

What's New with Community-Acquired Pneumonia (CAP)?



Use Ceftriaxone 1 g IV Daily

Ceftriaxone 2 g IV daily provides no added benefit for mild to moderate CAP

- Ceftriaxone 1 g IV provides levels ~1500x the MIC* of S. pneumoniae.
- Ceftriaxone 1 g vs. 2 g IV daily has the same clinical cure for CAP.¹

Avoid Routine Atypical Coverage

Atypical coverage is not required for most mild to moderate $CAP(CRB-65 \text{ score} \le 2)$

The CAP-START study showed no benefit to adding atypical coverage in 90-day mortality for hospitalized patients with CAP, excluding patients with suspected atypical infection.²

*Minimum Inhibitory Concentration

Step 1 - Assess severity

Severity of Pneumonia based on CRB-65 Score (1 point each)

Confusion or altered mental status from baseline **R**espiratory Rate \geq 30 bpm **B**lood Pressure (Diastolic \leq 60 mmHg or Systolic < 90 mmHg) 65 years of age or more



Got feedback or questions? Let us know by scanning the QR code!

Step 2- Choose treatment		
Treatment Guidelines (ASPIRES)		Duration
Mild CAP (CRB-65 score 0-1; 30-day mortality 1- 2%)	Amoxicillin 500-1000 mg PO TID If penicillin/amoxicillin allergic with no severe delayed reaction to β-lactams: Cefuroxime 500 mg PO BID-TID If severe penicillin/amoxicillin & cefuroxime allergy: Doxycycline 100 mg PO BID	3-5 days
Moderate CAP (CRB-65 score 2; 30- day mortality 8.2%)	Amoxicillin-clavulanate 875-125 mg PO BID OR Cefuroxime 500 mg PO BID-TID If unable to tolerate PO or IV therapy is required: Ceftriaxone 1 g IV daily If an atypical infection is suspected ADD: Azithromycin 500 mg PO/IV daily x 3 days OR Doxycycline 100 mg PO BID If penicillin/cefuroxime/ceftriaxone allergy: Moxifloxacin 400 mg PO/IV daily	3-5 days
Severe CAP (CRB-65 score 3-4; 30-day mortality 31.3%)	Ceftriaxone 1-2 g IV daily AND Azithromycin 500 mg PO/IV daily x 3 days OR Doxycycline 100 mg PO BID If ceftriaxone allergy or SEVERE allergy to beta-lactams: Moxifloxacin 400 mg PO/IV daily If MRSA is suspected, ADD: Vancomycin 15 mg/kg IV (follow the Pharmacy Vancomycin Empiric Dosing Guidelines reference card; no load needed)	3-7 days

Ther. 2019 Jul;17(7):501-510 2.Postma DF et al. Antibiotic treatment strategies for community-acquired pneumonia in adults. N Engl J Med. 2015 Apr 2;372(14):1312-23.

3. Dinh A et al. Discontinuing β-lactam treatment after 3 days for patients with community-acquired pneumonia in non-critical care wards (PTC): a double-blind, randomised, placebocontrolled, non-interiority trial. Lancet 2021; 397:1195-1203.



Duration of CAP should be:

- 3 days If all clinical stability criteria are met by Day 3
- 5 days If no more than one clinical instability criterion is present
- 7 days For all other cases without complications (empyema, abscess)

Shorten Duration of Treatment

The **PTC** study showed that 3 days was non-inferior to 8 days of therapy in hospitalized patients with CAP.³

Step 3- Assess when to stop

Clinical Stability Criteria

Stop on day 3 if:

- 1. Afebrile ($\leq 37.8^{\circ}$ C) on day 3 of therapy
- 2. No CAP-associated sign of clinical instability OR return to baseline
 - i. Systolic blood pressure < 90 mmHg
 - ii. Heart rate ≥ 100 beats/minute
 - iii. Respiratory rate \geq 24 breaths/minute
 - iv. Oxygen saturation < 90% on room air (or on baseline home oxygen)

Stop on day 5 if:

- 1. Afebrile ($\leq 37.8^{\circ}$ C) for 48 hours
- 2. No more than 1 CAP-associated sign of clinical instability on day 5 of therapy OR return to baseline
 - i. Systolic blood pressure < 90 mmHg
 - ii. Heart rate > 100 beats/minute
 - iii. Respiratory rate > 24 breaths/minute
 - iv. Oxygen saturation < 90% on room air (or on baseline home oxygen)