Abstract:

Objective: To assess the efficacy and safety of dalbavancin compared to standard-of-care (SOC) or vancomycin and daptomycin in invasive infections due to suspected or confirmed Gram-positive organisms.

Methods: Retrospective cohort of adults who received dalbavancin or SOC on discharge or as an outpatient from 12/2016 to 11/2019. Indications were osteoarticular infection (OAI), infective endocarditis (IE), or other bloodstream infection (BSI). Primary endpoint was 90-day infection-related readmission (IRR); secondary endpoints included time-to-IRR, frequency of adverse drug events (ADEs), and all-cause readmission and mortality.

Results: 215 patients were included: 70 (33%) receiving dalbavancin, and 145 (67%) receiving SOC. Indications were OAI (47%), IE (27%), and other BSI (26%). OAI was more common in patients on dalbavancin compared with those receiving SOC (70% vs. 37%, P<0.001). Dalbavancin patients had shorter median (interquartile range) length of stay (LOS) prior to drug initiation compared with those receiving SOC (10 [7-17] vs. 13 [9-19], P=0.021). IRR incidence was 17% for dalbavancin patients and 28% for SOC patients. Dalbavancin use was independently associated with lower IRR (adjusted odds ratio, 0.10; 95% confidence interval, 0.04-0.31). There was longer median (IQR) time-to-IRR in the dalbavancin group (43 [30-87] vs. 23 [11-63] days, P=0.039), but no differences in all-cause readmission or mortality. Treatment-related ADE incidence was 3% and 14% for the dalbavancin and SOC groups, respectively (P=0.013). Infusion reactions (1/2) and catheter-related complications (1/2) were the most common dalbavancin ADEs; catheter-related complications (14/21), nephrotoxicity (3/21), rhabdomyolysis (2/21), and rash (2/21) were the most common SOC ADEs.

Conclusions: Dalbavancin use was associated with lower 90-day IRR, a shorter hospital LOS prior to therapy, and longer time-to-IRR compared with SOC.

Reference: