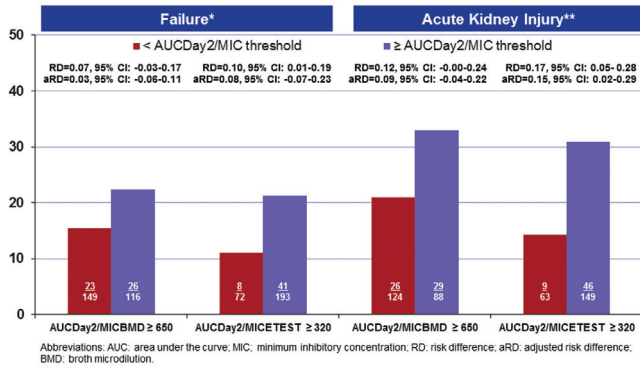


BMD and ETEST were 1/1 and 1.5/1.5 mg/l, respectively. Failure occurred in 18%; 26% had AKI. Mean (SD) VAN duration was 18 (14) days. Mean (SD)  $AUC_{DAY2}/MIC_{BMD} \geq 650$  was 586.9 (235.5) and 44% and 73% of patients achieved an  $AUC_{DAY2}/MIC_{BMD} \geq 650$  and  $AUC_{DAY2}/MIC_{ETEST} \geq 320$ . In the multivariate analyses (Figure 1), failure was not significantly different between  $AUC_{DAY2}/MIC$  groups. In contrast, AKI was significantly more common in patients with an  $AUC_{DAY2}/MIC_{ETEST} > = 320$ .

**Conclusion.** Achievement of higher VAN  $AUC_{DAY2}/MIC$  exposures for patients with MRSA BSIs were not associated with better outcomes and were found to result in increased AKI. Clinicians should assess the benefits vs. risks of using VAN regimens that confer high  $AUC_{DAY2}/MIC$  exposures for patients with MRSA BSIs.

**Figure 1. Comparisons of Outcomes between  $AUC_{DAY2}/MIC$  Exposure Groups**



Abbreviations: AUC, area under the curve; MIC, minimum inhibitory concentration; RD, risk difference; aRD, adjusted risk difference; BMD, broth microdilution.  
 \*All variables associated with failure at  $P \leq 0.1$  and considered at model entry included: prior receipt of vancomycin, type of MRSA infection (community vs. hospital/healthcare), "other" source of infection, pre-existing valvular heart disease, heart failure, APACHE, age, creatinine clearance at baseline, infective endocarditis, and presence of prosthetic material.  
 \*\*Patients with Baseline Serum Creatinine ( $< 2.0$  mg/dL). All variables associated with acute kidney injury at  $P \leq 0.1$  and considered at model entry included: race, prior surgery, urinary source, prior hospital length of stay, creatinine clearance baseline, and prior vancomycin.

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**986. Comparing the Outcomes of Adults with *Enterobacteriaceae* Bacteremia Receiving Short-Course vs Prolonged-Course Antibiotic Therapy**

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**Session:** 132. Advances in Management of Bacteremia and Sepsis  
 Friday, October 6, 2017: 10:30 AM

**Background.** The recommended duration of antibiotic treatment for *Enterobacteriaceae* bacteremia is between 7 and 14 days. We compared the clinical outcomes of patients receiving short-course (6–10 days) vs prolonged-course (11–15 days) antibiotic therapy for *Enterobacteriaceae* bacteremia.

**Methods.** A retrospective cohort study was conducted at The Johns Hopkins Hospital, The University of Maryland Medical Center, and The Hospital of the University of Pennsylvania including patients with monomicrobial *Enterobacteriaceae* bacteremia treated with *in vitro* active antibiotic therapy in the range of 6–15 days between 2008 and 2014. 1:1 nearest neighbor propensity score matching without replacement was performed, prior to regression analysis, to estimate the risk of all-cause mortality within 30 days after the end of antibiotic treatment for patients

receiving short vs. prolonged durations of antibiotic therapy. Secondary outcomes included *Clostridium difficile* infection (CDI) and the emergence of multidrug-resistant Gram-negative (MDRGN) bacteria within 30 days after the end of antibiotic therapy.

**Results.** A total of 1,769 patients met eligibility criteria. There were 385 matched pairs who were well-balanced on baseline characteristics. The median duration of therapy in the short-course group and prolonged-course group was 8 days (interquartile range (IQR) 7–9 days) and 15 days (IQR 13–15 days), respectively. No difference in all-cause mortality between short- and prolonged-course treatment groups was observed (adjusted hazard ratio [aHR] 1.00; 95% CI 0.62–1.63). Rates of CDI were similar between the treatment groups (OR 1.17; 95% CI 0.39–3.51). There was a non-significant protective effect of short-course antibiotic therapy on the emergence of MDRGN bacteria (OR 0.59; 95% CI 0.32–1.09  $P = 0.09$ ).

**Conclusion.** Short courses of antibiotic therapy yields similar clinical outcomes to prolonged courses of antibiotic therapy for *Enterobacteriaceae* bacteremia, and may protect against subsequent MDRGN emergence.

**Disclosures.** All authors: No reported disclosures.

**987. Infectious Disease Consultation Is Associated with Decreased Mortality with *Enterococcal* Bloodstream Infections**

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**Background.** *Enterococcal* bloodstream infections (EBSI) have been attributed with significant morbidity and mortality. The objective of this study was to determine whether IDC is associated with improved mortality in patients hospitalized with EBSI.

**Methods.** This is a cross-sectional study of patients admitted to the University of Alabama Health System between January 1, 2015 and June 30, 2016 who had EBSI. Patients who died within 2 days of hospitalization were excluded. Categorical variables were analyzed with chi-square or Fisher's exact test and continuous variables were analyzed with a *t*-test or Wilcoxon rank-sums test when appropriate. A *P*-value  $< 0.05$  was considered significant. Logistic regression was used to estimate odds ratios (ORs) and 95% confidence intervals (CI) for factors associated with 30-day in-hospital mortality.

**Results.** A total of 213 patients met the case definition. One hundred and thirty-four (63%) received IDC. Baseline patient demographics and comorbidities were similar in both groups. Patients with IDC were more likely to have repeated blood cultures (99% vs. 72%,  $P < 0.001$ ), echocardiogram performed (77% vs. 46%,  $P < 0.001$ ), and interventions for source control (19% vs 6%,  $P = 0.01$ ). Patients without IDC were more likely to have inappropriate antibiotic treatment or no antibiotics (20% vs. 0%,  $P < 0.001$ ) as well as inappropriate duration of therapy (54% vs. 10%,  $P < 0.001$ ). There were no differences in the rates of recurrent bacteremia or readmission within 60 days. Patients who did not receive IDC had higher 30-day in-hospital mortality (27% vs. 13%,  $P = 0.02$ ). Having an echocardiogram (OR 2.75, 95% CI 1.36–5.55), surgical intervention (OR 3.11, 95% CI 1.07–9.05) and an IV catheter (OR 3.90, 95% CI 1.39–10.88) were associated with increased likelihood of IDC while inappropriate duration of antibiotics was associated with an 87% decreased likelihood of IDC (OR 0.13, 95% CI 0.06–0.29). The strongest association observed with 30-day mortality was inappropriate duration of antibiotics (OR 4.93, 95% CI 1.93–12.61).

**Conclusion.** IDC was associated with reduced 30-day in-hospital mortality in patients with EBSI. Although further investigation is warranted, the results of this study suggest that early involvement of ID specialists in EBSI may lead to better outcomes.

**Disclosures.** All authors: No reported disclosures.

**988. "Big data" and Gram-negative Resistance: A Multiple Logistic Regression Model Using EMR Data to Predict Carbapenem Resistance in Patients with *Klebsiella pneumoniae* Bloodstream Infection**

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**Background.** The timely identification of carbapenem resistance is essential in the management of patients with *Klebsiella pneumoniae* bloodstream infection (BSI). An algorithm using electronic medical record (EMR) data to quickly predict resistance could potentially help guide therapy until more definitive resistance testing results are available.

**Methods.** All cases of *K. pneumoniae* BSI at Mount Sinai Hospital from September 2012 through September 2016 were identified. Cases of persistent BSI or recurrent BSI