

Bug-Drug Relationships

ANTIBIOTICS	Empiric? Community; Nosocomial	<i>Strep.</i> <i>pneumo</i> (α <i>Strep</i>)	Group A <i>Strep.</i>	<i>Staph.</i> <i>aureus</i> (MSSA)	<i>Staph.</i> <i>aureus</i> (MRSA)	<i>Entero-</i> <i>coccus</i> // VRE	<i>Hemo-</i> <i>philus</i>	<i>Entero-</i> <i>bacteriaceae</i>	<i>Pseudo-</i> <i>monas</i>	Anaerobes (incl. <i>B.</i> <i>fragilis</i>)
Penicillin G	YES/C	++*	++*							
Ampicillin	YES/C/N	+	+			++*//no				
Nafcillin	NO/C	+	+	++*						
Cefazolin	NO/C	+	+	++						
Cefoxitin	NO/C	+	+	+/-			+	+/-		+/-
Ceftriaxone/Cefotaxime	YES/C	+	+	+/-			++*	++*		
Cefepime	YES/N	+	+	+			++	++ [®]	+	
Ceftaroline	No/N	+	+	+	+		+	+		
Gentamicin (synergy)	YES/C							++	+	
Tobramycin (synergy)	YES/N							++	+	
Amikacin (synergy)	NO							++	++	
Aztreonam	NO							++	+	
Ampicillin/sulbactam	NO	+	+	+		+//no	+	+/-		++
Piperacillin/tazobactam	NO	+	+	+		+//no	+	++	+	++
Meropenem	NO	+	+	+		+/-//no	+	++	++***	++
Ertapenem	NO	+	+	+			+	***		++
Fluoroquinolone #	YES/C/N	+	+	+/-	+/-	+//maybe	+	++	+/-	
Clindamycin	YES/C/N	+	+	+						+
Metronidazole	YES/C/N									++*
Tmp-Smx	YES/C	+/-	+/-	+	+		+	+/-		
Azithromycin	YES/C/N	+	+	+			+			
Vancomycin	Yes/N	+/-	+	+/-	+	+//no				
Rifampin	NO	+/-	+/-	+	+	+// maybe	+	+/-		+/-
Linezolid	YES/N	+	+	+	+	+//yes				
Quinupristin/dalfopristin	NO	+	+	+	+	+// faecium				
Daptomycin	NO	+	+	+	+	+//yes				
Tigecycline [^]	NO	+	+	+	+	+//yes	+	+		+

*Preferred for initial empiric therapy. # Ciprofloxacin or high dose levofloxacin is preferred over other fluoroquinolones in combination with an anti-*Pseudomonas* beta lactam for synergy. A fluoroquinolone is never adequate as a single agent to treat *Pseudomonas* infections except simple cystitis. Oral ciprofloxacin is now cheap and preferred for GNR coverage. Moxifloxacin or levofloxacin (not ciprofloxacin) is preferred for respiratory pathogens. **Preferred to treat possibility of ESBL in community acquired sepsis.

***Preferred to treat possibility of ESBL and *Pseudomonas* in hospital or LTAC or Nursing home acquired sepsis. [®] Preferred over ceftriaxone to forestall emergence of ESBL.

[^]Very low blood concentrations; inferior to comparators: limited usefulness.