

Visit Number: 42226502772 Registered 14-02-2026 10:13:45  
 Patient Name: 140527 محمد عبدالحميد جيهان Collected 14-02-2026 10:49:07  
 Age / Sex: 59 Year / Female Authenticated 14-02-2026 14:30:35  
 Referred By: Prof : - Reported 14-02-2026 15:05:32  
 Client Name: 0

### MICROBIOLOGY REPORT

FilmArray® Pneumonia Panel plus - IVD		BIOFIRE BY SIDERIS			
www.BioFireDx.com		www.BioFireDx.com			
<b>Run Information</b>					
Sample ID	42226507673	Run Date	14 Feb 2026 1:50 PM		
Protocol	SPUTUM v3.3	Serial No.	123024122		
Pouch Type	Pneumoplus v2.0	Lot No.	35UE25		
Controls	Passed	Operator	rania badr (raniabadr)		
Run Status	Completed	Instrument	TM15983		
<b>Detection Summary</b>					
<b>Bacteria</b>					
	Bin (copies/mL)	Bin (copies/mL)			
		10 <sup>4</sup>	10 <sup>5</sup>	10 <sup>6</sup>	≥10 <sup>7</sup>
Detected:	≥10 <sup>7</sup> Acinetobacter calcoaceticus-baumannii complex				
	10 <sup>5</sup> Staphylococcus aureus				
	10 <sup>4</sup> Escherichia coli				
<p><b>Note:</b> Detection of bacterial nucleic acid may be indicative of colonizing or normal respiratory flora and may not indicate the causative agent of pneumonia. Semi-quantitative Bin (copies/mL) results generated by the FilmArray Pneumonia Panel plus are not equivalent to CFU/mL and do not consistently correlate with the quantity of bacterial analyses compared to CFU/mL. For specimens with multiple bacteria detected, the relative abundance of nucleic acids (copies/mL) may not correlate with the relative abundance of bacteria as determined by culture (CFU/mL). Clinical correlation is advised to determine significance of semi-quantitative Bin (copies/mL) for clinical management.</p>					
<b>Antimicrobial Resistance Genes</b>					
Detected:	<ul style="list-style-type: none"> <li>✓ CTX-M</li> <li>✓ mecA/C and MREJ</li> <li>✓ NDM</li> <li>✓ OXA-48-like</li> <li>✓ VIM</li> </ul>				
<p><b>Note:</b> Antimicrobial resistance can occur via multiple mechanisms. A Not Detected result for a genetic marker of antimicrobial resistance does not indicate susceptibility to associated antimicrobial drugs or drug classes. A Detected result for a genetic marker of antimicrobial resistance cannot be definitively linked to the microorganism(s) detected. Culture is required to obtain isolates for antimicrobial susceptibility testing and FilmArray Pneumonia Panel plus results should be used in conjunction with culture results for the determination of susceptibility or resistance.</p>					
<b>Atypical Bacteria</b>					
Detected:	None				
<b>Viruses</b>					
Detected:	✓ Human Metapneumovirus				



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- The detection of resistance genes in the BioFire panels provides crucial insights to guide targeted antibiotic therapy.
- Antibiotic susceptibility testing is mandatory to guide specific antibiotic treatment for every case.
- Below, is a general interpretation of detected resistance genes and their implications for treatment:

1. blaKPC, blaNDM, blaVIM, blaIMP, blaOXA-48-like: These genes indicate carbapenemase production, conferring resistance to carbapenems (Ertapenem, Imipenem and Meropenem) and often other beta-lactams (including Penicillins and Cephalosporins).

- Treatment options may include ceftazidime-avibactam (except for NDM producers), meropenem-vaborbactam (for KPC producers), imipenem-relebactam, or cefiderocol, or colistin (in combination with a carbapenem or aminoglycoside) or tigecycline depending on susceptibility testing.

- N.B: In case of metallo-beta lactamase production (blaNDM, blaVIM, blaIMP), aztreonam is recommended.

2. mecA/mecC: These genes confer methicillin resistance in Staphylococcus aureus (MRSA).

Treatment options may include vancomycin, linezolid, daptomycin (Daptomycin is NOT recommended in case of VAP), or ceftaroline depending on susceptibility testing.

3. vanA/vanB : These genes indicate vancomycin resistance in Enterococcus species (VRE).

Treatment options may include linezolid, daptomycin, or tigecycline.

4. CTX-M: Indicates extended-spectrum beta-lactamase (ESBL) production, conferring resistance to against most penicillins and cephalosporins

The preferred treatment option remains carbapenems though ceftazidime-avibactam or piperacillin-tazobactam (if susceptible) may be alternatives

5. mcr-1: Indicates colistin resistance. Treatment options should be determined after reviewing local antibiogram and consultation of the ICU team.

- Empiric therapy should be adjusted based on the patient's clinical status, local antibiogram, and resistance gene findings.
- Confirmation with phenotypic susceptibility testing is essential before finalizing therapy.
- Consultation with infectious disease specialists is recommended for complex resistance patterns.

Dr. Yasmine Elkholy  
Ass.Prof. of Medical Microbiology  
Faculty of Medicine, Cairo University

Yasmine Elkholy



Visit No.: 42226502772

Patient Name: الأستاذة / جيهان عبدالحميد .  
محمد 140527

Patient ID: 2128242649

Visit Date: 14 Feb 2026

Branch : B-Helwan

Age: 60 year

Receipt No.: 2997

Ref. Doctor: -

Result Date: 14 Feb 2026

Payment Date: 14-02-2026  
10:13:45

Customer: Normal Patient

Insurance No

Item Type	Item Name	Value
Test	Biofire Pneumonia Panel	9660

Total Amount: 9660

Discount: 0

Final Amount: 9660

Total Received: 9660

Balance Amount: 0

اجمالي المبلغ المدفوع : 9660 جنيهاً