and LOS (2.2 ± 0.6 vs. 1.8 ± 0.8 days) were similar for D-test positive and negative patients, respectively. In addition, one (3.1%) patient had documented diarrhea, but there were no reports of *C. difficile*. No patients were readmitted for SSTIs during the study time frame.

Conclusion. In our study, clindamycin was effective in treating SSTIs with or without a positive D-test result. More studies are warranted to further evaluate D-test results and their correlation to clinical cure and infection recurrence.

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

2361. Factors Associated With Sepsis Development in Cellulitis. A Prospective Analysis of 606 Episodes in Adult Patients

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Session: 249. Skin and Skin Structure Infection
Saturday, October 6, 2018: 12:30 PM

Background. Cellulitis, a frequent cause of admission of adult patients to medical wards, occasionally evolves to sepsis. In this study, we analyze the factors related to sepsis development.

Methods. Prospective and observational study of 606 adult patients with cellulitis admitted to several Spanish hospitals. Comorbidities, microbiological, clinical, laboratory, diagnostic, and treatment data were analyzed. Sepsis was diagnosed according to the criteria of the 2016 International Sepsis Definitions Conference. Multiple logistic regression modeling was performed to determine the variables independently associated with sepsis development.

Results. Mean age was 63.4 years and 51.8% were men. Overall 65 (10.7%) patients developed sepsis, 7 (10.8%) of whom died, but only 4 (6.2%) due to cellulitis. Drawing of blood ($P < 0.0001$) or any ($P < 0.0001$) culture, and identification of the agent ($P = 0.005$) were more likely among septic patients. Septics had also a longer duration of symptoms ($P = 0.04$), higher temperature ($P = 0.03$), more extensive cellulitis ($P = 0.02$), higher leukocyte ($P < 0.0001$) and neutrophil ($P < 0.0001$) counts, serum creatinine ($P = 0.001$), and CRP ($P = 0.008$) than non-septics. Regarding therapy, septic patients were more likely to undergo changes in the initial antimicrobial regimen ($P < 0.0001$), received more antimicrobials ($P < 0.0001$), were intravenously treated for longer ($P = 0.03$), and underwent surgery more commonly ($P = 0.01$) than non-septics. Death ($P = 0.002$), leukocyte counts ($P = 0.002$), serum creatinine ($P = 0.003$), drawing of blood cultures ($P = 0.004$), change of the initial antimicrobial regimen ($P = 0.007$) and length of cellulitis ($P = 0.009$) were independently associated with sepsis development in the multivariate analysis. The area under the ROC curve of a formula derived from blood leukocytes and serum creatinine for predicting sepsis development was 0.732 (95% CI 0.659–0.805), $P < 0.0001$, and its most discriminant cutoff value had a sensitivity 67.7% and specificity 74.4% for this purpose.

Conclusion. Death, increased blood leukocytes and serum creatinine, blood culture drawn, modification of the initial antimicrobial regimen, and maximum length of cellulitis were associated with sepsis development in cellulitis patients.

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

2362. Emergency Department Resource Utilization After Implementation of a Dalbavancin Pathway for Skin and Soft-Tissue Infections

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Session: 249. Skin and Skin Structure Infection
Saturday, October 6, 2018: 12:30 PM

Background. Dalbavancin has an extended duration of activity allowing for single-dose treatment of skin and soft-tissue infections (SSTI). An SSTI treatment pathway in the University of Maryland Medical Center (UMMC) Emergency Department (ED) was revised in December of 2016 to add dalbavancin for patients with barriers to treatment adherence as a means of admission avoidance. The purpose of this study was to describe ED resource utilization and outcomes in the patients who received dalbavancin.

Methods. Retrospective evaluation of patients who received dalbavancin in the UMMC ED for an SSTI between December 2016 and March 2018. The primary outcome was 7-day ED revisit after dalbavancin administration for SSTI. Secondary outcomes included immediate hospital admission, 7-day ED revisit for non-SSTI indication, and outpatient follow-up visit attendance.

Results. Twenty-four patients received dalbavancin during the study period; 75% were persons who inject drugs (PWID), 46% had a history of prior SSTIs, 17% had HIV/AIDS, 13% were obese. The majority of patients, 22/24 (92%), had CREST I classified cellulitis and were not otherwise candidates for admission. Indications for dalbavancin included failure of oral antibiotics (42%), concern for follow-up (33%), and homelessness (25%). In the ED, 11 (46%) patients had imaging, 6 (25%) had bedside incision and drainage, 2 (8%) blood cultures and 5 (21%) wound cultures, of which 2 grew MRSA and 3 streptococci. Seven of the 24 patients (29%) returned to the ED within 7 days of dalbavancin with a chief complaint related to SSTI. Seven (29%) patients attended their scheduled 14-day outpatient follow-up visit. Two patients (8%) were admitted from the ED after dalbavancin administration, and 4 patients (17%) had an ED revisit within 14 days for a non-SSTI-related indication. No patients experienced any adverse events related to dalbavancin administration.

Conclusion. While the majority of patients did not have a 7-day ED revisit for SSTI after administration of dalbavancin, ED revisits regardless of indication, and loss to follow-up were common. Dalbavancin may facilitate treatment adherence; however, barriers to successful treatment remain problematic, particularly in a large urban center where patients' socioeconomic considerations limited the benefit.

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2363. Identification of Risk Factors to Predict *Pseudomonas aeruginosa* and Methicillin-Resistant *Staphylococcus aureus* in Patients With Infected Chronic Foot Ulcers

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Session: 249. Skin and Skin Structure Infection
Saturday, October 6, 2018: 12:30 PM

Background. *Pseudomonas aeruginosa* and methicillin-resistant *Staphylococcus aureus* (MRSA) have traditionally been considered prevalent pathogens in foot infections. Whether empiric therapy directed against these organisms is necessary, and in which specific patient population, remains unclear. The aim of this study was to identify risk factors to forecast the probability of isolating *P. aeruginosa* or MRSA in these infected wounds.

Methods. We reviewed the records of 140 patients with infected chronic foot ulcers. Data on baseline demographic, clinical, surgical, microbiology, and treatment parameters were collected. Multivariable logistic regression models, validated via bootstrapping methods, were used to establish risk factors associated with isolation of these organisms. We then used these models to build predictive nomograms for clinical use, and to calculate sensitivity, specificity, positive and negative predictive values.

Results. A total of 307 bacterial isolates were identified, most frequently MRSA (24.3%). *P. aeruginosa* was found in 14.3% of these cultures. Amputation (OR 5.75, 95% CI 1.48–27.63) and renal disease (OR 5.46, 95% CI 1.43–25.16) were associated with higher *P. aeruginosa* isolation, whereas, diabetes (OR 0.07, 95% CI 0.01–0.34) and IDSA infection category >3 (OR 0.18, 95% CI 0.03–0.65) were associated with lower odds (Figure 1). Analysis for MRSA showed that amputation was associated with lower (OR 0.29, 95% CI 0.09–0.79) risk, while history of MRSA infection (OR 5.63, 95% CI 1.56–20.63) was associated with higher odds of isolating this organism (Figure 2). The models' ability to discriminate was found to be reasonable to strong, as evidenced by the optimism-corrected C statistic of 0.81 and 0.69, respectively.

Conclusion. We developed easy to use nomograms based on logistic regression models with strong predictive performances to forecast risk of drug-resistant pathogens. They may be used in clinical practice to judge the probability of isolating these two resistance prone organisms.

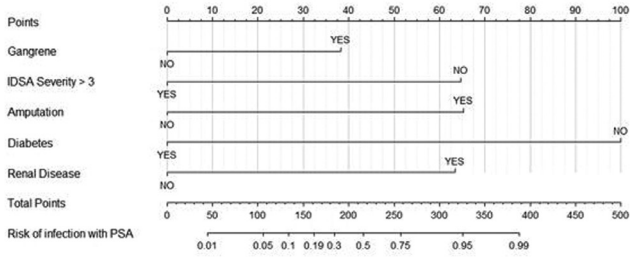

Figure 1. Nomogram to predict probability of infections with *P. aeruginosa*

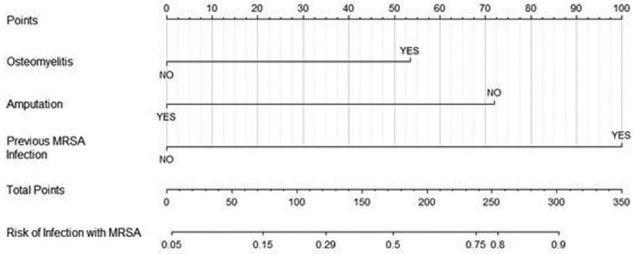

Figure 2. Nomogram to predict probability of infections with MRSA

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