On multivariable logistic regression analysis, only relapsed/refractory malignancy was identified as an independent predictor of global clinical failure (odds ratio, OR, 9.43; 95% confidence interval, CI, 1.17–76.9; $P = 0.035$). Duration of treatment was not associated with global clinical cure (OR, 2.92; 95% CI, 0.51–16.7; $P = 0.23$).

Conclusion. No differences in clinical outcomes were seen in patients with active hematologic malignancies who received 2 weeks vs. >2 weeks of antibiotic therapy for the treatment of U-SAB, although confirmation of our findings in a larger study is warranted.

Figure 1: Clinical Outcomes in Patients with Hematologic Malignancies and Uncomplicated SAB Treated with Standard vs Prolonged Antibiotic Duration

	Standard course (n=45)	Prolonged course (n=44)	p-value
Global clinical cure	37 (82%)	42 (96%)	0.09
Relapse SAB	3 (7%)	2 (5%)	> 0.99
Hospital length of stay[†]	19 (7, 32)	25 (10, 38)	0.25
Unplanned hospital readmission	11 (24%)	14 (32%)	0.49
Vancomycin-induced nephrotoxicity	6 (29%)	1 (7%)	0.20

[†]Median (inter-quartile range); otherwise reported as number (%)

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

1072. Streamlining to Oral β-Lactam vs. Fluoroquinolone as Definitive Therapy for Enterobacteriaceae Bacteremia

Karen Fong, PharmD, AAHIVP[1]; Yanina Dubrovskaya, PharmD, BCPS (AQ-ID), AAHIVP[1]; Justin Siegfried, PharmD, BCPS[1]; John Papadopoulos, BS, PharmD, FCCM, BCCCP, BCNSP[1]; Vinh Pham, MD, PhD[2] and Shin-Pung (Polly) Jen, PharmD, BCPS (AQ-ID), AAHIVP[1]; [1]Pharmacy, NYU Langone Health, New York, New York, [2]Medicine, Division of Infectious Diseases, NYU Langone Health, New York, New York

Session: 131. Bacteremia and Endocarditis
Friday, October 5, 2018: 12:30 PM

Background. Oral treatment strategies for Enterobacteriaceae bacteremia (EB) are controversial, with both β-lactams (BL) and fluoroquinolones (FQ) used in clinical practice. FQ may be preferred for their high bioavailability, but other oral antibiotics are needed due to concerns of resistance and adverse effects. As an effort to facilitate antibiotic stewardship, BL should be explored as an additional oral option for EB treatment.

Methods. This retrospective study compared clinical characteristics and outcomes in patients with EB treated with BL vs. FQ as definitive oral therapy between January 2013 and July 2017. Adult patients diagnosed with their first incidence of EB and transitioned from IV antibiotics to either study antibiotic class were included. Primary and secondary outcomes assessed recurrence, collateral damage, readmission, and all-cause mortality.

Results. A total of 173 patients were included (BL $n = 59$, FQ $n = 114$). Median age was 70 years, Pitt bacteremia score was 2 (range 0–7), and Charlson Comorbidity Index was 5 (0–12); all were comparable between groups. Urinary source of infection was most common (57%). The majority of oral BL courses used cefpodoxime (63%). More patients in FQ vs. BL had a prior transplant (9% vs. 0%, $P = 0.05$), presence of abscess (11% vs. 0%, $P = 0.01$), and Infectious Diseases consultation (63% vs. 34%, $P = 0.0001$). Onset of EB in an intensive care unit was more common in BL vs. FQ (24% vs. 10%, $P = 0.01$). Median duration of IV and oral therapy was 5 vs. 4 days, $P = 0.22$ and 11 vs. 12 days, $P = 0.17$ in BL and FQ, respectively. Recurrence within 90 days was 7% in BL and 4% in FQ, $P = 0.49$ (adjusted OR 1.44, 95% CI 0.31–6.66; $P = 0.64$). Multivariate analysis identified liver cirrhosis (OR 16.89, 95% CI 1.06–268.32; $P = 0.05$) as an independent predictor of recurrence within 90 days. All secondary outcomes were similar between BL vs. FQ: superinfection within 90 days (10% vs. 9%, $P = 0.76$), *C. difficile* infection within 90 days (3% vs. 1%, $P = 0.27$), 30-day readmission (15% vs. 20%, $P = 0.43$), all-cause 30-day mortality (0% vs. 3%, $P = 0.55$).

Conclusion. In our cohort of patients with EB, clinical outcomes were similar between those treated with oral BL compared with FQ. Oral BL may be considered for definitive treatment of EB, although further investigation in larger studies is needed.

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

1073. Predictors of Vancomycin Switch or Escalation in Patients With Methicillin-Resistant *Staphylococcus aureus* Bloodstream Infection

Abdalhamid M. Lagnf, MPH[1]; Sarah Jorgensen, PharmD, BCPS, AAHIVP[1]; Evan J. Zasowski, PharmD, MPH[2]; Trang D. Trinh, PharmD, MPH[3]; Sahil Bhatia, BS[1]; Susan L Davis, PharmD[4] and Michael J. Rybak, PharmD, MPH, PhD[1,5]; [1]Anti-Infective Research Laboratory, Department of Pharmacy Practice, Wayne State University, Eugene Applebaum College of Pharmacy and Health Sciences, Detroit, Michigan, [2]Department of Pharmacy Practice and Translational Research, University of Houston College of Pharmacy, Houston, Texas, [3]Department of Clinical Pharmacy, University of California, San Francisco, School of Pharmacy, San Francisco, California, [4]Henry Ford Health-System, Detroit, Michigan, [5]Detroit Medical Center, Detroit, Michigan

Session: 131. Bacteremia and Endocarditis
Friday, October 5, 2018: 12:30 PM

Background. Vancomycin (VAN) is the primary agent for the treatment methicillin-resistant *Staphylococcus aureus* (MRSA) bloodstream infections (BSI). VAN is frequently combined with or switched to a second anti-MRSA agent for the treatment of serious BSI because VAN monotherapy has been linked to treatment failures. We aimed to determine the potential risk factors for patients with MRSA BSI who switched or had therapy escalated.

Methods. This was a multicenter, retrospective cohort study of adults (≥18 years) initially treated with VAN (>24 hours) for MRSA BSI between 2006 and 2018. Patients with a respiratory source were excluded. Baseline clinical and infection characteristics were compared between patients who received VAN as the sole anti-MRSA agent and continued on VAN until discharge and patients who switched or had a second anti-MRSA agent added during their admission (switch/escalate group). Multivariable logistic regression was performed to identify independent predictors of therapy switch or escalation.

Results. A total of 195 patients were included (66 VAN and 129 switch/escalate). The mean (SD) age of the study population was 56 (15.5) years, 68.2% were male, and 81.0% were African-American. Most (80%) of patient had community-onset BSI. The median (IQR) Charlson Comorbidity index and Acute Physiology and Chronic Health Evaluation (APACHE) II scores were 3 (1–5) and 14 (8–20), respectively. The major sources of BSI were skin/soft tissue (24.6%), infective endocarditis (24.1%), and bone/joint (23.1%). Median (IQR) time to switch/escalation was 67 (44–97) hours. In multivariable logistic regression analysis, infective endocarditis (aOR 6.2, 95% CI 2.2–16), hospitalization in the past 90 days (aOR 2.0, 95% CI 1.0–4.0), and APACHE II (aOR 1.07, 95% CI 1.01–1.12) were independently associated with switch/escalation.

Conclusion. We have identified a number of baseline clinical and infection characteristics that should be taken into account for clinicians to predict the likelihood of switch or escalation in vancomycin treated patients with MRSA BSI. Further studies evaluating the impact of up front alternative therapies in these higher risk patients are needed.

Disclosures. **S. L. Davis**, Achaogen: Scientific Advisor, Consulting fee. Allergan: Scientific Advisor, Consulting fee. Melinta: Scientific Advisor, Consulting fee. Nabriva: Scientific Advisor, Consulting fee. Zavante: Scientific Advisor, Consulting fee. **M. J. Rybak**, Allergan: Consultant, Grant Investigator and Speaker's Bureau, Research grant and Research support. Achaogen: Consultant, Grant Investigator and Speaker's Bureau, Consulting fee, Research grant and Research support. Bayer: Consultant, Grant Investigator and Speaker's Bureau, Consulting fee, Research grant and Research support. Melinta: Consultant, Grant Investigator and Speaker's Bureau, Consulting fee, Research grant and Research support. Merck: Consultant, Grant Investigator and Speaker's Bureau, Consulting fee, Research grant and Research support. Theravance: Consultant, Grant Investigator and Speaker's Bureau, Consulting fee, Research grant and Research support. Sunovian: Consultant, Grant Investigator and Speaker's Bureau, Consulting fee, Research grant and Research support. Zavante: Consultant, Grant Investigator and Speaker's Bureau, Consulting fee, Research grant and Research support. NIAID: Consultant, Grant Investigator and Speaker's Bureau, Consulting fee, Research grant and Research support.

1074. Management and Outcomes of Infective Endocarditis Due to Nutritionally Variant Streptococci

Madiha Fida, MD[1]; Tarab Mansoor, MBBS[2]; Omar Abu Saleh, MD[3]; Ahmed Hamdi, MD[1]; Daniel C. Desimone, MD[4]; Walter R. Wilson, MD, FIDSA[5]; James Steckelberg, MD, FIDSA[3]; Larry M. Baddour, MD[3] and M. Rizwan Sohail, MD[6]; [1]Infectious Disease, Mayo Clinic, Rochester, Minnesota, [2]Aga Khan University, Karachi, Pakistan, [3]Division of Infectious Diseases, Mayo Clinic, Rochester, Minnesota, [4]Infectious Disease, Mayo Clinic, College of Medicine, Rochester, Minnesota, [5]Infectious Diseases, Mayo School of Graduate Medical Education, Rochester, Minnesota, [6]Infectious Diseases and Cardiovascular Diseases, Mayo School of Graduate Medical Education, Rochester, Minnesota

Session: 131. Bacteremia and Endocarditis
Friday, October 5, 2018: 12:30 PM

Background. Nutritionally variant streptococci (NVS) are an infrequent cause of infective endocarditis (IE) and management recommendations are based on weak levels of evidence largely derived from case reports, small case series, and animal models of experimental endocarditis. Moreover, taxonomic changes have led to some confusion in designation of these organisms.

Methods. We retrospectively collected and analyzed data from 33 patients with NVS IE from 1970 to 2017. Only patients who met modified Duke Criteria for IE were included.

Results. Mean patient age was 55 years and 61% were males. The most common comorbidities included diabetes mellitus (12%), malignancy (3%), heart failure (16%), coronary artery disease (25%), and chronic liver disease (9%). Predisposing valve abnormalities included rheumatic heart disease (11%), bicuspid aortic valve (22%), transplant valvulopathy (3%), mitral valve prolapse (3%), and congenital heart disease (11%). Cultures were reported as NVS (70%), *Granulicatella* species (18%) and *Abiotrophia* species (12%). Echocardiogram findings included vegetations (67%), new regurgitation (55%), perivalvular abscess (3%), mitral valve prolapse (3%), and ruptured mitral valve chordae (3%). Both prosthetic (26%) and native valve IE (74%) was seen, and the valves involved were aortic (37%), mitral (50%) and both aortic and mitral (13%). Complications were seen in 27% of patients, including heart failure (17%), splenic infarct (11%), stroke (8%), mycotic aneurysm (3%), and glomerulonephritis (2%). In vitro susceptibility to penicillin, ceftriaxone, and vancomycin was 88%, 80%, and 100%, respectively. The majority (77%) of patients were treated with a combination of β-lactam and aminoglycoside. Median duration of treatment was 33 days.