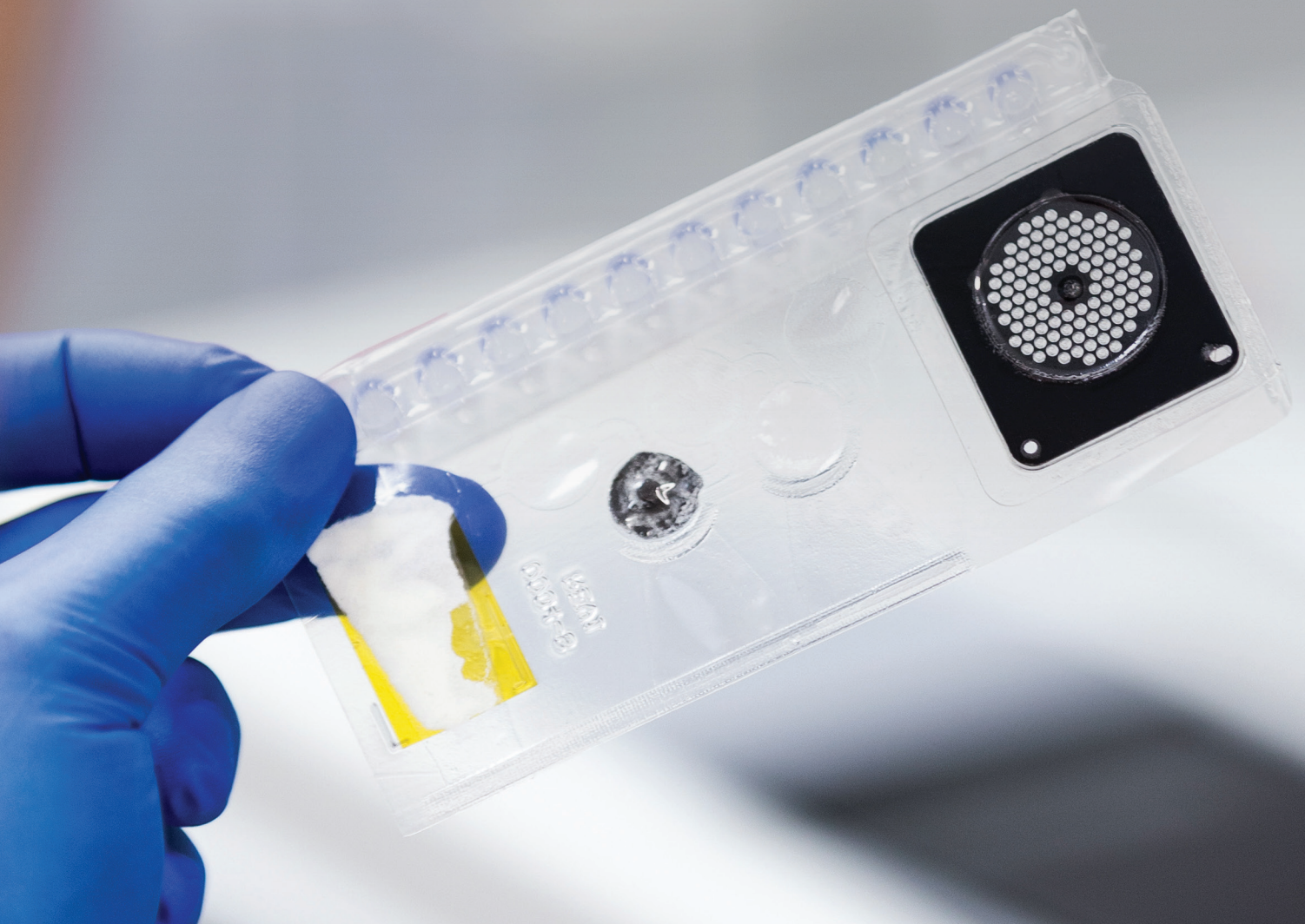


Syndromic Testing: The Right Test, The First Time.

**bioMérieux's line of BioFire products is evolving
infectious disease diagnostics.**



**The BioFire syndromic approach
empowers clinicians to choose
the right test, the first time.**



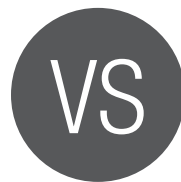
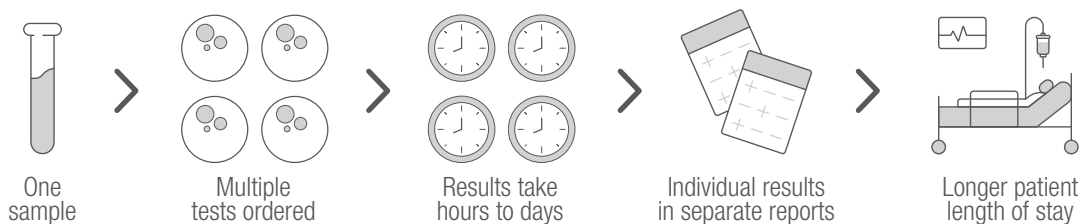
Don't Guess. Know.

Many infectious diseases present with similar signs and symptoms. Traditional targeted diagnostics limit testing to only the pathogens most commonly associated with a clinical syndrome. Because this testing method is so narrowly defined, it can leave many infections undiagnosed and may lead to additional downstream testing, patient dissatisfaction, and compromised patient care.

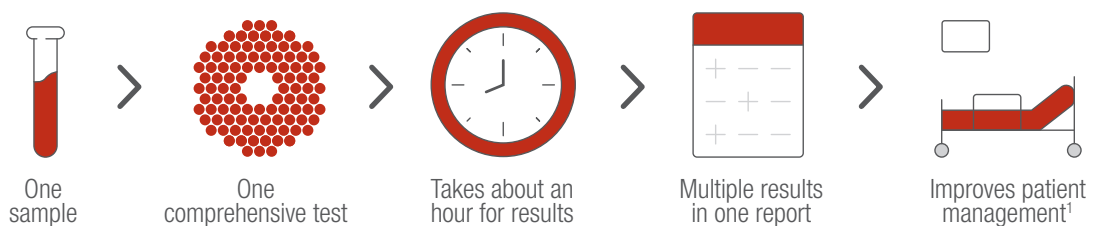
BioFire's syndromic approach to infectious disease diagnostics helps quickly identify pathogens, greatly reduces the guesswork in diagnostics, may increase patient satisfaction, can help improve patient care, and helps make the world a healthier place.

Choose the right test, the first time. Choose syndromic testing from BioFire.

Traditional Testing



Syndromic Testing



¹Brendish NJ, et al. Lancet Respir Med. 2017 May;5(5):401-411.



Protocol	Lot	Operator	Make	Model
CP-00	15985	Wang, J	Merck	1000
CP-00	15714	Ken, P	Merck	1000
CP-00	17104	Jack, D	Merck	1000
MS-00	17104	Ben, C	Merck	1000
MS-00	17104	Ben, C	Merck	1000

The Fastest Way to Better Results.



Faster Results

With about an hour turnaround time, BioFire's syndromic testing helps clinicians make vital decisions regarding admission, isolation, cohorting, antiviral or antibiotic therapy, and additional diagnostic testing.



Better Results

By harnessing the power of syndromic testing, labs can increase the probability of identifying a pathogen in patients with symptoms of an infectious disease. Each BioFire® FilmArray® Panel increases the capability of detecting co-infections and may result in shorter length of stay and improved downstream savings.

*“FilmArray from BioFire has massively influenced the way we now manage our patients and infection control situations. For example, rapid diagnosis of whooping cough [*B. pertussis* on BioFire® Respiratory 2.1 plus Panel] has enabled us to initiate effective treatment and infection control measures within hours of patient’s arrival to the hospital. Previously, a result from reference lab would typically take three to four days.”*

Dr. Mitul Patel

Consultant Microbiologist

Birmingham Children's Hospital, UK



Syndromic Testing Streamlines Laboratory Processes.

BioFire products can be used by any technician, on any shift, at any time. This helps hospitals provide the same standard of care 24/7 and removes the need to delay or send out samples for additional testing.



Fast

With a run time of about an hour, syndromic testing enables laboratories to provide answers to physicians in a clinically actionable time frame.



Easy

BioFire's syndromic approach is easy, and test preparation requires only two minutes of hands-on time. Results are given in a positive or negative report for each pathogen from a broad test menu.

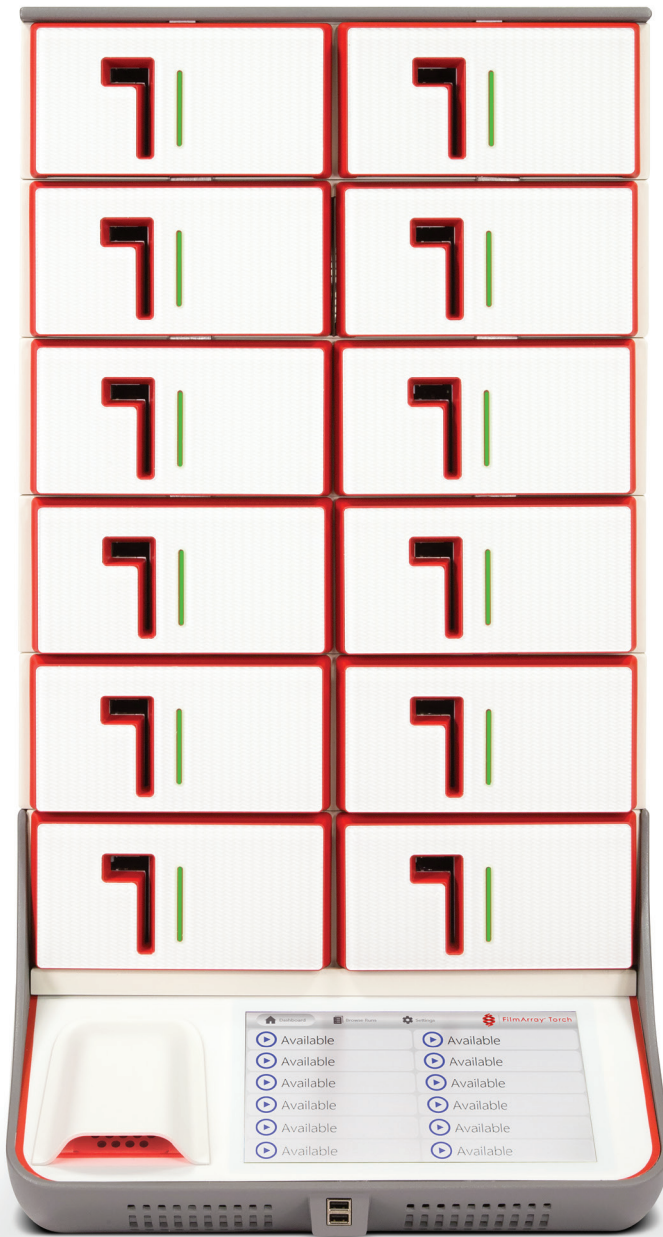


Comprehensive

Syndromic testing eliminates serial testing that can be frustrating and time-consuming for laboratories. It consolidates quality control and proficiency testing as well as minimizes the time required to keep and maintain multiple instruments.

The BioFire® FilmArray® Torch:

The most advanced syndromic testing.



351 PATIENT SAMPLES PER DAY¹

292 PATIENT SAMPLES PER DAY¹

234 PATIENT SAMPLES PER DAY¹

175 PATIENT SAMPLES PER DAY¹

117 PATIENT SAMPLES PER DAY¹

58 PATIENT SAMPLES PER DAY¹

Scalable configuration for customized throughput from 1 to 12 modules.

¹Calculations based on running the BioFire® Respiratory 2.1 *plus* Panel over a 24-hour day.



Intuitive

Provides faster input and navigation through an optimized user experience with a touchscreen interface, integrated barcode scanner, and intuitive instrument control.



Access

Improved testing and laboratory productivity with random and continuous access sample loading.



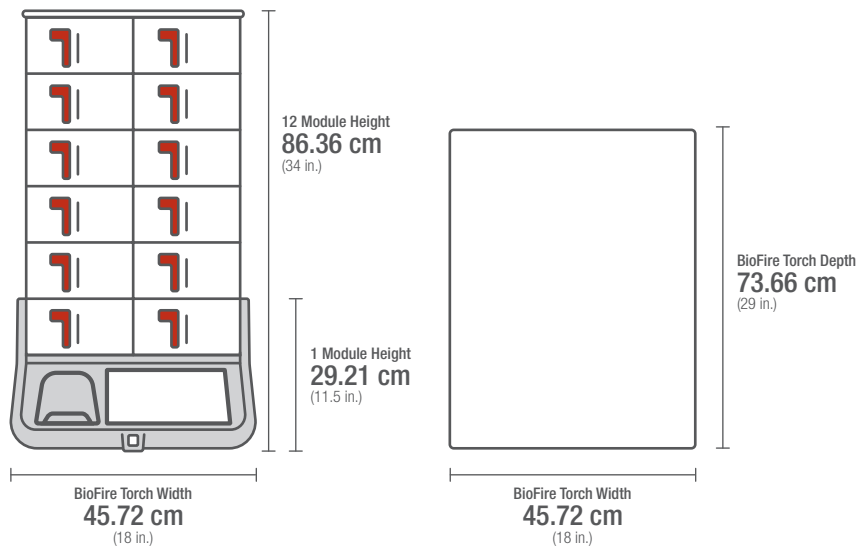
Connectivity

Makes data management automated and efficient through the BioFire® FilmArray® Link Technology that can seamlessly integrate into Laboratory Information System (LIS).



Radically Reduced Footprint

The BioFire® Torch offers the most scalable system with the same footprint.²



²In comparison to existing BioFire® FilmArray® Systems.



“In conclusion, the BioFire® FilmArray® Gastrointestinal Panel is a broad, multiplex gastrointestinal panel with a rapid turnaround time, resulting in a significant reduction of unnecessary isolation days, antibiotic therapy and prevention of additional diagnostic procedures in patients with clinical suspicion of infectious gastroenteritis.”³

Julian Machiels, MD

Consultant Microbiologist

3. Machiels J., et al. Impact of the BioFire FilmArray gastrointestinal panel on patient care and infection control. PLoS One. 2020;15(2):e0228596. Published 2020 Feb 6. doi:10.1371/journal.pone.0228596.

Fast Answers With BioFire Syndromic Panels.

Comprehensive Panels Offer Better Diagnostics

Comprehensive panels take out the guesswork. Each BioFire® Panel targets an infectious disease syndrome by combining a broad grouping of probable pathogenic causes into a single test.

The CE-marked BioFire Panels test for viruses, bacteria, parasites, yeast, and antimicrobial resistance genes.



Respiratory 2.1 *plus* Panel



Pneumonia *plus* Panel



Gastrointestinal Panel



Meningitis/Encephalitis Panel



Blood Culture Identification 2 Panel



Bone and Joint Infection Panel Investigational Use Only.

Product availability varies by country. Consult your bioMérieux representative.



BioFire® Respiratory 2.1 *plus* Panel

Sample Type: 0.3 mL of nasopharyngeal swab
CE-marked

23 Targets in One Test

The BioFire® Respiratory 2.1 *plus* (RP2.1 *plus*) Panel identifies the most common viral and bacterial pathogens—including SARS-CoV-2—that cause respiratory tract infections, which can present with nearly indistinguishable symptoms. An unprecedented run time of about 45 minutes enables higher efficiency and throughput on the BioFire® 2.0 and the BioFire® Torch Systems, and offers faster results to clinicians, potentially enabling better-informed diagnosis and treatment of patients. Higher overall sensitivity across a broader spectrum of pathogens means the BioFire RP2.1 *plus* Panel offers the world the fastest way to better results in the detection of respiratory pathogens.

Panel Menu

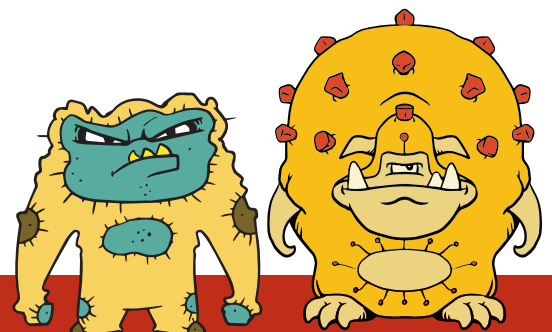
VIRUSES

Adenovirus
Coronavirus 229E
Coronavirus HKU1
Coronavirus NL63
Coronavirus OC43
Middle East Respiratory
Syndrome Coronavirus (MERS-CoV)
Severe Acute Respiratory Syndrome
Coronavirus 2 (SARS-CoV-2)
Human Metapneumovirus
Human Rhinovirus/Enterovirus

Influenza A
Influenza A/H1
Influenza A/H1-2009
Influenza A/H3
Influenza B
Parainfluenza Virus 1
Parainfluenza Virus 2
Parainfluenza Virus 3
Parainfluenza Virus 4
Respiratory Syncytial Virus

BACTERIA

Bordetella parapertussis
Bordetella pertussis
Chlamydia pneumoniae
Mycoplasma pneumoniae





BioFire® FilmArray®

Pneumonia *plus* Panel

Sample Type: Sputum (including ETA) and BAL (including mini-BAL)
CE-marked and US FDA-cleared

34 Targets in One Test

The BioFire Pneumonia *plus* Panel tests for 27 of the the most common bacterial and viral pathogens associated with various types of community/hospital-acquired pneumonia, along with 7 antimicrobial resistance genes. Quickly identifying the probable causative agent can help a healthcare provider determine how best to treat a lower respiratory tract infection.

Panel Menu

BACTERIA

Semi-Quantitative Bacteria

Acinetobacter calcoaceticus-baumannii complex
Enterobacter cloacae complex
Escherichia coli
Haemophilus influenzae
Klebsiella aerogenes
Klebsiella oxytoca
Klebsiella pneumoniae group
Moraxella catarrhalis
Proteus spp.
Pseudomonas aeruginosa
Serratia marcescens
Staphylococcus aureus
Streptococcus agalactiae
Streptococcus pneumoniae
Streptococcus pyogenes

ATYPICAL BACTERIA

Qualitative Bacteria

Chlamydia pneumoniae
Legionella pneumophila
Mycoplasma pneumoniae

VIRUSES

Adenovirus
Coronavirus
Human Metapneumovirus
Human Rhinovirus/Enterovirus
Influenza A
Middle East Respiratory Syndrome Coronavirus (MERS-CoV)
Influenza B
Parainfluenza Virus
Respiratory Syncytial Virus

ANTIMICROBIAL RESISTANCE GENES

Carbapenemases

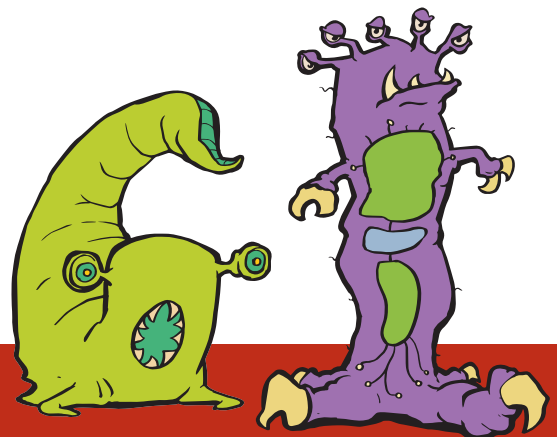
IMP
KPC
NDM
OXA-48-like
VIM

ESBL

CTX-M

Methicillin Resistance

mecA/C and MREJ (MRSA)





BioFire® FilmArray®

Gastrointestinal Panel

Sample Type: 0.2 mL stool collected in Cary Blair transport medium
CE-marked and US FDA-cleared

22 Targets in One Test

The BioFire® FilmArray® Gastrointestinal (GI) Panel tests stool in Cary Blair for the bacteria, viruses, and parasites commonly associated with gastroenteritis. Quickly identifying the probable pathogen can ensure appropriate treatment and patient management and help decrease infectious gastroenteritis, which can lead to severe illness or death.

Panel Menu

BACTERIA

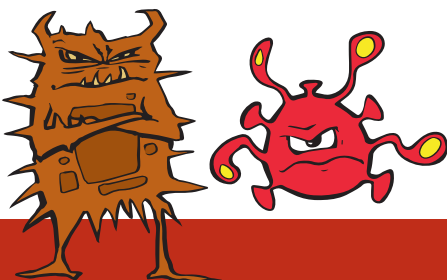
Campylobacter (jejuni, coli, and upsaliensis)
Clostridioides (Clostridium) difficile (toxin A/B)
Plesiomonas shigelloides
Salmonella
Vibrio (parahaemolyticus, vulnificus, and cholerae)
Vibrio cholerae
Yersinia enterocolitica
Diarrheagenic *E.coli/Shigella*
Enteroaggregative *E.coli* (EAEC)
Enteropathogenic *E.coli* (EPEC)
Enterotoxigenic *E.coli* (ETEC) *lt/st*
Shiga-like toxin-producing *E.coli* (STEC) *stx1/stx2*
E.coli O157
Shigella/Enteroinvasive E.coli (EIEC)

VIRUSES

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

PARASITES

Cryptosporidium
Cyclospora cayetanensis
Entamoeba histolytica
Giardia lamblia





BioFire® FilmArray®

Meningitis/Encephalitis Panel

Sample Type: 0.2 mL of uncentrifuged cerebrospinal fluid (CSF)
CE-marked and US FDA-cleared

14 Targets in One Test

The BioFire® FilmArray® Meningitis/Encephalitis (ME) Panel identifies the most common viral, bacteria, and yeast pathogens that cause infections in the central nervous system which, in some cases, can be life-threatening. Rapidly identifying the probable cause of these potentially severe conditions can allow faster decisions on appropriate therapy.

Panel Menu

BACTERIA

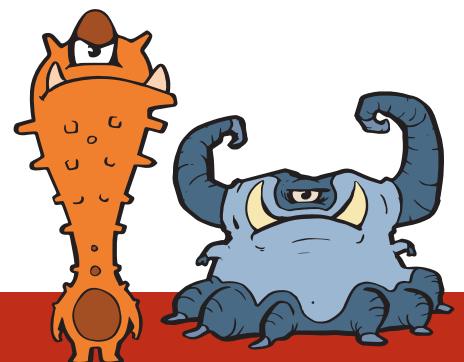
Escherichia coli K1
Haemophilus influenzae
Listeria monocytogenes
Neisseria meningitidis
Streptococcus agalactiae
Streptococcus pneumoniae

VIRUSES

Cytomegalovirus (CMV)
Enterovirus (EV)
Herpes Simplex Virus 1 (HSV-1)
Herpes Simplex Virus 2 (HSV-2)
Human Herpesvirus 6 (HHV-6)
Human Parechovirus (HPeV)
Varicella Zoster Virus (VZV)

YEAST

Cryptococcus neoformans/gattii





BioFire® Blood Culture Identification 2 Panel

Sample Type: 0.2 mL positive blood culture media
CE-marked and US FDA-cleared

43 Targets in One Test

The BioFire® Blood Culture Identification 2 (BCID2) Panel tests for the most common causes of bloodstream infections, including gram-positive, gram-negative, and yeast pathogens, and 10 antibiotic resistance genes. Quickly identifying the probable cause of bloodstream infections may help clinicians reduce the time to appropriate antimicrobial therapy and positively impact patient survival.

Panel Menu

GRAM-NEGATIVE BACTERIA

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

GRAM-POSITIVE BACTERIA

- Enterococcus faecalis*
- Enterococcus faecium*
- Listeria monocytogenes*
- Staphylococcus*
 - Staphylococcus aureus*
 - Staphylococcus epidermidis*
 - Staphylococcus lugdunensis*
- Streptococcus*
 - Streptococcus agalactiae*
 - Streptococcus pneumoniae*
 - Streptococcus pyogenes*

YEAST

- Candida albicans*
- Candida auris*
- Candida glabrata*
- Candida krusei*
- Candida parapsilosis*
- Candida tropicalis*
- Cryptococcus neoformans/gattii*

ANTIMICROBIAL RESISTANCE GENES

Carbapenemases

- IMP
- KPC
- OXA-48-like
- NDM
- VIM

Colistin Resistance

- mcr-1*

ESBL

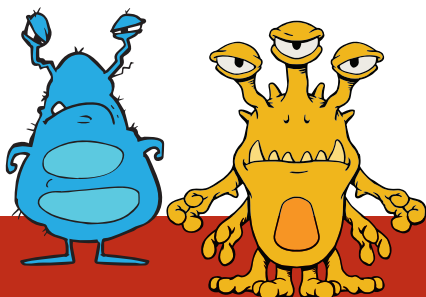
- CTX-M

Methicillin Resistance

- mecA/C*
- mecA/C* and MREJ (MRSA)

Vancomycin Resistance

- vanA/B*





BioFire® Bone and Joint Infection Panel*

Sample Type: 0.2 mL of synovial fluid

*Investigational use only. Not for use in diagnostic procedures.

39 Targets in One Test

The BioFire® Bone and Joint Infection (BJI) Panel tests for common causes of prosthetic joint infections, septic arthritis, and other musculoskeletal infections. The BioFire BJI Panel includes assays for 39 targets, including gram-positive bacteria, gram-negative bacteria, yeast, and antibiotic resistance genes. Fast results on a comprehensive menu of targets may help guide quick surgical and therapeutic decision making.

Panel Menu

GRAM-POSITIVE BACTERIA

Anaerococcus prevotii/vaginalis
Clostridium perfringens
Cutibacterium avidum/granulosum
Enterococcus faecalis
Enterococcus faecium
Finegoldia magna
Parvimonas micra
Peptoniphilus
Peptostreptococcus anaerobius
Staphylococcus aureus
Staphylococcus lugdunensis
Streptococcus spp.
Streptococcus agalactiae
Streptococcus pneumoniae
Streptococcus pyogenes

GRAM-NEGATIVE BACTERIA

Bacteroides fragilis
Citrobacter
Enterobacter cloacae complex
Escherichia coli
Haemophilus influenzae
Kingella kingae
Klebsiella aerogenes
Klebsiella pneumoniae group
Morganella morganii
Neisseria gonorrhoeae
Proteus spp.
Pseudomonas aeruginosa
Salmonella spp.
Serratia marcescens

YEAST

Candida spp.
Candida albicans

ANTIMICROBIAL RESISTANCE GENES

Carbapenemases

IMP
KPC
NDM
OXA-48-like
VIM

ESBL

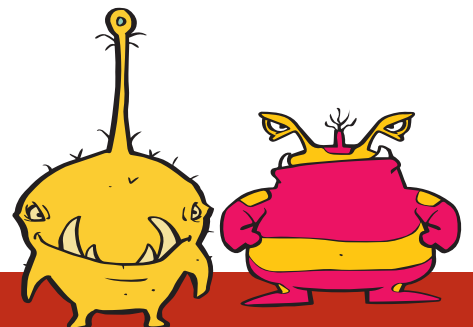
CTX-M

Methicillin Resistance

mecA/C and MREJ

Vancomycin Resistance

vanA/B



Peace of Mind All the Time.

First in Diagnostics. First in Customer Care.

bioMérieux has a skilled team dedicated to client success. Our customer support team provides global product support, solution training courses, LIS connectivity assistance, and instrument or chemistry related troubleshooting. We are committed to the speedy resolution of all technical issues.



International Support

For international BioFire technical assistance and support, please contact your local bioMérieux representative or distributor.



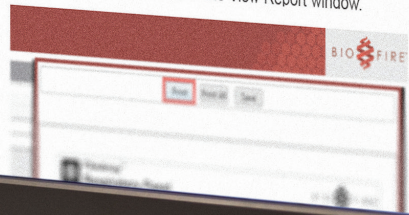
Help at Your Fingertips

With a complete suite of resources, our customers have access to everything they need for set-up, verification, and integration of the BioFire® FilmArray® System. Our website provides documents to assist with verification, EC Declarations of Conformity, and continuing education for all customers.

Visit biofire.com to find Advisory Notices, Information Sheets, Product Support Documents, and other resources.

Date	Sample ID	Fouch Type	Protocol	Lot Number	Serial Number	Fouch Result	Operator	Instrument	Status
12/01/2013 8:27:09 PM	BCD-FAL15	BCD-Panel-v2.0	BC-V2.1	138313	00829988	Pass	Daniel Goldgega	FAL2426	Completed
12/01/2013 8:27:40 PM	BCD-FAL15	BCD-Panel-v2.0	BC-V2.1	138313	00839814	Pass	Daniel Goldgega	FAL2424	Completed
12/01/2013 8:28:43 PM	BCD-FAL15	BCD-Panel-v2.0	BC-V2.1	138313	00811092	Pass	Daniel Goldgega	FAL2408	Completed
12/01/2013 8:29:35 PM	BCD-FAL15	BCD-Panel-v2.0	BC-V2.1	138313	00811092	Pass	Daniel Goldgega	FAL2423	Completed
12/01/2013 7:40:43 PM	RP-FAL15	Respiratory Pa.	NPS v2.0	142013	00948376	Pass	Daniel Goldgega	FAL2087	Completed
12/01/2013 7:40:52 PM	RP-FAL15	Respiratory Pa.	NPS v2.0	142013	00948416	Pass	Daniel Goldgega	FAL2176	Completed
12/01/2013 7:40:57 PM	RP-FAL15	Respiratory Pa.	NPS v2.0	142013	00948383	Pass	Daniel Goldgega	FAL2427	Completed
12/01/2013 5:53:47 PM	RP-FAL15	Respiratory Pa.	NPS v2.0	142013	00948368	Pass	Daniel Goldgega	FAL1171	Completed
12/01/2013 5:53:53 PM	RP-FAL15	Respiratory Pa.	NPS v2.0	142013	00948403	Pass	Daniel Goldgega	FAL1248	Completed
12/01/2013 5:53:59 PM	RP-FAL15	Respiratory Pa.	NPS v2.0	142013	00948440	Pass	Daniel Goldgega	FAL1296	Completed
12/01/2013 5:54:56 PM	RP-FAL15	Respiratory Pa.	NPS v2.0	142013	00948402	Pass	Daniel Goldgega	FAL1109	Completed
12/01/2013 5:59:29 PM	RP-FAL15	Respiratory Pa.	NPS v2.0	142013	00948395	Pass	Daniel Goldgega	FAL1176	Completed
12/01/2013 5:59:52 PM	RP-FAL15	Respiratory Pa.	NPS v2.0	142013	00948389	Pass	Daniel Goldgega	FAL2087	Completed
12/01/2013 5:58:44 PM	RP-FAL15	Respiratory Pa.	NPS v2.0	142013	00948438	Pass	Daniel Goldgega	FAL1242	Completed
12/01/2013 5:42:38 PM	SMB94	Respiratory Pa.	NPS v2.0	142013	00948387	Pass	Daniel Goldgega	FAL1238	Completed
11/20/2013 1:58:53 PM	17992	Smoke v1.0	PhosvetRAM	16952	85643	Fail	Amber Boehm	15N	Completed
11/20/2013 1:58:44 PM	17992	Smoke v1.0	PhosvetRAM	16952	35845	Fail	Amber Boehm	15N	Completed
11/20/2013 5:05:46 PM	17992	Smoke v1.0	PhosvetRAM	16952	35791	Fail	Amber Boehm	15N	Completed
12/01/2013 5:05:29 PM	BCD-FAL15	BCD-Panel-v2.0	BC-V2.1	138313	00829109	Pass	Daniel Goldgega	FAL2012	Completed
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12/01/2013 4:58:47 PM	BCD-FAL15	BCD-Panel-v2.0	BC-V2.1	138313	00829060	Pass	Daniel Goldgega	FAL2087	Completed
12/01/2013 10:56:33 AM	RP-FAL15	Respiratory Pa.	NPS v2.0	138313	00829000	Pass	Erk Huynh oanh	FAL1173	Completed
12/01/2013 4:00:25 PM	BCD-FAL15	BCD-Panel-v2.0	BC-V2.1	138313	00829071	Pass	Erk Huynh oanh	FAL1130	Completed

4. Click on the red View Report tab to open the View Report window.





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