108. Efficacy of Dalbavancin Compared to Standard of Care for the Treatment of Osteomyelitis: A Retrospective Study
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Session: O-23. New Developments in Antibiotic Efficacy
Background. Preliminary data suggest that the efficacy of dalbavancin, a long-acting lipoglycopeptide, may be similar to current standard of care (SoC) treatment options for osteomyelitis, and may be associated with fewer treatment related adverse events. This study assessed the incidence of treatment failure in patients receiving either dalbavancin or SoC for the treatment of osteomyelitis.
Methods. This was a multi-center, retrospective, observational cohort study of adult patients diagnosed with osteomyelitis. Patients were matched 1:2 either dalbavancin (1500 mg infused intravenously on days 1 and 8) or SoC for osteomyelitis (oral or intravenous antibiotics) by Charlson Comorbidity Index, site of infection, and causative pathogen. The primary objective was to determine the incidence of treatment failure within a one-year follow-up period. Secondary objectives included hospital length of stay (LOS), infection related one year readmission rates, and treatment related adverse events.
Results. A total of 132 patients were matched to receive dalbavancin (n = 42) or SoC (n = 90). Baseline characteristics were similar between the two treatment groups. The majority of patients had lower extremity osteomyelitis (76.2% vs 73.3%) with an etiology of diabetic foot infection (45.2% vs 46.7%) in the dalbavancin and SoC groups, respectively. Treatment failure was similar between those who received dalbavancin (21.4% vs 23.3%, p = 0.808). Patients who received dalbavancin had a significantly shorter hospital LOS compared to patients who received SoC regimens (5.2 days vs 7.2 days, p = 0.013). There was no difference in the rates of infection related readmissions between the dalbavancin and the SoC group (31% vs 31.1%, p = 0.985). Peripherally inserted central catheter line related complications were reported in 17.8% of patients in the SoC group, however the lower incidence of overall adverse events in the dalbavancin group was not significantly different than the SoC group (21.4% vs 36.7%, p = 0.08).
Conclusion. Dalbavancin administered as a two-dose regimen is a safe and effective option for the treatment of osteomyelitis.
Disclosures. Dustin R. Carr, PharmD, BCPS, BCIDP, AAHIVP, Merck (Speaker’s Bureau); Thomas L. Walsh, MD, Accelerate Diagnostics (Other Financial or Material Support, speaking fees)

109. Evaluating Predictive Value of Surgical Resected Proximal Bone Margins in Diabetic Foot Osteomyelitis with Clinical Outcomes at One Year
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Session: O-23. New Developments in Antibiotic Efficacy
Background. Diabetic foot osteomyelitis (DFO) remains a significant comorbidity in diabetes and often requires both surgical and medical interventions. Surgical bone resection with proximal margins is performed for treatment at our institution to guide antimicrobial therapy. Optimal antibiotic duration often remains unclear, along with clinical outcomes with negative margins. We evaluate if negative bone margins predict outcomes of DFO at one year in our county hospital.
Methods. A retrospectively cohort study assessed adult patients undergoing DFO amputations between 9/2016 to 9/2019. Patient data collected included demographics, smoking history, hemoglobin A1c (HbA1c), basic labs, microbiology, antibiotic duration, bone margin pathology. Physician review of records determined if intervention was successful. Primary outcome was met if no further amputation at the same site was required in the following 12 months. Secondary objectives included hospital length of stay (LOS), failure after a one-year follow-up period. Secondary objectives included hospital length of stay (LOS), infection related one year readmission rates, and treatment related adverse events.
Results. A total of 132 patients were matched to receive dalbavancin (n = 42) or SoC (n = 90). Baseline characteristics were similar between the two treatment groups. The majority of patients had lower extremity osteomyelitis (76.2% vs 73.3%) with an etiology of diabetic foot infection (45.2% vs 46.7%) in the dalbavancin and SoC groups, respectively. Treatment failure was similar between those who received dalbavancin (21.4% vs 23.3%, p = 0.808). Patients who received dalbavancin had a significantly shorter hospital LOS compared to patients who received SoC regimens (5.2 days vs 7.2 days, p = 0.013). There was no difference in the rates of infection related readmissions between the dalbavancin and the SoC group (31% vs 31.1%, p = 0.985). Peripherally inserted central catheter line related complications were reported in 17.8% of patients in the SoC group, however the lower incidence of overall adverse events in the dalbavancin group was not significantly different than the SoC group (21.4% vs 36.7%, p = 0.08).
Conclusion. Dalbavancin administered as a two-dose regimen is a safe and effective option for the treatment of osteomyelitis.
Disclosures. Dustin R. Carr, PharmD, BCPS, BCIDP, AAHIVP, Merck (Speaker’s Bureau); Thomas L. Walsh, MD, Accelerate Diagnostics (Other Financial or Material Support, speaking fees)

Clinical demographics, antibiotic usage, microbiology and results of patients presenting for diabetic foot osteomyelitis needing surgical intervention are presented. Abbreviations: HbA1c - Hemoglobin A1c; MSSA - methicillin-susceptible Staphylococcus aureus; MRSA - methicillin-resistant Staphylococcus aureus; CRP - C-reactive protein; ESR - erythrocyte sedimentation rate
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110. A Phase 3, Multicenter, Double-blind, Randomized Clinical Trial to Evaluate the Efficacy and Safety of Ceftolozane/Tazobactam Plus Metronidazole Versus Meropenem in Chinese Participants With Complicated Intrabdominal Infections
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Session: O-23. New Developments in Antibiotic Efficacy
Background. In China, the prevalence of infections due to multidrug-resistant gram-negative bacteria is high and additional treatment options for complicated intra-abdominal infections (cIAI) are needed. This study compared the efficacy and safety of ceftolozane/tazobactam (C/T) + metronidazole (MTZ) versus meropenem (MEM) + placebo (pbo) for the treatment of cIAI in adult Chinese participants.
Methods. This was a phase 3, double-blind study conducted at 21 centers in China (NCT03830033). Participants aged 18-75 years with cIAI requiring surgical intervention within 24 hours of study drug administration were stratified by site of infection and randomized 1:1 to receive 1.5 g C/T (1 g ceftolozane and 0.5 g tazobactam) + 0.5 g MTZ administered intravenously (IV) every 8 hours (q8h) or 1 g MEM + pbo administered IV q8h for 4-14 days. The primary endpoint was clinical cure at test of cure (TOC) in the clinically evaluable (CE) population. Secondary endpoints included rates of clinical cure, per-patient microbiologic response, per-pathogen microbiologic response, and adverse events (AE). Non-inferiority for clinical cure at TOC in the CE population was confirmed if the lower bound of the 2-sided 95% CI for the between-treatment difference in the clinical cure rate was larger than –12.5%.