

Title: Comparison of Glycopeptide or Lipopeptide versus Beta-Lactam for the Treatment of Enterococcus faecalis Bacteremia: a National Retrospective Cohort Study of Veterans Affairs Patients

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Introduction: Enterococcus species are a significant cause of bloodstream infections and carry a high risk for mortality. Recent studies have shown the overall incidence of 30-day all-cause mortality in enterococcal bacteremia to range between 7-40%. The optimal treatment for Enterococcus faecalis (EF) bacteremia has not been well studied. To date, three studies have compared the risk of mortality in enterococcal bacteremia treated with glycopeptides compared to beta-lactam therapy with mixed results reported. The purpose of this study is to compare outcomes of patients with ampicillin-susceptible EF bacteremia treated with glycopeptide or lipopeptide therapy compared to beta-lactam therapy.

Methods: A retrospective review of national database for Veterans Affairs Medical Centers admitted patients between January 1, 2008 and December 31, 2017. Patients ≥ 18 years of age with clinically significant ampicillin-susceptible EF bacteremia receiving appropriate definitive therapy with either glycopeptide, lipopeptide, or beta-lactam therapy will be included. Baseline demographics and clinical characteristics of patients will be obtained from the national Corporate Data Warehouse. The primary outcome analyzed will be incidence of 30-day all-cause mortality. Secondary outcomes include incidence of recurrent EF bacteremia, one-year all-cause mortality, C. difficile infections, hospital length of stay, intensive care unit length of stay, and duration of bacteremia. Descriptive statistics will be conducted for demographics data. Between group differences will be analyzed using Mann-Whitney U test and Fisher's exact for continuous and categorical values, respectively.

Results: Research in Progress

Conclusions: Research in Progress