JHH Department of Antimicrobial Stewardship



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New Daptomycin Breakpoint for Enterococci

- In January 2019, CLSI lowered the breakpoint for enterococci from an MIC ≤ 4 mcg/mL to an MIC ≤ 1 mcg/mL
- Isolates with MICs of 2 or 4 mcg/mL are now considered susceptible dose dependent (SDD)
- Linezolid is preferred for patients with SDD vancomycin-resistant E. faecium (VRE) infections, except for those with infective endocarditis or linezolid resistance/contraindication
- Recommended daptomycin dosing is based on MIC (doses below are for normal renal function):
 - o MIC ≤ 1 mcg/mL: 10 mg/kg
 - MIC = 2 mcg/mL: 10-12 mg/kg
 - MIC = 4 mcg/mL: 12 mg/kg ± a 2nd agent
- Contact ASP to discuss dosing and regimens

<u>Duration and Oral Therapy for</u> Enterobacteriaceae Bacteremia

Duration

- Recent studies^{1, 2} including patients from JHH have shown that Enterobacteriaceae bacteremia with source control can be treated for 7 days. See the new bacteremia section in our Guidelines (<u>ASP Bacteremia</u> Guidelines).
- Patients with solid organ transplant and heme malignancy were not well represented in these studies and these recommendations may not be applicable.

Oral step-down therapy

 Switching to oral therapy should be considered in patients who have source control, are clinically improved, and are able to take oral medications as soon as susceptibilities are available.³ Oral options with high bioavailability include ciprofloxacin and TMP/SMZ.

ASP's Antibiotic Corner: Linezolid

Linezolid is bacteriostatic against enterococci and staphylococci and bactericidal against the majority of streptococci. Linezolid is now generic and thus more affordable for patients and hospitals; thus, the ASP has identified scenarios in which you should strongly consider the use of linezolid instead of vancomycin:

- As an alternative to vancomycin in hospitalized patients at risk for nephrotoxicity (age ≥65, advanced CKD, AKI) with:
 - Moderate to severe purulent cellulitis
 - Non-purulent cellulitis and severe PCN allergy
 - Other skin/soft tissue infections (e.g., diabetic foot infection without osteomyelitis, surgical site infection)
- Pneumonia in which MRSA is strongly suspected (e.g., empiric treatment of necrotizing pneumonia) or confirmed
- Oral step-down therapy for treatment of MRSA infections in non-bacteremic patients

Coming soon: JHH ASP on Twitter!



References:

- 1. Chotiprasitsakul D et al. Comparing the Outcomes of Adults With Enterobacteriaceae Bacteremia Receiving Short-Course Versus Prolonged-Course Antibiotic Therapy in a Multicenter, Propensity Score-Matched Cohort. *Clin Infect Dis* 66:172, 2018
- 2. Yahav D et al et al. Seven versus fourteen Days of Antibiotic Therapy for uncomplicated Gram-negative Bacteremia: a Non-inferiority Randomized Controlled Trial. Clin Infect Dis 2018.
- 3. Tamma PD et al. Association of 30-Day Mortality With Oral Step-Down vs Continued Intravenous Therapy in Patients Hospitalized With Enterobacteriaceae Bacteremia. *JAMA Intern Med* 2019;