Update on the In Vitro Activity of Dalbavancin against Indicated Species (Staphylococcus aureus, Enterococcus faecalis, β-Hemolytic Streptococci, and Streptococcus anginosus Group) Collected from United States Hospitals in 2017–2018

Helio S. Sader, Jennifer M. Strait, S.J. Ryan Arenas, Rodrigo E. Mendes, Robert K. Flemm

JMI Laboratories, North Liberty, Iowa, USA

MATERIALS AND METHODS

- Bacterial isolates
  - A total of 12,138 unique isolates of the indicated species were consecutively collected from 70 United States (US) medical centers in 2017–2018
  - Isolates were determined to be clinically significant based on local guidelines and were submitted to a central monitoring laboratory (JMI Laboratories, North Liberty, Iowa, USA)
  - Participating laboratories initially identified isolates and JMI confirmed bacterial identities by standard algorithms supported by matrix-assisted laser desorption ionization-time of flight mass spectrometry (Bruker Biotools, Bremen, Germany)

- Antimicrobial susceptibilities of each isolate were determined according to CLSI guidelines (M100-S29, M07-S11) using E-test strips (bioMérieux, Inc., Marcy-l’Etoile, France) or broth microdilution (M100-S29). The CLSI breakpoints for the bacterial species and isolates were compared with the CLSI guidelines for intermediate and resistant categories (M100-S29)

- Table 1: Activity of dalbavancin and comparator antimicrobial agents against clinical isolates of indicated species collected from US medical centers (2017–2018)

- Conclusions
  - Dalbavancin exhibited activity against 99.9% of isolates from indicated species collected in US hospitals in 2017–2018 (95% CI).
  - Dalbavancin MIC 
70 (50/90, 0.03/0.06 mg/L) against MSSA. Dalbavancin was highly active against β-hemolytic streptococci (MIC
82.4%, and 99.2%, respectively (Table 1).

- Acknowledgments
  - The authors would like to thank all participants of theInternational Dalbavancin Evaluation of Activity (IDEA) for providing clinical isolates.

REFERENCES


- Table 1: Activity of dalbavancin and comparator antimicrobial agents against clinical isolates of indicated species collected from US medical centers (2017–2018)

- Antimicrobial susceptibility testing
  - Isolates were tested for susceptibility (S) by broth microdilution following guidelines in the CLSI M100-S29 document (2019)

- RESULTS
  - Dalbavancin MIC
70 (50/90, 0.03/0.06 mg/L) against S. aureus (100.0%), including MRSA isolates (Table 1 and Figure 1).

- Dalbavancin was highly active against Gram-positive cocci from US medical centers in 2017–2018 (n=12,138)

- Quality assurance was performed by concurrently testing CLSI-recommended quality control reference strains. 

- Table 1: Activity of dalbavancin and comparator antimicrobial agents against clinical isolates of indicated species collected from US medical centers (2017–2018)

- Figure 1: Dalbavancin MIC distributions when tested against clinical isolates of indicated species collected from US medical centers (2017–2018)

- Conclusions
  - Dalbavancin exhibited activity against 100.0% of isolates from indicated species collected in US hospitals in 2017–2018 (95% CI).
  - Dalbavancin MIC values ranged from ≤0.004 mg/L to 0.03 mg/L and MIC 
95.4 3.4

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REFERENCE


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