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Abstract (poster session)

Dalbavancin maintains potent in vitro activity against *S. aureus* resistant to currently utilised anti-MRSA therapeutics

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Introduction: Dalbavancin (DAL) is a lipoglycopeptide undergoing clinical development for the treatment of skin and skin structure infections caused by Gram-positive pathogens. Emerging resistance among *S. aureus* to commonly utilized agents including linezolid (LZD), daptomycin (DAP), vancomycin (VAN), and tigecycline (TIG) is troubling, given the clinical prevalence and lack of other agents with activity against MRSA. It is important that newly developed agents are evaluated for their in vitro activity against such problematic isolates. This study was done to analyze the in vitro activity of DAL against non-susceptible (NS) isolates to current anti-staphylococcal therapies. Methods: 34 clinical isolates of *S. aureus* previously characterized NS to linezolid (n=9), daptomycin (n=18), and tigecycline (n=7) were evaluated for susceptibility to DAL and comparators by broth microdilution per CLSI M7 and M100 guidelines. Conclusions: DAL had potent in vitro activity against the evaluated *S. aureus* consisting of isolates non-susceptible to currently available and commonly utilized agents, with lower MICs than comparator glycopeptides (vancomycin) and the lipopeptide daptomycin. These data show the potential of dalbavancin for the treatment of *S. aureus* infections, including those where *S. aureus* are resistant to other available therapeutics.

QC <i>S. aureus</i> (ATCC 29213)				
	Range	Mode	MIC ₅₀	MIC ₉₀
Dalbavancin	0.03	NA	NA	NA
Vancomycin	1	NA	NA	NA
Oxacillin	0.25	NA	NA	NA

Daptomycin Non-Susceptible (n=18)				
	Range	Mode	MIC ₅₀	MIC ₉₀
Dalbavancin	0.03-0.5	0.06	0.06	0.5
Vancomycin	1-8	2	2	8
Oxacillin	0.12->4	>4	>4	>4

Linezolid Resistant (n=9)				
	Range	Mode	MIC ₅₀	MIC ₉₀
Dalbavancin	0.03-0.06	0.03	NA	NA
Vancomycin	0.5-2	1	NA	NA
Oxacillin	2->4	>4	NA	NA

Tigecycline Resistant (n=7)				
	Range	Mode	MIC ₅₀	MIC ₉₀
Dalbavancin	0.03-0.06	0.03	NA	NA
Vancomycin	1-1	1	NA	NA
Oxacillin	>4->4	>4	NA	NA