

BioFire Blood Cultures Drug of Choice Assistance Table

Guidelines are recommendations for management and should never replace clinical judgement

Yeast

	Organism	Resistance Marker	Preliminary Recommendation
Invasive Candidiasis	Candida albicans	XXX	Caspofungin *ID approval*
	Candida auris		
	Candida glabrata		
	Candida krusei		
	Candida parapsilosis		
	Candida tropicalis		
Cryptococcus	Cryptococcus neoformans	XXX	Liposomal Amphotericin B + Flucytosine ***ID CONSULT***
	Cryptococcus gattii		

Gram Positive Bacteria

	Organism	Resistance Marker	Preliminary Recommendation
Gram Positive Cocci	Staphylococcus aureus	MecA/C and MREJ NOT detected	Cefazolin (If allergy: Vancomycin)
		MecA/C and MREJ detected	Vancomycin (If allergy: Daptomycin) *ID approval*
	Staphylococcus epidermidis	Potential contaminant, especially if only 1 of 2 bottle of culture set are positive. Use clinical judgement, if treatment needed follow below guidance.	
		MecA/C NOT detected	Cefazolin (If allergy: Vancomycin)
		MecA/C detected	Vancomycin (If allergy: Daptomycin) *ID approval*
	Staphylococcus lugdunensis	Potential contaminant, especially if only 1 of 2 bottle of culture set are positive. Use clinical judgement, if treatment needed follow below guidance.	
		MecA/C NOT detected	Cefazolin (If allergy: Vancomycin)
		MecA/C detected	Vancomycin (If allergy: Daptomycin) *ID approval*
	Staphylococcus genus with ALL other species negative (not aureus, epidermidis, or lugdunensis)	Potential contaminant, especially if only 1 of 2 bottle of culture set are positive. Use clinical judgement, if treatment needed follow below guidance.	
		XXX	Vancomycin (If allergy: Daptomycin) *ID approval*
	Streptococcus agalactiae	XXX	Penicillin (Alt: Ceftriaxone, Cefazolin)
	Streptococcus pyogenes	XXX	Ceftriaxone (If allergy: Vancomycin, Levofloxacin)
	Streptococcus pneumoniae	XXX	Ceftriaxone (If allergy: Vancomycin)
	Streptococcus genus	XXX	Ceftriaxone (If allergy: Vancomycin)
	Enterococcus faecalis	VanA/B NOT detected	Ampicillin (If allergy: Vancomycin)
VanA/B detected = VRE (uncommon)		Linezolid (If allergy: Daptomycin) *ID approval*	
Enterococcus faecium	VanA/B NOT detected	Linezolid (If allergy: ID Consult) *ID approval*	

		VanA/B detected = VRE (common)	Linezolid (If allergy: ID Consult) *ID approval*
	Other Gram Positive Cocci (unidentified)	XXX	Vancomycin (If allergy: Daptomycin) *ID approval*

	Organism	Resistance Marker	Preliminary Recommendation
Gram Positive Rod	Listeria monocytogenes	XXX	Ampicillin + Gentamicin for synergy (If allergy: Trimethoprim/Sulfamethoxazole)
	Other Gram Positive Rod (unidentified)	XXX	Vancomycin (If allergy: Daptomycin) *ID approval*

Gram Negative Bacteria

	Organism	Resistance Marker	Preliminary Recommendation
Gram negatives non-Enterobacterales	Pseudomonas aeruginosa	XXX	Piperacillin/Tazobactam or Cefepime (If allergy: Meropenem) *ID approval*
	Acinetobacter baumannii	XXX	Meropenem (If allergy: ID Consult) *ID approval*
	Bacteroides fragilis	XXX	Metronidazole (If allergy: Piperacillin/Tazobactam or Meropenem) *ID approval*
	Haemophilus influenzae	XXX	Ceftriaxone (If allergy: Levofloxacin)
	Stenotrophomonas maltophilia	XXX	Trimethoprim/Sulfamethoxazole Ceftazidime/Avibactam *ID approval*
	Neisseria meningitidis	XXX	Ceftriaxone (If allergy: Aztreonam)
		If KPC, IMP, NDM, VIM, OXA-48-like (carbapenem resistance) is detected with any of the above organisms	

Enterobacterales	Organism	Resistance Marker	Preliminary Recommendation
	Escherichia Coli	CTX-M NOT detected	Ceftriaxone (If allergy: Aztreonam)
		CTX-M detected OR NOT detected BUT history of ESBL	Ertapenem or Meropenem *ID approval*
		KPC, IMP, NDM, VIM, OXA-48-like detected	Ceftazidime/Avibactam ***ID CONSULT***
	Proteus Spp.	CTX-M NOT detected	Ceftriaxone (If allergy: Aztreonam)
		CTX-M detected OR NOT detected BUT history of ESBL	Ertapenem or Meropenem *ID approval*
		KPC, IMP, NDM, VIM, OXA-48-like detected	Ceftazidime/Avibactam ***ID CONSULT***
	Klebsiella pneumoniae Klebsiella oxytoca	CTX-M NOT detected	Ceftriaxone (If allergy: Levofloxacin)
		CTX-M detected OR NOT detected BUT history of ESBL	Ertapenem or Meropenem *ID approval*
		KPC, IMP, NDM, VIM, OXA-48-like detected	Ceftazidime/Avibactam ***ID CONSULT***
	Klebsiella aerogenes	CTX-M NOT detected	Levofloxacin (If allergy: ID Consult)
		CTX-M detected OR NOT detected BUT history of ESBL	Meropenem *ID approval*
		KPC, IMP, NDM, VIM, OXA-48-like detected	Ceftazidime/Avibactam ***ID CONSULT***
	Serratia marcescens	CTX-M NOT detected	Piperacillin/Tazobactam or Cefepime (If allergy: Levofloxacin)
		CTX-M detected OR NOT detected BUT history of ESBL	Ertapenem or Meropenem *ID approval*
		KPC, IMP, NDM, VIM, OXA-48-like detected	Ceftazidime/Avibactam ***ID CONSULT***
	Salmonella spp.	CTX-M NOT detected	Levofloxacin (If allergy: Ceftriaxone)
		CTX-M detected OR NOT detected BUT history of ESBL	Ertapenem or Meropenem *ID approval*
		KPC, IMP, NDM, VIM, OXA-48-like detected	Ceftazidime/Avibactam ***ID CONSULT***
Enterobacter cloacae complex	CTX-M NOT detected	Cefepime (If allergy: Meropenem) *ID approval*	
	CTX-M detected OR NOT detected BUT history of ESBL	Ertapenem or Meropenem *ID approval*	
	KPC, IMP, NDM, VIM, OXA-48-like detected	Ceftazidime/Avibactam ***ID CONSULT***	
Enterobacterales family	CTX-M NOT detected	Piperacillin/Tazobactam or Cefepime (If allergy: Levofloxacin)	
	CTX-M detected OR NOT detected BUT history of ESBL	Meropenem *ID approval*	
	KPC, IMP, NDM, VIM, OXA-48-like detected	Ceftazidime/Avibactam ***ID CONSULT***	
If mcr-1 is detected with any of the above organisms		Ceftazidime/Avibactam ***ID CONSULT***	

Please note: This chart is for INITIAL therapy after organism identification via BioFire. Standard identification and sensitivities will be performed for all organisms and will be available in 48-72 hours. Please follow up with full sensitivities for further opportunities to de-escalate. Recommendations are based on the BHN 2021 antibiogram when information is available. MecA/C and MREJ = methicillin resistance, VanA/B = vancomycin resistance, CTX-M = possible ESBL, KPC, IMP, NDM, VIM, OXA-48-like = carbapenem resistance, and mcr-1 = colistin resistance.

XXX means that molecular testing (BioFire BCID2) is unable to detect resistance markers for these organisms