

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

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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.