



# CLEAR DIRECTION for Rapid Diagnosis of Pneumonia in Hospitalized Patients

Pneumonia can be fatal.

Clinical outcomes are highly dependent upon timely and appropriate therapy. Unfortunately, standard of care microbiology has a number of limitations including<sup>1</sup>

- Requires several days for results
- Affected by sample transport time and temperature
- Fails to determine a causative agent in >50% of pneumonia patients
- Exposure to unnecessary broad-spectrum antibiotics



## SHIFT THE PARADIGM

from days to hours  
for optimal results.

The only FDA-cleared panel for lower respiratory tract infections that detects *Pneumocystis jirovecii*

### Comprehensive Testing Panel

FDA-cleared Unyvero uniquely and accurately detects the most clinically relevant pathogens and antibiotic resistance markers associated with pneumonia.

BACTERIA		RESISTANCE	GENES	
<i>Acinetobacter</i> spp. <i>Chlamydia pneumoniae</i> <i>Citrobacter freundii</i> <i>Enterobacter cloacae</i> complex <i>Escherichia coli</i> <i>Haemophilus influenzae</i> <i>Klebsiella oxytoca</i> <i>Klebsiella pneumoniae</i> <i>Klebsiella variicola</i> <i>Legionella pneumophila</i>	<i>Moraxella catarrhalis</i> <i>Morganella morganii</i> <i>Mycoplasma pneumoniae</i> <i>Proteus</i> spp. <i>Pseudomonas aeruginosa</i> <i>Serratia marcescens</i> <i>Staphylococcus aureus</i> <i>Stenotrophomonas maltophilia</i> <i>Streptococcus pneumoniae</i>	Carbapenems	<i>kpc</i> <i>ndm</i> <i>oxa-23</i> <i>oxa-24</i>	<i>oxa-48</i> <i>oxa-58</i> <i>vim</i>
		3rd Generation Cephalosporins	<i>ctx-M</i>	
		Oxacillin/Cefoxitin	<i>mecA</i>	
		Penicillin	<i>tem</i>	
FUNGI				
<i>Pneumocystis jirovecii</i> *				



\* included on the Unyvero LRT BAL panel.

- Rapid, sample to answer direct from native specimen
- Simple and clear qualitative results based on quantitative algorithms
- Critical information for life-saving treatment decisions

#### Specimen Types:

- Endotracheal Aspirate
- Bronchoalveolar Lavage (including mini-BAL)

## CLEAR DIRECTION for hospitalized pneumonia patients

### Unyvero is Changing the Status Quo

#### Greater Diagnostic Accuracy Can Save Lives

Unyvero LRT has demonstrated correct identification of key pathogens that are often missed by culture, without relying on the growth of viable organisms<sup>2</sup>

**Sensitivity: 91.4%**  
**Specificity: 99.5%**

Unyvero LRT identified *Acinetobacter* cases that were initially culture-negative but all had a subsequent culture that grew *Acinetobacter*. All patients with initial negative culture for *Acinetobacter* died.<sup>3</sup>

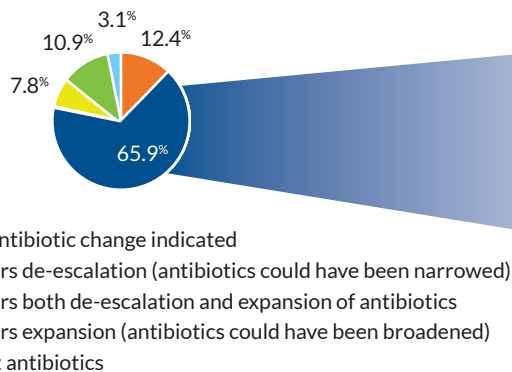
*Would your clinicians want to know?*

### Unyvero Supports Antibiotic Stewardship<sup>4</sup>

*"Antibiotic stewardship aims to minimize broad antibiotic use, which is associated with longer lengths of hospital stay, higher morbidity and mortality, higher hospital costs, nephrotoxicity, and nosocomial infections."*

#### Potential Impact on Antibiotic Therapy

Potential impact on therapy based on Unyvero LRT results alone:



Two-thirds of de-escalations include:

69% had unnecessary MRSA coverage

64% had unnecessary Pseudomonas coverage

#### Get Clear Direction

Unyvero LRT quickly delivers actionable answers to reduce the time to appropriate therapy and drive optimal, cost-effective care for hospitalized pneumonia patients. For clear, comprehensive, and reliable results to advance antimicrobial stewardship initiatives, **Unyvero points the way.**

 **Request an evaluation today: [customersupport@opgen.com](mailto:customersupport@opgen.com)**

#### References:

1. Messika J, Stoclin A, Bouvard E, et al. The Challenging Diagnosis of Non-Community-Acquired Pneumonia in Non-Mechanically Ventilated Subjects: Value of Microbiological Investigation. *Respir Care*. 2016;61(2):225234. doi:10.4187/respcare.04143
2. Unyvero LRT clinical trial data on file at Curetis.
3. Pickens C, et al. Rapid diagnostic testing of bronchoalveolar lavage to detect non-fermenting gram-negative bacteria and antibiotic resistance genes. Poster presented at: American Thoracic Society; 2018 May 18-23; San Diego, CA.
4. Pickens C, et al. A multiplex polymerase chain reaction assay for antibiotic stewardship in suspected pneumonia. *Diagnostic Microbiology & Infectious Disease*. <https://doi.org/10.1016/j.diagmicrobio.2020.115179>