

SPECTRUM OF ACTIVITY

- ✦ Gram-positive organisms, including isolates resistant to methicillin, vancomycin, and linezolid
- ✦ Note: The efficacy, safety, and optimal dosing of daptomycin for most infections has not been established (Health Canada approved for skin/soft tissue infections, *S. aureus* bacteremia and right-sided endocarditis)

INDICATION AND DOSAGE

- ✦ **Consultation with Infectious Disease** should be considered for any patient being treated with daptomycin,
- ✦ Interval adjustment to q48h required for patients with severe renal insufficiency (CrCl < 30mL/min)
- ✦ Round all doses to nearest 25mg

Clinical Syndrome	Organism	Dose
SSTIs		
Complicated	MRSA	4 mg/kg IV q24h ¹
BACTEREMIA		
	MRSA	6 mg/kg IV q24h ¹
	VRE [‡]	6-10 mg/kg q24h ²
NATIVE VALVE INFECTIVE ENDOCARDITIS		
Right-Sided	MRSA	6 mg/kg IV q24h ¹
Left-Sided	MRSA	8 mg/kg q24h ³
	VRE	10-12 mg/kg IV q24h ³
INTRA-ABDOMINAL INFECTION (see also <i>Management of Empiric Infection in Solid Organ Transplant guidelines</i>)		
	VRE	6 mg/kg iV q24h
PROSTHETIC JOINT INFECTION		
	MRSA	6 mg/kg IV q24h ¹
	VRE	6 mg/kg IV q24h ⁴
OSTEOMYELITIS		
	MRSA	6-8 mg/kg IV q24h ¹
	VRE	6 mg/kg IV q24h ⁵
SEPTIC ARTHRITIS		
	MRSA	6 mg/kg IV q24h ¹

Higher doses may be considered in patients with VRE bacteremia. There is limited evidence for combination therapy with β -lactams or aminoglycosides for severe infections due to enterococcus or those with high daptomycin minimal inhibitory concentration (MIC) levels

CONTRAINDICATIONS/PRECAUTIONS

- ✦ Anaphylaxis or severe drug reaction to daptomycin
- ✦ Respiratory infections (due to inactivation by pulmonary surfactant)

MONITORING AND ADVERSE DRUG REACTIONS

- Clinical assessments for hypersensitivity reactions, neuropathy, and eosinophilic pneumonia
- Weekly creatinine kinase (CK) for myositis and rhabdomyolysis (evaluate CK more frequently or consider suspending statin therapy while on daptomycin)

REFERENCES

1. Liu C, Bayer A, Cosgrove S, et al. (2011). Clinical Practice Guidelines by the Infectious Diseases Society of America for the Treatment of Methicillin-Resistant *Staphylococcus Aureus* Infections in Adults and Children. *CID* 52(3):e18-55.
2. Chuang YC, Lin HY, Chen PY, et al. (2017). Effect of Daptomycin Dose on the Outcome of Vancomycin-Resistant, Daptomycin-Susceptible Enterococcus faecium Bacteremia. *Clinical Infectious Disease* 64(8): 1026-34.
3. Baddour LM, Wilson WR, Bayer AS, et al. (2015). Infective Endocarditis in Adults: Diagnosis, Antimicrobial Therapy, and Management of Complications. A Scientific Statement for Healthcare Professionals from the American Heart Association. *Circulation* 132: 1-53.
4. Osmon DR, Berbari EF, Berendy AR, et al. (2013). Diagnosis and Management of Prosthetic Joint Infection: Clinical Practice Guidelines by the Infectious Disease Society of America. *Clinical Infectious Disease* 56(1): e1-25.
5. Berbari EF, Kanj SS, Kowalski TJ, et al. (2015). 2015 Infectious Disease Society of America (IDSA) Clinical Practice Guidelines for the Diagnosis and Treatment of Native Vertebral Osteomyelitis in Adults. *Clinical Infectious Disease* 61(6):e26-46.

Disclaimer: This document is intended for internal use at Sinai Health System and University Health Network. Recommendations herein are based on existing literature and clinical practice and are subject to change at any time. Please refer to the [Terms and Conditions](#) for more details.