

Daptomycin susceptibility testing

Daptomycin activity *in vitro* is markedly affected by the concentration of calcium ions and there are unresolved questions about how daptomycin susceptibility should be tested in routine clinical laboratories. Disc diffusion tests are unreliable and EUCAST recommends that the MIC must be determined to allow susceptibility categorization.¹

Reference

¹The European Committee on Antimicrobial Susceptibility Testing (EUCAST) Steering Committee (2006). EUCAST technical note on daptomycin. *Clin Microbiol Infect*; 2006; **12**:599-601.

Amendments to tables in the BSAC disc diffusion method are as follows:

Table 9. MIC and zone diameter breakpoints for staphylococci.

Antibiotic	MIC breakpoint (mg/L)				Interpretation of zone diameters (mm)		
	R >	I	S ≤	Disc content (µg unless stated)	R ≤	I	S ≥
Daptomycin ^{1,2}	1	-	1	-	-	-	-

¹ Strains with MIC values above the susceptible breakpoint are very rare or not yet reported. The identification and antimicrobial susceptibility tests on any such isolate must be repeated and if the result is confirmed the isolate sent to a reference laboratory. Until there is evidence regarding the clinical response for confirmed isolates with MIC above the current resistant breakpoint they should be reported resistant.

² Disc susceptibility testing is not recommended.

Table 13. MIC and zone diameter breakpoints for β-haemolytic streptococci

Antibiotic	MIC breakpoint (mg/L)				Interpretation of zone diameters (mm)		
	R >	I	S ≤	Disc content (µg unless stated)	R ≤	I	S ≥
Daptomycin ^{1,2}	1	-	1	-	-	-	-

¹ Strains with MIC values above the susceptible breakpoint are very rare or not yet reported. The identification and antimicrobial susceptibility tests on any such isolate must be repeated and if the result is confirmed the isolate sent to a reference laboratory. Until there is evidence regarding the clinical response for confirmed isolates with MIC above the current resistant breakpoint they should be reported resistant.

² Disc susceptibility testing is not recommended.