




The Antimicrobial and Diagnostic Stewardship Program (ADSP) team is here to bring you the latest

I came, I MRSA, I conquered: Anti-MRSA Agents


July 2025

	Vancomycin	Linezolid	Daptomycin	TMP-SMX
Spectrum	Gram-positives	Gram-positives (unlike vancomycin or daptomycin, covers most G+ rods, though the drug of choice for G+ rods is ampicillin)	Gram-positives	Moderate Gram-negative and MRSA activity (check your local antibiogram). Specialty coverage: PJP and <i>Stenotrophomonas</i>
Gaps in coverage	Gram negatives. VRE. G+ rods like <i>Lactobacillus</i> & <i>Listeria</i>	Gram negatives.	Gram negatives. <i>Strep viridians</i> , Gram+ rods like <i>Lactobacillus</i> & <i>Listeria</i>	+/- <i>Streptococcus</i> , Gram+ rods <i>Lactobacillus</i> & <i>Corynebacterium</i> , <i>Enterococcus</i>
1st choice for	Invasive MRSA infections	VRE, necrotizing fasciitis (toxin+ Group A Strep)	VRE, invasive MRSA infections	Oral step down for MRSA infections, UTI, <i>Stenotrophomonas</i> , PJP
Specific Things to Consider	Less good outcomes compared to cefazolin for susceptible infections like MSSA	100% oral bioavailable (use PO). Excellent CNS penetration. See Figure 2 (PMID 32901248) for relative risk of serotonin agents with linezolid (low overall risk). Myelosuppression risk with >2 week durations	IV only. Inactivated by lung surfactant, do not use in patients with pneumonia. Lacks good CNS penetration. Monitor weekly CK.	Oral should be preferred as excellent bioavailability, IV lacks much compatibility, requires a lot of fluids, short stability. Use for oral MRSA step down, not to be used empirically for invasive MRSA infections
Clinical Applications				
MRSA Osteo	Good empiric choice, potential targeted choice	Less good option as osteomyelitis courses are >2 weeks duration	Safe and once daily alternative to vancomycin	Option for oral step down in non-severe osteomyelitis if PO is desired and is susceptible
Invasive <i>E. faecium</i> : Linezolid S Dapto S Vanco S	Good empiric option, good option for bacteremia treatment	Good option with PO step down available for indications with durations ≤2 weeks	Easy option (vs. vanco) if PO linezolid is not an option	Nope! Does not cover any type of <i>Enterococcus</i>



Congratulations to Dawn Anderson, PharmD for earning the Antimicrobial Resistance Fighter **Red Belt**

Dawn was nominated for getting a patient with Candidemia restarted on optimal therapy



Take aways:

- Check patient context like site of infection or AKI when choosing MRSA treatment.
- Don't forget to order MRSA nares when covering MRSA pneumonia, d/c MRSA coverage if negative!

