

CLEAR DIRECTION for hospitalized pneumonia patients

FDA-cleared **Unyvero LRT** lower respiratory tract infection panel helps you quickly optimize antibiotic therapy. **Unyvero points the way.**



Detects the largest number of relevant pathogens and resistance markers¹



Delivers rapid, reliable, and actionable answers



Enables earlier diagnosis and selection of optimal treatment

Comprehensive Testing Panel

Unyvero LRT uniquely detects 29 clinically relevant targets comprised of bacterial pathogens—including atypical bacteria—and antibiotic resistance markers with the broadest carbapenemase resistance coverage.¹

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

Results You Can Count On²

MICROORGANISMS DETECTION	
92.5% sensitivity	97.4% specificity

ANTIBIOTIC RESISTANCE MARKERS DETECTION	
93.0% sensitivity	98.8% specificity

1. Compared to other molecular panels.
2. Data on file at Curetis.

The Challenges with Culture

Diagnosis of pneumonia is based on a combination of clinical and radiological evidence. Empiric treatment—which may include unnecessary, inadequate, or inappropriate antibiotics—is typically used initially for these patients.

It has been widely shown that targeted antibiotic treatment is guided by culture results, which can take several days to obtain and may still not be sufficient to determine the pathogen causing the pneumonia.

With the use of culture results alone, studies have shown that:³

29%

of patients were
overtreated

15%

of patients were
undertreated

Only 9%

of patients were
appropriately treated

Additionally, culture can be challenging for fastidious organisms or if the patient is on antibiotics when the sample is collected. The Unyvero LRT panel identifies nucleic acid even when the organism will not grow in culture.

In a study that evaluated retrospective outcomes, the panel identified *Acinetobacter* cases that were initially culture-negative but all had a subsequent culture that grew *Acinetobacter*, as detected by Unyvero LRT.

All patients with initial negative culture for *Acinetobacter* died.⁴

Organisms that are fastidious or do not grow in culture
can lead to adverse outcomes including mortality.

Advancing Antibiotic Stewardship

Retrospective chart review studies have demonstrated that therapy could have been optimized in >50% of cases based on Unyvero LRT results. The panel **favors narrowing antibiotics over expanding antibiotics nearly two-fold** (29% vs. 15%).³ Optimal antibiotic coverage can lead to less antibiotic side effects, decreased costs and reduction in chances of antibiotic resistance.

Figure 1. Potential Impact on Therapy Based on Unyvero LRT Results

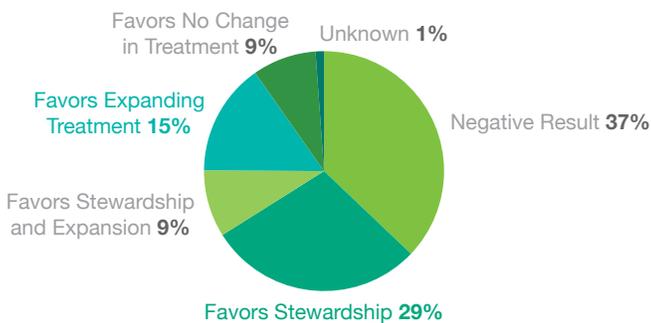
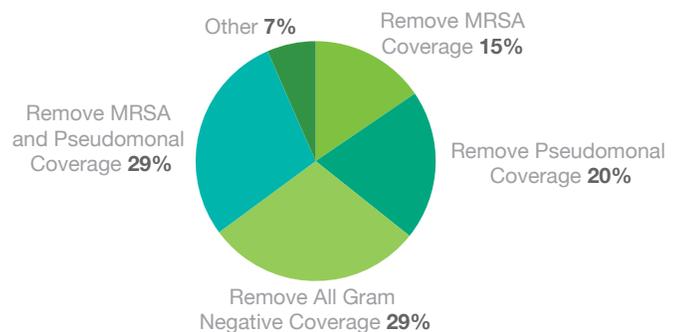


Figure 2. Stewardship Suggested by Unyvero LRT Results



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: curetisusa.com | info_us@curetis.com

3. Mopuru H, et al. Evaluation of A Rapid Highly Multiplexed Molecular Diagnostic Lower Respiratory Tract Panel for Clinical Impact and Antibiotic Stewardship. Poster presented at: ASM Microbe; 2018 June 9; Atlanta, GA.
4. 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 22; San Diego, CA.