



CLEAR DIRECTION for Rapid Diagnosis of Pneumonia in Hospitalized Patients

Clinical outcomes are highly dependent upon timely and appropriate therapy.

Unfortunately, standard of care microbiology has a number of limitations including:¹

- Several days for results
- Affected by sample transport time and temperature
- Growth dependent; often inhibited by prior antibiotics
- Failure to determine a causative agent in >50% of pneumonia patients

unyvero

■ LRT



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.

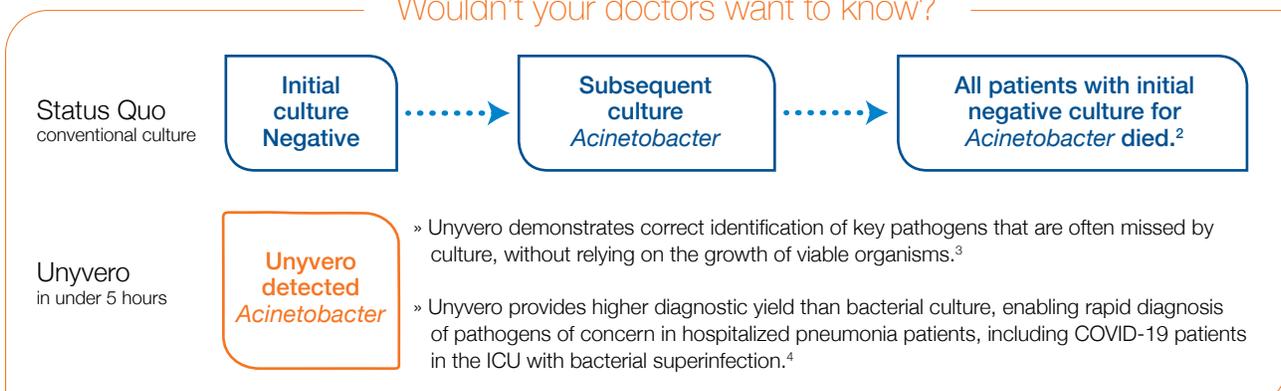
BACTERIA		RESISTANCE	GENES	
<i>Acinetobacter</i> spp.	<i>Moraxella catarrhalis</i>	Carbapenems	<i>kpc</i>	<i>oxa-48</i>
<i>Chlamydia pneumoniae</i>	<i>Morganella morganii</i>		<i>ndm</i>	<i>oxa-58</i>
<i>Citrobacter freundii</i>	<i>Mycoplasma pneumoniae</i>		<i>oxa-23</i>	<i>vim</i>
<i>Enterobacter cloacae</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>				
FUNGI		Specimen Types:		
<i>Pneumocystis jirovecii</i> *		Endotracheal Aspirate		
		Bronchoalveolar Lavage (including mini-BAL)		

* included on the Unyvero LRT BAL panel.

Rapid, sample to answer, direct from native specimen. Simple and clear qualitative results based on quantitative algorithms. Sensitivity: 91.4%; Specificity: 99.5%

Greater Diagnostic Accuracy. Critical Information for Life-Saving Treatment Decisions.

Wouldn't your doctors want to know?



One patient sample. Comprehensive results.

unyvero points the way for hospitalized pneumonia patients.

LRT



Unyvero Provides Rapid and Actionable Results and Supports Antibiotic Stewardship.⁵



Unyvero reduced the use of inappropriate antibiotic therapy by **45.1%**



Unyvero gives results on a broad menu of pathogens and resistance genes in **4-5 hours**, versus 72 hours with culture



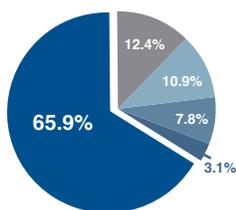
Unyvero shortened inappropriate antibiotic therapy by **39 hours**, and reduced overall antibiotic therapy duration by **22.54%**



Patients treated in the Unyvero group had three times higher probability of **appropriate antibiotic therapy**

One patient sample. Comprehensive results.

Unyvero LRT panel demonstrated the opportunity to de-escalate antibiotics in **65.9%** (405/615) of cases.⁶



65.9% Favors de-escalation, including anti-MRSA (69%) and anti-pseudomonal (64%)
10.9% Favors expansion; 7.8% Favors both de-escalation and expansion; 3.1% Start antibiotics
12.4% No change

Save time. Save money. Reduce exposure.

- Unyvero enabled changes in therapy significantly faster, on average **21 hours faster**, compared to when conventional AST result was available, which allows for reduction in drug cost and mitigation of the potential for adverse events such as nephrotoxicity.⁷
- Unyvero results combined with antibiotic stewardship are **efficient and safe** in decreasing time on inappropriate antibiotic therapy in hospitalized patients with pneumonia at risk for Gram-negative bacteria.⁵
- A stringent antibiotic stewardship program can be safely implemented and it can **decrease antibiotic costs** by as much as 80%.⁸
- The high negative predictive value (**99.8%**) of the Unyvero LRT panel is extremely useful for **reducing excess exposure** to unnecessary antimicrobials.⁷
- Unyvero provides clinicians **earlier data to inform** antimicrobial decisions, including the critically ill COVID patients.⁴

References

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2. Pickens C, *et al.* Rapid diagnostic testing of bronchoalveolar lavage to detect non-fermenting gram-negative bacteria and antibiotic resistance genes. *Am J Respir Crit Care Med* 197:A7770 (2018). doi: [10.1164/ajrccm-conference.2018.197.1.MeetingAbstracts.A7770](https://doi.org/10.1164/ajrccm-conference.2018.197.1.MeetingAbstracts.A7770)
3. Unyvero LRT clinical trial data on file at Curetis.
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5. Stolz, D. Multiplex Bacterial PCR in Bronchoalveolar Lavage (BAL): Does It Impact Inappropriate Antibiotic Use? September 14, 2021. Webinar.
6. Pickens, C. *et al.* A multiplex polymerase chain reaction assay for antibiotic stewardship in suspected pneumonia. *Diagn Microbiol Infect Dis* 98, (2020). doi: [10.1016/j.diagmicrobio.2020.115179](https://doi.org/10.1016/j.diagmicrobio.2020.115179)
7. Snyder JW, Hoffmann W. One Academic Medical Center's Experience with the Unyvero Multiplex Platform for Testing Bronchoalveolar Lavage Fluids: Analytical and Clinical Assessment. June 29, 2021. Webinar.
8. Mauro, J. *et al.* Rigorous antibiotic stewardship in the hospitalized elderly population: saving lives and decreasing cost of inpatient care. *JAC Antimicrob Resist* 3, (2021). doi: [10.1093/jacamr/dlab118](https://doi.org/10.1093/jacamr/dlab118)



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