## Methods

### Daptomycin Pre-diffusion Method

- Each strain was tested in duplicate by sites 1-5.
- The only sites that did not test each organism were sites 2 and 4.
- Mean MICs were determined by each site by broth dilution methods.
- Mean category agreement of DAP NEO to DAP mean MICs was 83.0%.
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### Conclusion

- Mean category agreement of DAP NEO to DAP mean MICs was 83.0%.
- The mean category agreement of site MICs compared to the mean MIC was 84.9% (range of 70-95%). The essential agreement of site MICs to mean MICs (within ±1 dilution) was 100% for all sites.
- 4 strains were non-susceptible with mean MICs of 4 mg/L and all MICs were considered non-susceptible (within a 2-8 mg/L range).
- Borderline mean MICs (1 mg/L) were obtained for 12 strains. The mean MIC for 4 strains was 1 mg/L (susceptible), and 15% of all MICs (7/46) were 2 mg/L (susceptible).

### Table 1: Daptomycin MIC Results (mg/L) and NeoSensitab Results (mm) by Site and Mean

| Site No. | Site 1  | Site 2  | Site 3  | Site 4  | Site 5  | Median | Range | QC | Mean of QC
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### Results

- All daptomycin MIC and Neo-Sensitab (NDO) results by site and mean values are shown in Table 1.
- Scatter plots of replicates NDO zone results (mm) versus mean MIC results (mg/L) are shown in Figure 1A-E.

### Conclusions

- A variation in replicates MIC values of ±0.02 mg/L is typical in broth microdilution testing. The figures in this study were selected to include a large percentage with borderline susceptible/non-susceptible MICs and without an intermediate category. The lowest of the following category agreement numbers (both for the intra-laboratory MIC comparison and for the MIC/NCCLS comparison) are not incorrect.
- Overall, the DAPCa Neo-Sensitab pre-diffusion method performed well against this challenge set, although difference between laboratories were noted. Additional studies related to evaluating potential source of lab to lab variation and testing with a larger and typical set of strains is warranted.
- A routine disk diffusion method is not available for daptomycin and the pre-diffusion Neo-Sensitab method provides a cost effective way to test for daptomycin susceptibility against S. aureus.

### References


### Acknowledgement

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