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Background. Currently, the reconstitution instructions in the package insert indicate that 100 mg of anidulafungin powder is to be dissolved in 30 ml of sterile water for injection and this reconstituted solution is to be further mixed with 100 ml of either normal saline (NS) or dextrose 5% (w/v) (D5) to give a final infusion solution of concentration 0.77 mg/mL. The compatibility of the reconstituted solution with diluents other than NS or D5 has not been established and there is no literature to support the use of a more concentrated infusion solution. Thus, the infusion solution prepared strictly according to the method described by the manufacturer may pose a problem clinically in patients who are indicated for treatment with anidulafungin but require fluid restriction. In order to meet the needs of the abovementioned patient populations in the clinical setting, it is imperative to establish the stability of suitable anidulafungin infusion solutions prepared in diluents that are appropriate to the patients but differ from that set forth by the manufacturer.

Methods. After an initial validation of the HPLC-MS/MS method, the concentration of the anidulafungin solutions was determined over 48/72 hours. Other parameters assessed were pH, osmolality and particulate matter.

Results. 100 mg of anidulafungin powder was soluble in 15 ml of sterile water and this reconstituted solution was stable for at least 24 hours at 25. Anidulafungin infusion solutions of concentration 2 mg/mL prepared using diluents like NS, D5, half normal saline (HNS) and NSD5 were stable for at least 72 hours at 25. If the diluent was HNSD5, the infusion solution of concentration 2 mg/mL was stable for at least 48 hours at 25. All of the anidulafungin solutions tested were of acceptable standard for an injection in terms of pH, osmolality and particulate matter.

Conclusion. The method of preparation employed yielded anidulafungin solutions of suitable stability for clinical use and can be adopted should there be a need to differ from the manufacturer's recommended preparation method. We may use these concentrated preparations for patient with central line like in ICU or OPAT setting.

Disclosures. All authors: No reported disclosures.

1101. Impact of Obesity on Acute Kidney Injury Incidence Among Patients Treated with Piperacillin-Tazobactam and Vancomycin

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Background. Obesity is associated with worse patient outcomes in a variety of clinical scenarios. It is unclear from previous research if obesity is associated with increased acute kidney injury (AKI) among patients receiving concomitant piperacillin-tazobactam (TZP) and vancomycin (VAN).

Methods. Clinical and demographic data were collected from the University of Kentucky Center for Clinical and Translational Science Enterprise Data Trust. Patients who received TZP+VAN for at least 48 hours in combination were included. Patients with CKD, a baseline creatinine clearance (CrCl) < 30 mL/minute, CF, or missing height and weight information were excluded from analysis. AKI was defined using the Risk, Injury, Failure, Loss, End-stage (RIFLE) criteria. A weight cutoff point of 91 kg was determined by finding the most predictive bivariable logistic regression model with weights varying from 70 kg through 120 kg via minimization of the Akaike information criterion. Basic descriptive statistics were performed and bivariable and multivariable logistic regressions were performed.

Results. In total, 8125 patients were included in the final analysis. A total of 2452 (30.2%) of patients weighed ≥91 kg. Patients weighing less than 91kg were less likely to receive concomitant nephrotoxins and had higher baseline CrCl (97.3 [70.1-128.1] mL/minute vs. 91.8 [68.1-116.5] mL/minute, <0.00001). Baseline severity of illness was similar between groups; however, diabetes (38.9% vs. 20.8%, *P* < 0.00001), hypertension (63.5% vs. 46.7%, *P* < 0.00001), and heart failure (14.8% vs. 12.5%, *P* = 0.007) were more common among the 91kg+ patients. Median daily VAN doses were less in the sub-91kg patients (2000 [1250-2500] mg vs. 3000 [2000-3500] mg, *P* < 0.00001); however, weight-based doses were lower in the ≥91kg group (25.5 [16.3-31.5] mg/kg/day vs 27.9 [18.7-34.2] mg/kg/day, *P* < 0.00001). AKI was more common in the patients weighing ≥91kg (23.8% vs. 17.8%, *P* < 0.00001; adjusted odds ratio 1.46 [95% CI 1.28-1.66]).

Conclusion. Obesity appears to increase the incidence of AKI among patients treated with TZP+VAN, independent of clinically important confounders, with an important breakpoint occurring at 91 kg.

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1102. Incidence of Acute Kidney Injury Among Intensive Care Unit Patients Receiving Vancomycin in Combination with Cefepime or Piperacillin-Tazobactam

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Background. Combination therapy with piperacillin-tazobactam (TZP) and vancomycin (VAN) has been associated with increased AKI incidence when compared

with cefepime (FEP) and VAN. However, this was not seen in critically ill patients, we hypothesized that critically ill patients receiving TZP+VAN would have a higher AKI incidence compared with those receiving FEP+VAN.

Methods. Clinical and demographic data were collected from the University of Kentucky Center for Clinical and Translational Science Enterprise Data Trust. Adult patients were included if they received TZP+VAN or FEP+VAN for ≥ 48 hours in the ICU. Patients were excluded for initial CrCl < 30 mL/minute, receipt of other β-lactam agents, past medical history of CKD. AKI cases were identified via the RIFLE criteria. Variables were analyzed via appropriate statistical tests. Patients were propensity score matched on a 1:1 basis on variables that were significantly different at baseline or associated with AKI.

Results. Overall, 1871 patients were included in this study, with 1205 receiving TZP+VAN and 666 receiving FEP+VAN. At baseline, TZP+VAN patients were older (56 [45-65] vs. 52 [37-63] years; *P* < 0.00001). Vasopressor exposure was more common in the FEP+VAN group (32.6% vs. 27.0%, *P* = 0.01). AKI incidence was higher in the TZP+VAN group (31.8% vs. 18.0%, *P* < 0.00001). Following matching, 1282 patients were included with 641 patients in each group. The cohorts were similar in baseline AKI risk factors, except hypertension (TZP+VAN 59.4% vs. 53.4%, *P* = 0.03), and loop diuretic exposure (53.4% vs. 46.7%, *P* = 0.02). AKI was significantly more common in TZP+VAN patients (34.2% vs. 17.8%, *P* < 0.00001) and after controlling for remaining confounders, TZP+VAN had 2.51 times the odds of experiencing AKI than those in the FEP+VAN (95% CI 1.9-3.34). Other factors associated with increased odds of AKI included: increasing severity of illness, higher baseline renal function, exposure to calcineurin inhibitors, vasopressors, and loop diuretics, diagnosis of heart failure, and duration of antimicrobial therapy > 7 days.

Conclusion. TZP+VAN therapy is associated with significant increases in AKI in critically ill patients compared with those who received FEP+VAN independent of other AKI risk factors.

Disclosures. All authors: No reported disclosures.

1103. A Little Bit of Dalba Goes a Long Way: Dalbavancin Use in a Vulnerable Patient Population

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Background. Serious staphylococcal infections require prolonged courses of intravenous (IV) antibiotics. Weekly IV dalbavancin is an alternative to more frequent IV antimicrobial dosing for homeless patients or persons who inject drugs (PWID), for whom creating a treatment plan can be challenging. We examined the clinical outcomes in patients who were treated with dalbavancin compared with a similar population treated with alternative antibiotics.

Methods. We identified 18 patients who received dalbavancin from June 1, 2015 to December 31, 2016 using pharmacy records and 89 patients receiving IV antibiotics for similar infections treated at Harborview Medical Center from January 1, 2015 to May 31, 2015, before dalbavancin was available. Medical records were reviewed, and patient demographics, length of stay (LOS), readmission, and outcomes were abstracted using REDCap, linked to the University of Washington's Clinical Data Repository.

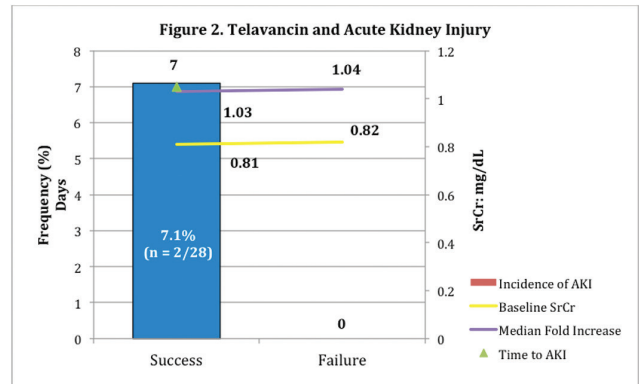
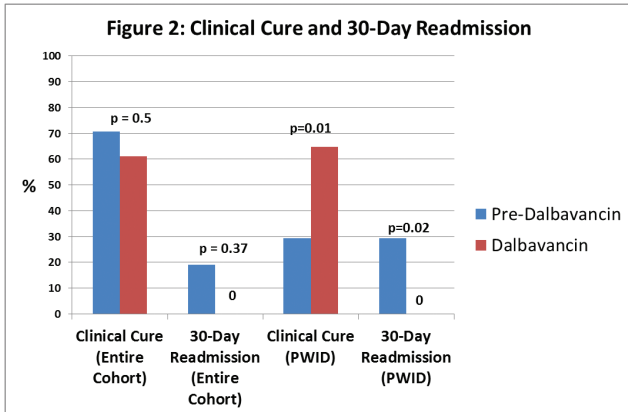
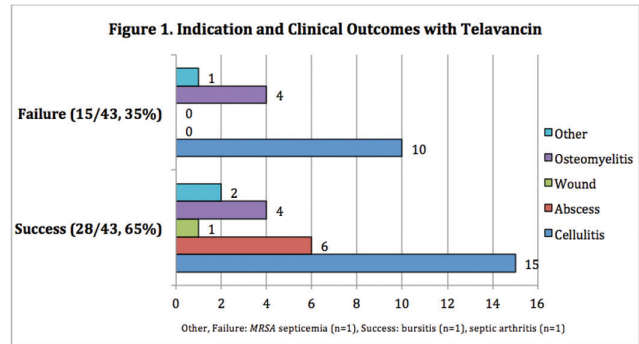
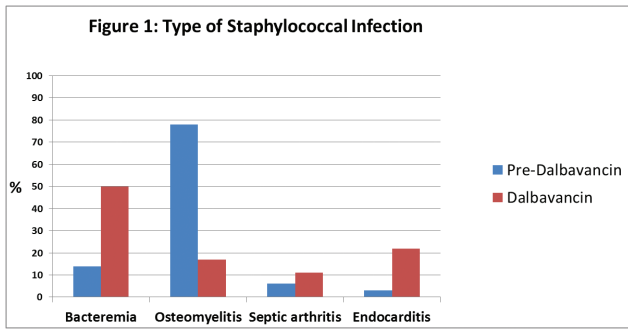
Results. Basic demographics in Table 1. The types of infections are in Figure 1. Clinical cure rates were similar between the two groups (Figure 2) although 21% and 28% of the patients were lost to follow-up in the pre and post dalbavancin period. Among the subgroup of PWID, those who received dalbavancin had higher rates of clinical cure (64.7% vs. 29.4%, *P* = 0.01), a trend toward decreased LOS (11.4 ± 5.8 vs. 20.2 ± 15.1 days, *P* = 0.04), and fewer 30-day readmissions (0% vs. 29.4%, *P* = 0.02) (Figure 2). Fewer PWID in the dalbavancin group were lost to follow-up (23.5% vs. 70.6%).

Conclusion. Patients treated with dalbavancin had similar outcomes compared with patients treated in the pre-dalbavancin time period. Among PWID, dalbavancin use led to significantly improved outcomes including a higher clinical cure rate, lower readmission rate, and shorter hospital LOS, which offset the cost of the drug. Dalbavancin is an option for the treatment of serious staphylococcal infections in selected patients.

Table 1: Baseline Characteristics.

	Entire Population		PWID Population	
	Pre-Dalbavancin N = 89 (%)	Dalbavancin N = 18 (%)	Pre-Dalbavancin N = 17 (%)	Dalbavancin N = 17 (%)
Mean Age in years	51	37	37	36
Male	64 (71.9)	15 (83.3)	12 (70.6)	14 (82.4)
Homeless	18 (20.2)	8 (44.4)	9 (52.9)	7 (41.2)
IDU	17 (19.1)	17 (94.4)	17 (100)	17 (100)

Abbreviations: IDU= injection drug use.



Disclosures. All authors: No reported disclosures.

1104. Safety and Efficacy of Telavancin at an Outpatient Parenteral Antibiotic Therapy (OPAT) Unit in New York City

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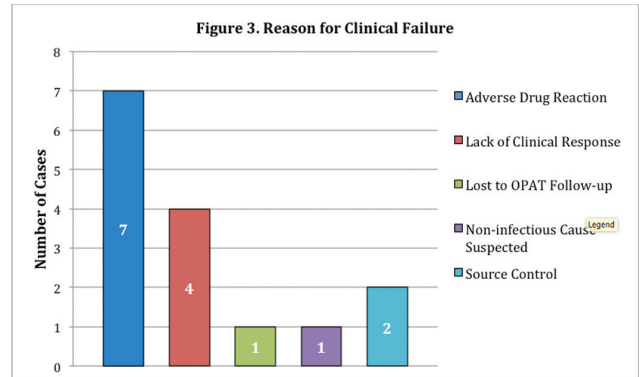
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Background. Telavancin is an intravenous (IV) lipoglycopeptide with concentration-dependent bactericidal activity against a broad spectrum of gram-positive organisms and is approved for the treatment of skin and skin structure infections and nosocomial pneumonia; however, post-marketing data is limited. At a hospital-based Outpatient Parenteral Antibiotic Therapy (OPAT) unit, telavancin is used to treat patients due to its convenient daily dosing, its lack of need for therapeutic drug monitoring and its potent *in-vitro* gram-positive activity. We sought to evaluate the safety and efficacy of telavancin in the OPAT setting.

Methods. We performed a two-year, IRB-approved, retrospective evaluation of all adult patients admitted to the OPAT unit treated with telavancin. Primary outcome was clinical success defined as completion of telavancin and documented clinical resolution. Secondary outcomes included time to initial clinical improvement, 30-day infection related readmission, frequency and time to acute kidney injury (AKI) per RIFLE criteria and incidence of adverse drug reactions (ADRs).

Results. A total of 43 patients were evaluated. Median age was 51 years, 56% were male, and 84% were admitted from the hospital. Baseline demographics differed between clinical failure and success in BMI (38.1 vs. 31 $P = 0.168$), rates of diabetes mellitus (47% vs. 25% $P = 0.148$) and chronic vascular insufficiency (33% vs. 11% $P = 0.104$). Clinical success was observed in 28/43 patients (Figure 1). Successfully treated patients were more likely to be treated for abscesses (21% vs. 0% $P = 0.076$) and dosed using actual body weight (79% vs. 60% $P = 0.196$). AKI occurred in 4.7% of all patients, at a median of 7 days after starting (Figure 2). ADRs occurred in 9 patients, of whom 7 led to discontinuation (Figure 3). No difference in time to clinical resolution and 30-day infection-related readmission was observed.

Conclusion. Our study shows real-life experience with telavancin in an OPAT setting, demonstrating tolerability, efficacy, and potential factors which may predispose one to clinical failure (BMI, vascular insufficiency, and dosing weight). Further investigation is warranted to better individualize patient selection and optimize dosing and management of ADRs.



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1105. To Add or Not to Add: Would the Addition of Dalbavancin to Formulary Decrease Admissions for Acute Bacterial Skin and Skin Structure Infections (ABSSSI)?

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Background. One of the major advantages of dalbavancin is that it may be administered as a single dose for the treatment of acute bacterial skin and skin structure infections (ABSSSI). Our objective was to determine the number (%) of patients with an ABSSSI diagnosis whose admission to a county hospital could have been avoided if dalbavancin was on formulary.

Methods. From November 2016 to April 2017, we reviewed encounters for adult patients seen in the emergency department or inpatient setting with a primary ABSSSI diagnosis. For those admitted, potential candidates for dalbavancin included those with ≥ 2 local signs/symptoms of ABSSSI AND ≥ 1 systemic sign of infection AND none of the exclusion criteria used in the DISCOVER 1 and 2 trials. Potential candidates were classified as qualifying for dalbavancin if they received IV antibiotics for ≥ 3 days but < 14 days, had no Gram-negative or anaerobic organisms isolated, had no operative intervention nor ≥ 2 incision and drainage procedures, had a contraindication to linezolid, and did not require hospitalization for management of other comorbidities.