Clinical Impact of the BIOFIRE® Respiratory 2.1 plus (RP2.1plus) Panel

23 TARGETS
~45 min
BIOFIRE® Syndromic Testing
The right test, the first time
BIOFIRE syndromic testing allows rapid identification of infectious agents that produce similar symptoms in patients.

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

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

Get Test Results Faster
The BIOFIRE RP Panel® enables clinicians to diagnose patients faster and get them on the road to recovery more quickly.³

Turnaround time before BIOFIRE RP Panel adoption
19 hours

Turnaround time after BIOFIRE RP Panel adoption
2.03 hours

89.3% drop in turnaround time
Who Should Get Tested

All patients with signs/symptoms (syndrome) suggestive of an RTI, especially in hospitalized immune-compromised patients and with not immune-compromised hospitalized patients if it might influence care (e.g., aid in cohorting decisions, reduce testing, or decrease antibiotic use).  

Superior Clinical and Economic Outcomes

It is difficult to deliver the highest quality healthcare at a low cost. Studies show that the BIOFIRE RP Panel\textsuperscript{*} can deliver excellent clinical and economic outcomes and has been shown to:

- Dramatically reduce time to diagnosis.\textsuperscript{4-6,8}  
- Improve patient management.\textsuperscript{4-8}  
- Reduce total cost of care and resource utilization.\textsuperscript{8}  
- Prevent secondary spread of infection.\textsuperscript{7,8}  
- Prevent exposure to unnecessary antibiotics.\textsuperscript{5-8}  
- Detect more positives and co-infections than non-panel assays.\textsuperscript{9}  
- Provide more timely and effective treatment.\textsuperscript{5-8}  
- Result in shorter hospital stays.\textsuperscript{6,8}  
- Reduce unnecessary or ancillary testing.\textsuperscript{6,7}
The BIOFIRE RP Panel* resulted in decreased antibiotic use in 23% of pediatric patients tested.\textsuperscript{10}

The BIOFIRE RP Panel decreased the duration of antibiotic use by an average of 2.4 days in infants with positive panel results.\textsuperscript{11}

Decreased hospital length of stay of infants by an average of 4.7 days with a positive BIOFIRE RP Panel result vs a negative result.\textsuperscript{11}

“Getting an answer within an hour is something that’s very powerful to clinicians: it gives us actionable information right away.”

Dr. Tufik Assad, MD, MSCI
Pulmonary and Critical Care Physician

*Data generated using previous versions of this product.
BIOFIRE® RESPIRATORY 2.1 PLUS (RP2.1plus) PANEL

1 Test. 23 Targets. ~45 Minutes.

**BACTERIA**
- Bordetella parapertussis
- Bordetella pertussis
- Chlamydia pneumoniae
- Mycoplasma pneumoniae

**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 virus
- Influenza A virus A/H1
- Influenza A virus A/H3
- Influenza A virus A/H1-2009
- Influenza B virus
- Parainfluenza virus 1
- Parainfluenza virus 2
- Parainfluenza virus 3
- Parainfluenza virus 4
- Respiratory syncytial virus

Overall Performance:
- 97.1% sensitivity
- 99.3% specificity

SARS-CoV-2 Performance:
- 98.4% PPA
- 98.9% NPA

Product availability varies by country. Consult your bioMérieux representative.

Learn more about the BIOFIRE range of commercially-available panels for syndromic infectious disease diagnostics.

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Guidelines

- CDC Guidelines for preventing Health-Care Associated Pneumonia, 2003: https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5303a1.htm

References


Performance

Overall Performance: 97.1% sensitivity, 99.3% specific city12
SARS-CoV-2 Performance: 98.4% PPA, 98.9% NPA13

Panel Specifications

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>nasopharyngeal swab in transport media or saline</th>
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<tbody>
<tr>
<td>Sample Volume</td>
<td>0.3 mL</td>
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