Introducing dalbavancin: An effective treatment for skin and skin structure infections (ABSSSI) in children


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Background
Dalbavancin, an extended-release lipoglycopeptide, is approved for the treatment of skin and soft tissue infections (SSTI) in adults. This study evaluated the in vitro activity of dalbavancin and other comparator agents against Gram-positive clinical isolates in children admitted to US hospitals.

Methods
Clinical isolates of S. aureus, S. pyogenes, S. pneumoniae, S. agalactiae, S. dysgalactiae, S. anginosus, and CoNS were collected and determined at standard algorithms and supported by MALDI-TOF MS. Antimicrobial activity was assessed using the CLSI broth microdilution method for S. aureus, S. pyogenes, S. pneumoniae, and CoNS, and Etest for S. agalactiae, S. dysgalactiae, S. anginosus, and CoNS.

Results
Dalbavancin had M100 MIC values of ≤0.03/0.06 μg/mL, against S. aureus and CoNS, including the MRSA and MSSA isolates tested. Dalbavancin was ≥4MD and >8MD against the MRSA isolated from US hospitals (14.4% resistant). All tested agents showed ≥8/16 MD against the MSSA population (Table 1). Dalbavancin was ≥4MD and >8MD against the MRSA isolated from US hospitals (14.4% resistant). All tested agents showed ≥8/16 MD against the MSSA population (Table 1).

Conclusions
Dalbavancin demonstrated potent in vitro activity against these Gram-positive isolates causing SSTIs in children. The results warrant further development of dalbavancin for the treatment of SSTIs in children, provided safety and tolerability are satisfactory.

REFERENCES

DISCLOSURES
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ABSTRACT
Dalbavancin was approved in the United States (USA) (2014) and Europe (2015) for the treatment of adults with skin and soft tissue infections (SSTIs). Dalbavancin is a 1-week dosing schedule, with a single intravenous dose of 1500 mg or a dose of 1000 mg followed by 500 mg a week later. Dalbavancin was ≥4 MD and >8 MD against the MRSA isolated from US hospitals (14.4% resistant). All tested agents showed ≥8/16 MD against the MSSA population (Table 1).

Dalbavancin demonstrated potent in vitro activity against these Gram-positive isolates causing SSTIs in children. The results warrant further development of dalbavancin for the treatment of SSTIs in children, provided safety and tolerability are satisfactory.