



Community-Acquired Pneumonia Subtopic: Aspiration & MRSA Coverage October 2025

Action Items

- Avoid anaerobic coverage for CAP or aspiration pneumonia unless abscess, necrosis, or empyema present
- Either linezolid or vancomycin are recommended for empiric MRSA CAP coverage
- Refer to the recently updated ADSP CAP Guideline for more CAP treatment

Aspiration: Treat or Not Treat?¹


- Aspiration pneumonitis = chemical lung injury, NOT infection → usually resolves in 24-48h without antibiotics
- Antibiotics are indicated only if bacterial pneumonia develops (fever, leukocytosis, infiltrate, purulent secretions)

Why Not Anaerobes for Aspiration Pneumonia?²

- Aspiration CAP is usually caused by aerobic gram-negatives and streptococci
- Anaerobes are rarely isolated
- Extra coverage = ↑ C. diff risk, no benefit
- ATS/IDSA guidelines: reserve anaerobic therapy only for abscess, necrotizing pneumonia, or empyema

Vancomycin vs. Linezolid for MRSA Pneumonia

- Empiric MRSA coverage is only indicated for patients with clinical findings consistent with *Staph aureus* (empyema or lung necrosis/cavitation on imaging)
- Linezolid was associated with higher clinical cure and higher rate of MRSA clearance at end of therapy compared to vancomycin^{3,4}
 - No statistically significant differences in mortality demonstrated
- Lung penetration⁵:
 - Linezolid has been shown to have better concentrations into lung tissue and epithelial lining fluid of the lungs than vancomycin

 **Takeaway – either vancomycin or linezolid are recommended for empiric MRSA CAP coverage, but linezolid may be more effective than vancomycin for MRSA CAP**



1. Dragan V. Clin Infect Dis. 2018. PMID: 29438467.
 2. Bai AD. Chest. 2024. PMID: 38387648.
 3. Wunderink RG. Clin Infect Dis. 2012. PMID: 22247123.

4. Kato H. J Glob Antimicrob Resist. 2021. PMID: 33401013.
 5. Wunderink RG. Chest. 2003. PMID: 14605050.