C-824 In Vitro Activity of Oritavancin against Gram-Positive Pathogens Isolated in Canadian Hospitals from 2011 to 2013

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Abstract

Background: Oritavancin (SOR) is a semi-synthetic lipoglycopeptide that was approved by the United States Food and Drug Administration (FDA) in August 2014 for the single-dose treatment of complicated skin and skin structure infections due to Gram-positive bacteria, including methicillin-resistant Staphylococcus aureus (MRSA), Staphylococcus epidermidis (SE), vancomycin-resistant Enterococcus faecalis (VRE), and vancomycin-resistant Enterococcus faecium (VRE). Oritavancin is a hydrophobic lipoglycopeptide that incorporates a hydrophobic moiety of oritavancin without affecting its activity. SOR is orally bioavailable and active against some strains of MRSA and SE (MICs ≤0.008 µg/ml). SOR is also active against vancomycin-resistant enterococci (VRE, including vancomycin-resistant E. faecalis and vancomycin-resistant E. faecium). Oritavancin is indicated for the treatment of skin and skin structure infections due to Gram-positive bacteria, including methicillin-resistant Staphylococcus aureus (MRSA), Staphylococcus epidermidis (SE), vancomycin-resistant Enterococcus faecalis (VRE), and vancomycin-resistant Enterococcus faecium (VRE).

Results: Data for selected organisms and antimicrobial agents were presented. First, MICs for oritavancin were generated using broth microdilution (BMD) against S. aureus (9 species), E. faecalis (5 species), E. faecium (5 species), and MRSA. Oritavancin demonstrated activity against all tested gram-positive species at ≤0.008 µg/ml.

Conclusions: Oritavancin demonstrated in vitro activity equivalent to, or greater than, vancomycin, daptomycin, and linezolid against S. aureus (9 species), E. faecalis (5 species), E. faecium (5 species), and MRSA (MICs ≤0.008 µg/ml). Oritavancin susceptibility was determined using CLSI broth microdilution (BMD) against S. aureus (9 species), E. faecalis (5 species), E. faecium (5 species), and MRSA. Oritavancin demonstrated activity against all tested gram-positive species at ≤0.008 µg/ml. Oritavancin was compared to vancomycin and linezolid for susceptibility against S. aureus (9 species), E. faecalis (5 species), E. faecium (5 species), and MRSA (MICs ≤0.008 µg/ml). Oritavancin demonstrated activity against all tested gram-positive species at ≤0.008 µg/ml.

References