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AMENDED ABSTRACT

Background
Osteomyelitis represents hard-to-treat infections that usually involve the growth of resistant and antibiotic strains. Dalbavancin has demonstrated activity against Gram-positive isolates and has been considered as a candidate for osteomyelitis therapy in adults and children. This study evaluates the activity of dalbavancin against pathogens isolated from bone and joint infections (B&J) in the USA and Europe.

Methods
A total of 1184 clinical isolates, 115 (99.5% susceptible) were the most active drugs against BHS (115). Dalbavancin demonstrated potent activity against A, vancomycin (100.0% susceptible) showed as the reference standard for susceptibility, except for one vancomycin resistant (VRS) isolate. High susceptibility for ampicillin (98.4%), ceftriaxone (98.3%), and vancomycin (96.7%) were observed against MSSA, and dalbavancin had the lowest MIC and MBC results (Tables 1 and 2).

RESULTS

Table 1. Activity and spectrum of dalbavancin against contemporary Gram-positive isolates causing B&J in the USA and Europe.

Table 2. Antimicrobial activity of dalbavancin and comparator agents against contemporary Gram-positive isolates causing B&J in the USA and Europe.

CONCLUSIONS
Most tested agents demonstrated in vitro activity against MSSA (93.0% susceptible). Dalbavancin (100.0% susceptible), daptomycin (89.0% susceptible), linezolid (100.0% susceptible) and vancomycin (96.7% susceptible) were the most active against MRS.

Dalbavancin (100.0% susceptible). Linezolid (100.0% susceptible) and vancomycin (96.7% susceptible) were the most active against confirmed by the reference monitoring laboratory by standard surveillance program. Isolates were initially identified by the participating laboratory and submitted to a central monitoring laboratory (JMI Laboratories, North Liberty, IA, USA) for confirmation. The management of osteomyelitis in the adult.

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INTRODUCTION
Bone and joint infections (B&J) comprise a series of disorders, including septic arthritis, osteomyelitis, and infectious pseudo-joints. Dalbavancin is an extension of this bane associated with either hemorrhage or failure or direct inoculation so a consequence of trauma or infection from contiguous tissue. Staphylococcus aureus remains the most common pathogen responsible for acute infections, while Gram-negative organisms are usually associated with chronic infections. Infection in children occurs less frequently than adults, but it is predominantly a result of bacteremia due to S. aureus. The estimated incidence of acute osteomyelitis is about 30 and eight per 100,000 adults and children per year, respectively. Moreover, an increase in incidence of osteomyelitis in children has been observed in the recent years.

Since there is a high incidence of infections caused by community-acquired methicillin-resistant Staphylococcus aureus (MRSA) in the USA, vancomycin needs to be considered for empirical treatment. Dalbavancin was approved in the USA (2014) and Europe (2015) for the treatment of B&J with acute osteomyelitis caused by MSSA (96.7%) and has been considered as a candidate for osteomyelitis therapy in adults and children. Dalbavancin can be administered in a single dose of 1500 mg or 1000 mg followed by 500 mg each week for the treatment of ABSSSI. This study evaluates the activity of dalbavancin against pathogens isolated from B&J, including osteomyelitis.

METHODS


Figure 1. Susceptibility profile of S. aureus clinical isolates causing B&J in the studies (2011 years old) and pediatric (0-1 years old) populations. For more information, please contact:
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REFERENCES

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Dalbavancin (100.0% susceptible) was the most common pathogen associated with B&J (65.3%) was the most common pathogen associated with BJI, followed by S. aureus (43.5%) and BHS (35).

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- Linezolid (100.0% susceptible) and vancomycin (96.7% susceptible) showed in vitro activity against CoNS, and dalbavancin had the lowest MIC and MBC results (Tables 1 and 2).

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