Table 6. (Continued)

Antimicrobial Class	Antimicrobial Agent	MIC (µg/mL) Interpretive Criteria			Comments
		S	I	R	
TETRACYCLINES					
	Doxycycline	≤4	8	≥16	
	Tetracycline	≤4	8	≥16	
LINCOSAMIDES					
	Clindamycin	≤0.5	1–2	≥4	
FOLATE PATHWAY INHIBITORS					
	Trimethoprim-sulfamethoxazole	≤2/38	–	≥4/76	
ANSAMYCINS					
	Rifampin	≤1	2	≥4	(3) *Rx:* **Rifampin should not be used alone for antimicrobial therapy.**
STREPTOGRAMINS					
	Quinupristin-dalfopristin	≤1	2	≥4	
OXAZOLIDINONES					
	Linezolid	≤2	–	–	See comment (2).

Abbreviations: ATCC®, American Type Culture Collection; CAMHB-LHB, cation-adjusted Mueller-Hinton broth supplemented with lysed horse blood; I, intermediate; MIC, minimal inhibitory concentration; QC, quality control; R, resistant; S, susceptible.

Footnote

a. Coryneform genera include: *Arcanobacterium,* ***Arthrobacter,*** *Brevibacterium, Cellulomonas,* ***Cellulosimicrobium,*** *Dermabacter, Leifsonia, Microbacterium, Oerskovia, Rothia* **(excluding *Rothia mucilaginosa;* see Table 19),** ***Trueperella,*** and *Turicella.*

Supplemental Information

Resistance:

Resistance to β-lactams, macrolides, and aminoglycosides, as well as quinolones or folate pathway inhibitors, has been reported in *Corynebacterium afermentans, Corynebacterium amycolatum, Corynebacterium aurimucosum, Corynebacterium auris, Corynebacterium coyleae, C. diphtheriae, Corynebacterium glucuronolyticum, Corynebacterium jeikeium, Corynebacterium propinquum, Corynebacterium pseudodiphtheriticum, Corynebacterium resistens, Corynebacterium striatum, Corynebacterium tuberculostearicum* (which includes nearly all CDC group G-2 isolates), *Corynebacterium urealyticum*, and *Corynebacterium ureicelerivorans*. Resistance to erythromycin and clindamycin is nearly always attributable to the presence of the *ermX* or, occasionally, *ermB* gene.[38] Resistance to quinolones has been observed due to mutations in *gyrA.* Ophthalmic infections caused by *Corynebacterium macginleyi* are more difficult to treat with fluoroquinolone eye drops if a *gyrA* mutation is present.[39] Based on several recent reviews, all *Corynebacterium* remain susceptible to vancomycin, linezolid,[40,41] and tigecycline.[40] In addition, from among nearly 500 *Corynebacterium* strains, most were susceptible to daptomycin (99.6%) and quinupristin-dalfopristin (95.3%), with > 85% of isolates susceptible to rifampin, tetracycline, gentamicin, and meropenem (based on data collected by one member of the working group). A single daptomycin nonsusceptible *C. jeikeium* isolate has been reported.[42]

There are limited antimicrobial susceptibility and resistance mechanism data for other coryneform genera. In contrast to *Corynebacterium* spp., reduced susceptibility to daptomycin appears to be relatively common in other coryneform genera (based on data collected by one member of the working group). *Arcanobacterium haemolyticum* and *Trueperella* (formerly *Arcanobacterium*) *bernardiae* may be resistant to tetracycline.[43-45] *Arthrobacter* spp. have been reported to be resistant to aminoglycosides and quinolones.[46] *Brevibacterium* spp., particularly *Brevibacterium casei* and *Brevibacterium otitidis,* may demonstrate resistance to β-lactams and clindamycin.[47] *Dermabacter hominis* and *Turicella otitidis* may be macrolide and clindamycin resistant.[47] *Leifsonia aquatica* has been reported to have diminished vancomycin and penicillin susceptibility.[48] *Microbacterium resistens* and other *Microbacterium* spp. may be nonsusceptible to vancomycin.[49]