



Neuberg
DIAGNOSTICS

• India • UAE • South Africa • USA

Neu INSIGHTS

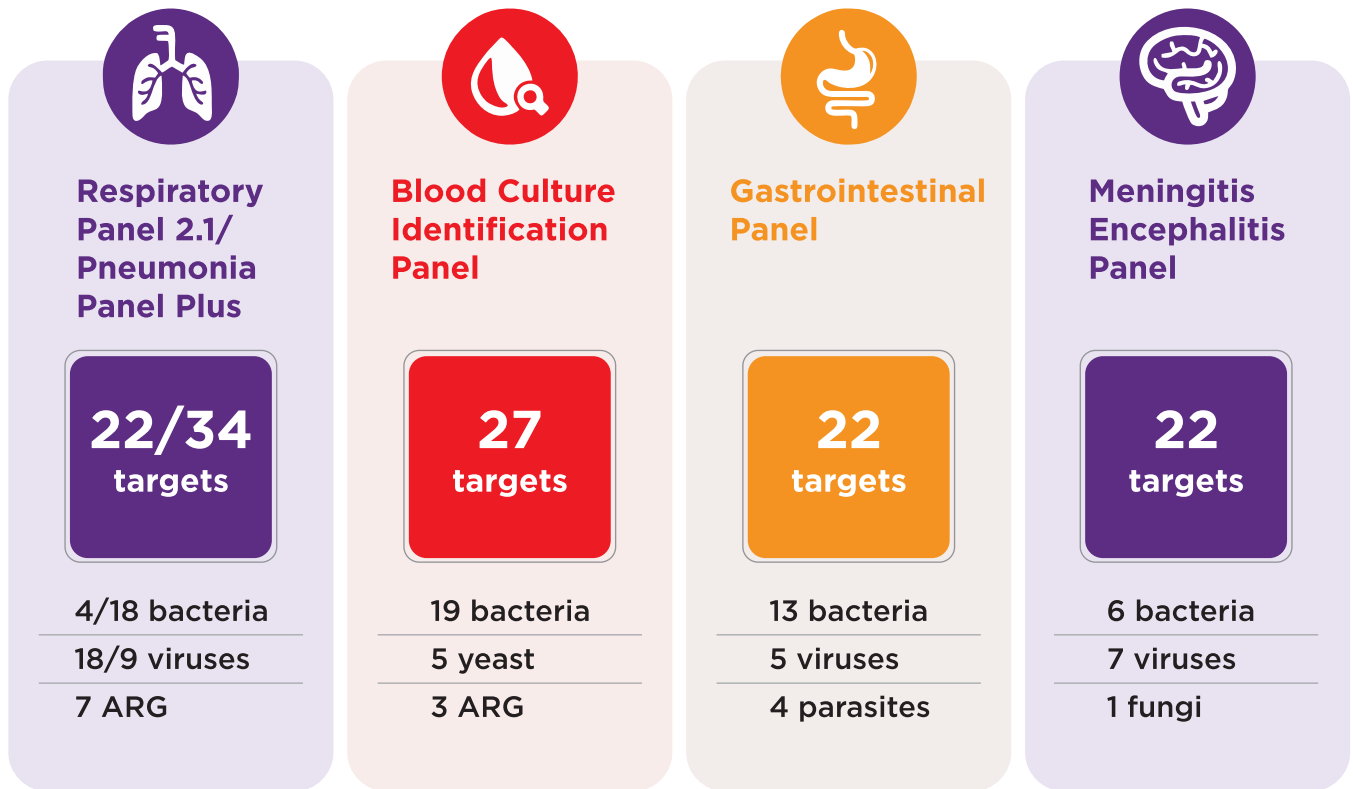


BIO  **FIRE**

Molecular diagnosis of infectious diseases

Serial number : 006 Edition : 1. 2022

One System. Many applications



The Right Test, The First Time.

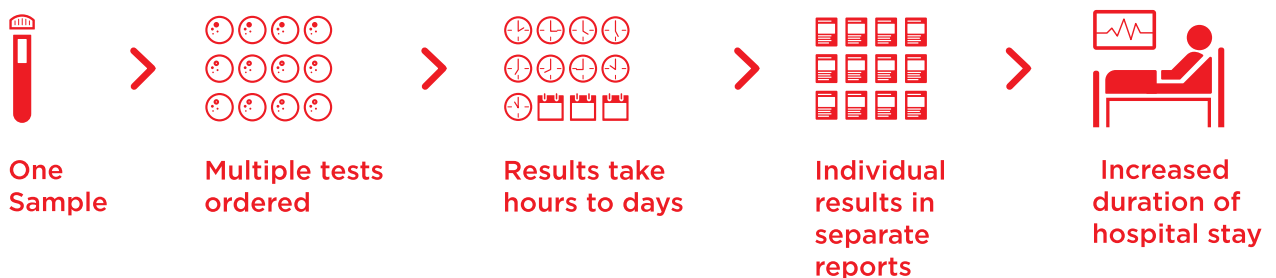
Syndromic testing is a symptom-driven broad grouping of probable pathogens into one, rapid test that maximizes the chance of getting the right answer in a clinically relevant timeframe.

Syndromic Testing



VS.

Traditional Testing



Respiratory Panel 2.1 EUA FDA-Cleared



22 pathogens

Sample :
Nasopharyngeal Swabs

Viral

Adenovirus
Coronavirus 229E
Coronavirus HKU1
Coronavirus Oc43
Coronavirus NL63

Sars-Cov 2

Human Metapneumovirus
Human Rhinovirus/
Enterovirus
Influenza A
Influenza A/H1
Influenza A/H1-2009
Influenza A/H3
Influenza B

Viruses

Parainfluenza 1
Parainfluenza 2
Parainfluenza 3
Parainfluenza 4
RSV

Bacterial

Bordetella pertussis
Bordetella parapertussis
Chlamydia pneumoniae
Mycoplasma pneumoniae

Specimen Collection and Preparation

Nasopharyngeal swab (NPS) in Viral Transport Medium (VTM)

- ▶ No specific swab or VTM type/brand required
- ▶ Multiple swabs/media evaluated in Interference studies
- ▶ 300µL required for testing

Specimen transport and storage

- ▶ Room temperature (19°-30° C) for up to 4 hours
- ▶ Refrigerated (2°-8° C) for up to 3 days
- ▶ Frozen (≤ -15° C) for up to 30 days



BioFire Pneumonia Panel Plus

1 Test. 43 Targets. 1 Hour.

BioFire Pneumonia Panel Plus Targets

Bacteria (Semi-quantitative)	Atypical Bacteria (Qualitative)	Viruses	Antimicrobial Resistance Genes
<ul style="list-style-type: none"> ✓ Acinetobacter calcoaceticus-baumannii complex ✓ Enterobacter Cloacae complex ✓ Escherichia coli ✓ Haemophilus influenzae ✓ Klebsiella aerogens ✓ Klebsiella oxytoca ✓ Klebsiella pneumoniae group ✓ Moraxella catarrhalis ✓ Protex spp. ✓ Pseudomonas aeruginosa ✓ Serratia marcescens ✓ Staphylococcus aureus ✓ Streptococcus pneumoniae ✓ Streptococcus pyogenes 	<ul style="list-style-type: none"> ✓ Chlamydia pneumoniae ✓ Legionella pneumophila ✓ Mycoplasma pneumoniae 	<ul style="list-style-type: none"> ✓ Adenovirus ✓ Coronavirus Human ✓ Metapneumovirus ✓ Human Rhinovirus/Enterovirus ✓ influenza A ✓ influenza B ✓ Middle East Respiratory Syndrome Coronavirus (MERS-CoV) ✓ Parainfluenza ✓ Respiratory Syncytial Virus 	<ul style="list-style-type: none"> ✓ Carbapenemases <i>IMP</i> <i>KPC</i> <i>NDM</i> <i>OXA - 48 - like</i> <i>VIM</i> ✓ ESBL <i>CTX-M</i> ✓ Methicillin Resistance

Enhance the Standard of Care with the BioFire Pneumonia Panel Plus

Traditional Testing Methods

Syndromic Testing Method



Blood Cultures ²

Culture on Lower Respiratory Samples³

Urine Antigen Testing ^{4,5}

BioFire Pneumonia Panel Plus¹

Low positivity rate

Low sensitivity

Low sensitivity

High sensitivity

Results in days

Results in days

Results in hours

Results in about an hour

High complexity

Subjective interpretation

Limited organisms

Objective semi-quantitative

Panel Specifications

Sample Type: Sputum (including endotracheal aspirate) and bronchoalveolar lavage (BAL) (including mini-BAL)

Storage Conditions: All kit components stored at room temperature (15-25° C)

BioFire Blood Culture Identification 2 (BCID 2) Panel

1 Test. 43 Targets. 1 Hour.

The BioFire BCID2 Panel Targets

Gram- Negative Bacteria

- ✓ Acinetobacter calcoaceticus-baumannii complex
- ✓ Bacteroides fragilis
- ✓ Enterobacterales
- ✓ 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*

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*

Antimicrobial Resistance Genes

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

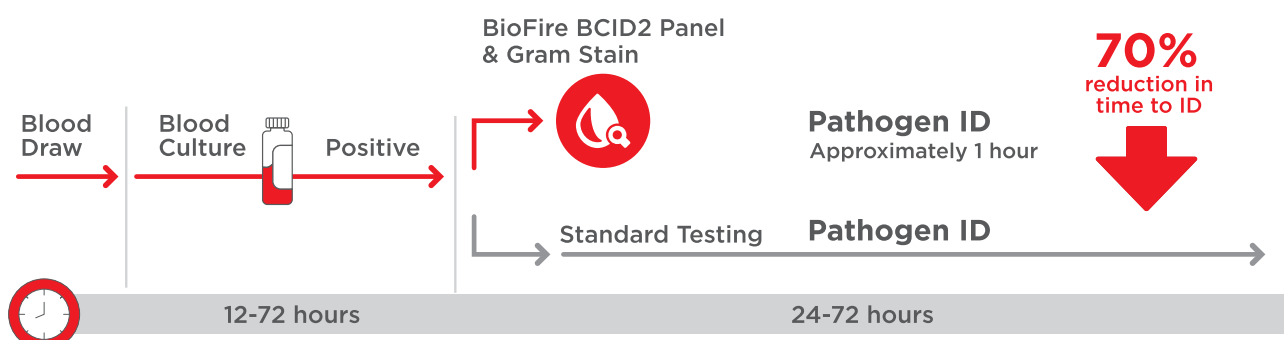
Specimen Collection and Preparation

Positive Blood Culture Bottle

- ▶ Flagged by instrument
- ▶ Positive by gram stain
- ▶ Sample Volume - 100 µl
- ▶ Do not use charcoal bottles
- ▶ Use 28 gauge needle to avoid resin introduction into pouch



Streamline Workflow and Provide Fast, Actionable Results



GI Panel CE & FDA- Cleared



22 pathogens

Sample :
Stool resuspended in
Cary Blair

Bacteria

Aeromonas
Campylobacter
Clostridium
difficile (Toxin A/B)
Pleisomonas
shigelloides
Salmonella
Vibrio
Vibrio cholerae
Yersinia
enterocolitica

Protozoa

Cryptosporidium
Cyclospora
cayetanensis
Entamoeba
histolytica
Giardia lamblia

Viruses

Andenovirus F 40/41
Astrovirus
Norovirus GI/GII
Rotavirus A
Sapovirus

Diarrheagenic E.coli I Shigella

E.coli O157
Enteroggregative
E.coli(EAEC)
Enteropathogenic
E. coli(EPEC)
Enterotoxigenic
E. coli (ETEC)
Shiga-like toxin-
producing E.coli
(STEC)
Shigella
Enteroinvasive
E.coli (EIEC)

Specimen Collection and Preparation

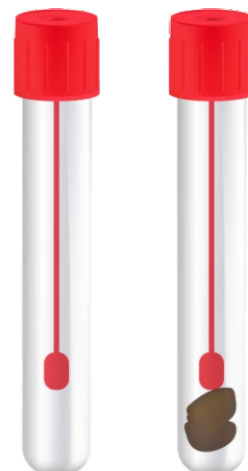
Stool in Cary Blair Transport Media

- ▶ Provides a liquid sample
- ▶ Add stool upto the line marked, mix
- ▶ Do not overfill

Sample Volume- 200mL

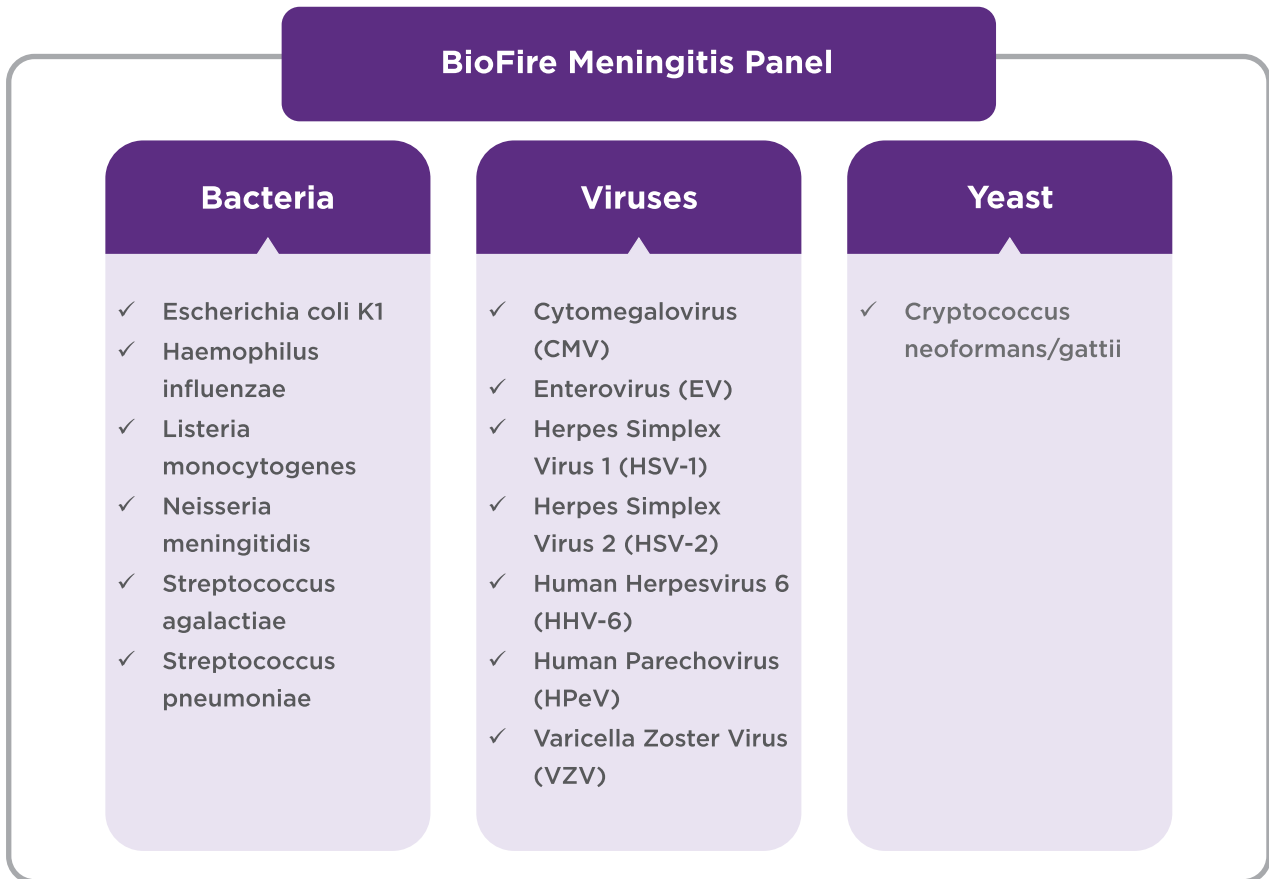
Sample Storage

- ▶ Up to 4 days
- ▶ Ambient or refrigerator temperature

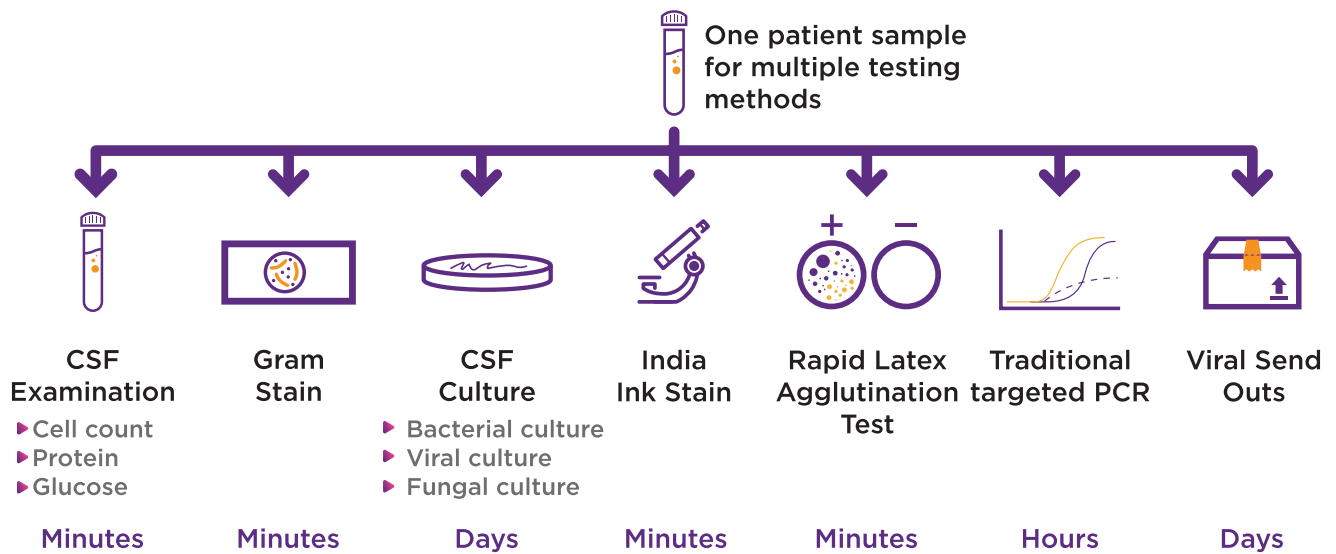


BioFire Meningitis Panel

1 Test. 14 Pathogens. 1 Hour.



Traditional Testing Methods



BioFire FilmArray Meningitis Panel



How Does the FilmArray Work?

FilmArray[®]

The Fastest Way To Better Results

The FilmArray reagent pouch stores all the necessary reagents for sample preparation, reverse transcription, PCR and detection in a freeze-dried format. Prior to a run, the user injects hydration solution and sample, combined with sample buffer mix into the pouch. The FilmArray instrument does the rest.



- ▶ First, the Film Array extracts and purifies all nucleic from the sample.
- ▶ Next, the FilmArray performs a nested multiplex PCR. During the first-stage PCR, the FilmArray performs a single, large volume, massively multiplexed reaction. Last, individual single plex second-stage PCR reactions detect the products from the first stage PCR.
- ▶ Using endpoint melting curve data, the FilmArray software automatically generates a result for each target in a single report.

Easy, Fast, Comprehensive and Scalable

Easy

- ▶ No precise pipetting required
- ▶ Simple sample preparation

Fast

- ▶ Two minutes of hands-on time
- ▶ Run time of only one hour

Comprehensive

- ▶ 5 panels CE-marked and FDA cleared
- ▶ Up to 43 different targets in one test

High Throughput

- ▶ Up to 176 runs per day
- ▶ Random access 24/7
- ▶ Scalable
- ▶ LIS



Knock out medical emergencies,
before it's too late!

**HEALTH ko aasani se na lo,
TEST aasani se karo**



Blood Tests



Health Packages



ECG



**ICMR Approved
COVID Tests**

**“ Get your blood test done
Anywhere, Anytime...
Neuberg hain na ”**

PARTNERS IN HEALTH



DR. UMA SENTHIL KUMAR

Consultant Microbiologist - Neuberg Ehrlich
druma.s@neubergdiagnostics.com



DR. PREETI KABRA

Chief Of Lab - Neuberg Ehrlich
dr.preetikabra@neubergdiagnostics.com



DR. SARANYA NARAYAN

Chief Technical Director - Neuberg Ehrlich
drsaranya@neubergdiagnostics.com

FOR MORE DETAILS, CONTACT US AT

 **9700 36 9700**

neubergdiagnostics.com



● India ● UAE ● South Africa ● USA