ANMC Inpatient Adult Community-Acquired Pneumonia (CAP) Guideline

Risk Factor Considerations

- Structural lung disease such as bronchiectasis or exacerbations of COPD with multiple courses of antibiotics and/or chronic steroid use may warrant coverage for *Pseudomonas aeruginosa*
- Receipt of IV antibiotics in preceding 90 days is a risk factor for multi-drug resistant organisms (MRDO)

****NOTE:** The following are **NOT** predictive of multi-drug resistant pneumonia and should **NOT** be used alone as an indication for empiric broad-spectrum coverage:

- Hospitalized in an acute care hospital for 2 or more days within 90 days of infection
- Resided in a nursing home or long term care facility
- Received recent chemotherapy or wound care in last 30 days
- Attended a hemodialysis clinic in the last 30 days

Treatment Recommendations

Infection	Treatment	Duration
Community-acquired PNA	**Preferred Therapy:** ○ **Ceftriaxone 1g** IV q24hr (**Cefepime** 1g IV q8hr extended infusion if risk factors for MRDOs) **PLUS** **Azithromycin 500mg** PO/IV q24hr x3 days **Anaphylactic β-Lactam Allergy:** ○ **Levofloxacin 750mg** PO/IV q24hr **+/-** **Aztreonam 2g** IV q8hr*	○ **5 days** for patients **without** immunosuppression or structural lung disease ○ **7 days** for patients with **moderate** immunosuppression or structural lung disease ○ **10-14 days** for poor clinical response, initial inappropriate tx, or **significant** immunosuppression ○ Patients should be afebrile for 48-72hr and demonstrate signs of clinical stability before therapy is discontinued
Aspiration Pleuropulmonary Syndrome (Anaerobic coverage is clearly indicated only in the classic aspiration pleuropulmonary syndrome in pts with a h/o LOC as a result of EtOH/drug overdose or after seizures in pts with concomitant gingival disease or esophageal motility disorders)	**Preferred Therapy:** ○ **Ampicillin/Sulbactam 3g** IV q6hr (monotherapy) ○ If MRDO risk factors- **Piperacillin/Tazobactam 3.375g** IV q8hr extended infusion (monotherapy) **Penicillin Allergic (Non-Anaphylactic):** ○ **Ceftriaxone 1g** IV q24hr **+/-** ○ **Metronidazole 500mg** PO/IV q8hr **Anaphylactic β-Lactam Allergy:** ○ **Moxifloxacin 400mg** PO/IV q24hr ○ If MRDO risk factors- **Levofloxacin 750mg** PO/IV q24hr **PLUS** **Aztreonam 2g** IV q8hr **PLUS** **Clindamycin 600mg** IV q8hr	
If **MRSA PNA** is suspected due to severe, life-threatening CAP, **add** vancomycin or linezolid to above regimen	**Vancomycin Loading Dose:** ○ <50 kg: **Vancomycin 1gm** IV x 1 (then RPh to dose) ○ 50-70 kg: **Vancomycin 1.5gm** IV x 1 (then RPh to dose) ○ >70 kg: **Vancomycin 2gm** IV x 1 (then RPh to dose) **OR** **Linezolid 600mg** PO/IV BID	
Suspected or confirmed Influenza	**Oseltamivir 75mg** PO BID∞	○ 5 days
Oral options to consider for de-escalation of β-lactam	**Preferred Therapy:** ○ **Amoxicillin 1g** PO TID^ ○ **Augmentin 875mg** BID ▪ **Add additional** **amoxicillin 1g** BID to **Augmentin** for CAP complicated by empyema, asplenia or Strep pneumo PenG MIC 2-4 **Non-Anaphylactic PCN Allergy:** ○ **Cefuroxime axetil 500mg** PO BID	○ Total duration (IV + PO) as above

Consideration

- *If risk factors present consider addition of aztreonam, or if fluoroquinolone exposure in previous 90 days
- ^Strep pneumo and/or cefinase negative H.influenzae / M.cattarhalis use high-dose **amoxicillin**
- ∞ Higher doses of Tamiflu have not been associated with improved outcomes
- Consider Procalcitonin if question of pneumonia diagnosis or acute exacerbation of COPD, see ANMC Procalcitonin guideline for further guidance.

Antimicrobial Stewardship Approved August 2017; Updated June 19, 2019