

Daptomycin

Daptomycin is a lipopeptide antibiotic. It has activity against most strains of staphylococci (including MRSA) and streptococci (including VRE). It does NOT have activity against Gram-negative organisms. It is ineffective for pulmonary parenchymal infections.

Acceptable uses (ID consult or ASP approval is required)

- Bacteremia or endocarditis caused by MRSA or methicillin-resistant coagulase-negative staphylococci in a patient with a serious allergy to vancomycin
- Therapy for MRSA infections (other than pneumonia) in which the MIC of vancomycin is ≥ 2 mcg/mL
- Bacteremia or endocarditis caused by MRSA in a patient failing vancomycin therapy defined as:
 - Clinical decompensation after 3-4 days
 - Failure to clear blood cultures after 7-9 days despite vancomycin troughs of 15-20 mcg/mL
 - Select cases in which the MIC of vancomycin is ≥ 2 mcg/ml
- Salvage therapy for VRE infections other than pneumonia, on a case-by-case basis

Unacceptable uses

- Treatment of pneumonia of any kind, as daptomycin is inactivated by pulmonary surfactant.
- Initial therapy for Gram-positive infections
- VRE colonization of the urine, respiratory tract, wounds, or drains
- Convenience due to ease of dosing compared to vancomycin. Clinical pharmacists or the Antimicrobial Stewardship Program pharmacists are available to assist with vancomycin pharmacokinetics.

Dose

- Bacteremia: 6-12 mg/kg IV q24h
- Endocarditis: 6-12 mg/kg IV q24h
- Dose adjustment is necessary for CrCl < 30 ml/min (see Table)

Toxicity

Myopathy (defined as CK more than 10 times ULN without symptoms or more than 5 times ULN with symptoms)

Monitoring: total CK and creatinine weekly