Gran-stain. Numerous studies have shown that RDTs in BSIs improve clinical outcome, particularly with antimicrobial stewardship (AMS) intervention. Little is known regarding outcomes in GN BSI without vs. with AMS intervention.

**Methods.** A retrospective three-part quasi-experimental study of adult patients with GN BSI from December 2014 to April 2018. VBC-GN was introduced September 2015 and AMS review was implemented October 2017. Antibiotics were appropriate if active in vitro against isolated GN. Optimal antibiotics were not overly broad, accounted for resistance source of infection, and other infecting organisms. Comparisons were made using Chi-squared for nominal variables and Kaplan–Meier with log-rank for time to event analysis.

**Results.** In total, 772 patients met inclusion. The most common source was urinary (30.1%) and E. coli was the most common GN (37.9%). Infectious Disease consults increased with each group (50.6% vs. 67.9% vs. 81.8%, P < 0.001). More patients pre-RDT (37.36%) and RDT+AMS (35.6%) compared with RDT only (24.6%) were critically ill, P = 0.001. Optimal therapy was achieved in more patients in RDT+AMS only (79%) and RDT+AMS (86%) groups compared with pre-RDT (66%), P < 0.001. More patients in the pre-RDT group (44.7%) were appropriately de-escalated compared with RDT only (31.6%) and RDT + AMS (38.7%), P = 0.06. Appropriate escalation of antibiotics was much higher in the RDT-only group (38.3%) vs. pre-RDT groups (15.2%) and RDT + AMS (14.2%), P = 0.019. Median post-BSI length of stay (8.2 vs. 7.1 to 8.5 days, P = 0.226) and inpatient mortality (10.8% vs. 14.3% vs. 11.4%, P = 0.493) were similar.

**Conclusion.** With the implementation of VBC-GN RDT there was a significantly decreased time to optimal therapy, mainly based on necessary antibiotic escalation. Antibiotic de-escalation remained a challenge, even with active AMS review.

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

142. Mean Platelet Volume Is Associated with Embolic Events of Infectious Endocarditis

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**Session:** 37. Bacteremia, CLABSI, and Endovascular Infections Thursday, October 3, 2019: 12:15 PM

**Background.** Increased mean platelet volume (MPV) is a marker of more active and ongoing platelet aggregation. There is limited evidence that increased MPV is associated with more embolic disease in infectious endocarditis (IE). This study seeks to validate this relationship and assess for effect modification by injection drug use.

**Methods.** Records of all patients aged ≥18 admitted to Wake Forest Baptist Medical Center (WBFMC) from January 1, 2004 to September 30, 2015 with an ICD-9 code for IE and without a simultaneous ICD-9 code indicating mechanical complication of cardiac device, implant and graft were reviewed. Inclusion criteria consisted of possible or definite IE by modified Duke criteria and labs drawn within 24 hours of presentation. Uni-variate analyses were assessed by Chi-square, Fisher’s exact test, Mann-Whitney U and Student’s t-test. Multiple logistic regression assessed the association between MPV and embolic phenomena while controlling for potential confounders.

**Results.** A total of 237 cases (80 IDU-IE and 157 non-IDU IE) met criteria for analysis suffering 115 (48.5%) embolic events to the brain and/or lungs (41.4% in non-IDU IE and without a simultaneous ICD-9 code indicating “mechanical complication of cardiac device, implant and graft”). There was no evidence of an interaction between MPV and drug use nor evidence of a quadratic association between MPV and embolic disease in infectious endocarditis (IE). This study seeks to validate this relationship and assess for effect modification by injection drug use.

**Conclusion.** Increased MPV is significantly associated with more embolic disease in IE. While additional covariates are taken into consideration.

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

144. Organism Identification and Antibiotic Susceptibilities with Verigene Blood Culture Assay: A Retrospective Single-Center Study

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**Background.** The Verigene blood culture assay is a rapid molecular testing platform for positive blood cultures. Verigene detects a limited number of bacteria and a limited number of antibiotic resistance determinants. While certain Verigene results have clear implications for optimal antibiotic therapy prior to complete antibiotic susceptibility testing, others do not. The purpose of this study was to compare the results of the Verigene blood culture assay with standard organism identification and antibiotic susceptibility testing.

**Methods.** This was a retrospective cohort study conducted at a single academic medical center. The study period was 14 months from November 2017 to December 2018. All Verigene results from the study period were reviewed and compared with the results of standard organism identification and antibiotic susceptibility testing. Organism identification and antibiotic susceptibility testing were performed by Vitek MS and Vitek 2. Duplicate results from the same patient were excluded. The primary outcome was the percentage of blood cultures correctly identified by Verigene. Secondary outcomes included the antibiotic susceptibility of organisms identified by Verigene in the presence and absence of resistance determinants and the identity and frequency of organisms not detected by Verigene.

**Results.** A total of 782 Verigene results were screened. After exclusions, 675 Verigene results including 737 organisms from 597 patients were included. Of 737 organisms, Verigene correctly identified 611 (82.9%), incorrectly identified 19 (2.6%) and was unable to identify 107 (14.5%) off-panel organisms. Tables 1 and 2 outline the antibiotic susceptibility of organisms by the presence or absence of resistance determinants in Gram-negative and Gram-positive bacteria, respectively. Table 3 describes the identities of the organisms not detected by Verigene, stratified by Gram stain result.

**Conclusion.** The Verigene blood culture assay demonstrated accuracy in identifying organisms and predicting antibiotic susceptibility. These results will help inform the prospective interpretation of Verigene results and subsequent antibiotic selection at the study institution.