University of Colorado Hospital
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News

Clinical Laboratory Test Update

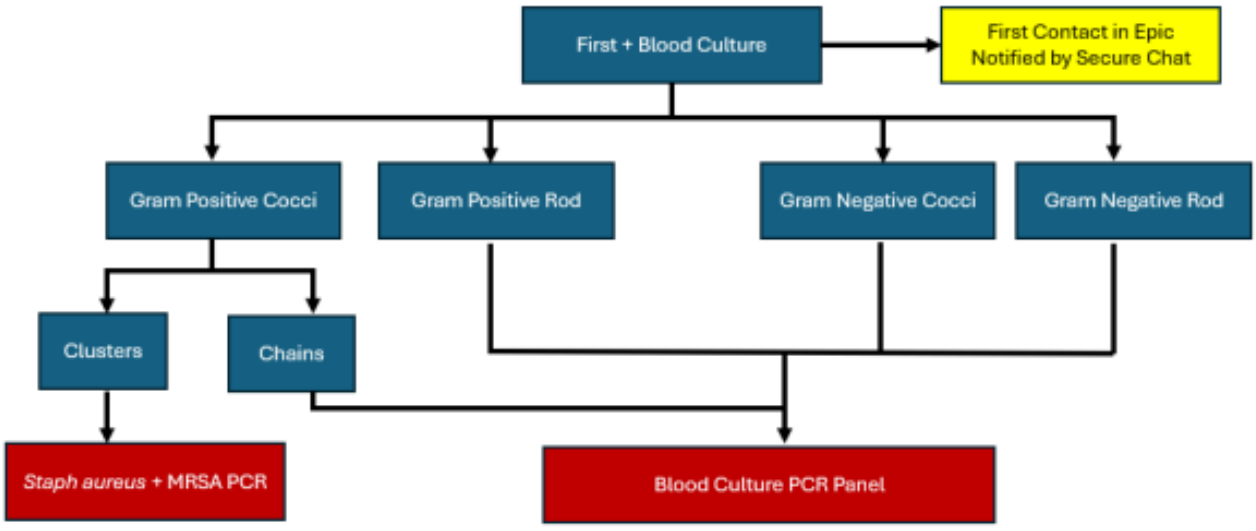
Blood Culture PCR Panel

Effective August 12, 2025, the UCH Clinical Laboratory will implement a Blood Culture PCR Panel reflex from positive blood cultures for patients. This test is not orderable by providers, and reflexes from the first positive blood culture in a 7-day period for patients. Results will be available in the chart 1.5-2 hours after the blood culture becomes positive. For blood cultures that grow Gram-positive cocci in clusters in the initial Gram stain, the reflex to MRSA/SA Blood Culture PCR will not change.

UCH Antimicrobial Stewardship has created a comprehensive Clinical Guidance Document (linked) for providers with details about the Blood Culture PCR Panel and how to interpret results – please refer to this for more information.

The testing and reporting algorithm, along with panel's pathogens and resistance genes are listed below from the Clinical Guidance Document:

Testing and Reporting Algorithm



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Pathogens and Resistance Genes Detected by the Blood Culture PCR Panel

Table 1. List of Pathogens Detected on Blood Culture Panel

Gram Positive Bacteria	Gram Negative Bacteria	Yeasts
Enterococcus faecalis	*Acinetobacter baumanii*	*Candida albicans*
Enterococcus faecium	*Bacteroides fragilis*	*Candida auris*
Listeria monocytogenes	***Enterobacterales* group**	*Candida glabrata*
***Staphylococcus* species**	*Enterobacter cloacae*	*Candida krusei*
Staphylococcus aureus	*Escherichia coli*	*Candida parapsilosis*
Staphylococcus epidermidis	*Klebsiella* (formerly *Enterobacter*) *aerogenes*	*Candida tropicalis*
Staphylococcus lugdunensis	*Klebsiella oxytoca*	*Cryptococcus neoformans/gattii*
***Streptococcus* species**	*Klebsiella pneumoniae*	
Streptococcus agalactiae	*Proteus* species	
Streptococcus pneumoniae	*Salmonella* species	
Streptococcus pyogenes	*Serratia marcescens*	
	Haemophilus influenzae	
	Neisseria meningitidis (encapsulated)	
	Pseudomonas aeruginosa	
	Stenotrophomonas maltophilia	

Table 2. Empiric Antibiotic Recommendations in the setting of Resistance Genes Detected

Resistance Gene	Impact on Susceptibility
Gram Positive Resistance	
mecA/C	Confers methicillin resistance for *Staph epidermidis* and *Staph lugdunensis*
mecA/C and MREJ	Confers methicillin resistance for *Staph aureus*
vanA/B	Confers vancomycin resistance for *E. faecalis* and *E. faecium*
Gram Negative Resistance	
CTX-M	Indicates presence of an extended-spectrum beta-lactamase (ESBL)
mcr-1	Confers colistin resistance
KPC, IMP, NDM, VIM, OXA-48-like	Indicates presence of a carbapenemase

For information about the Clinical Lab's tests, visit the University of Colorado Hospital Clinical Laboratory Test Directory at https://www.testmenu.com/universityhospital. If you have any questions or special concerns email them to cara.faliano@uchealth.org