Consolidated Content from Past Flyers (2018–2021)

Compiled Aug2026

Dec 2018: moving past the routine use of macrolides for all patients with community-acquired pneumonia

Azithromycin – Master of Lingering	
Oral Bioavailability/Absorption	Moderate (~40%)
Dosing Regimen (for Atypical Pneumonia)	A total treatment dose of 1.5g (PO/IV) • 500mg PO/IV daily x 3 days • 500mg PO/IV x 1 day, then 250mg PO x 4 days
Half-Life	68 to 72 hours
Renal Dose Adjustment	No

Total dose of 1.5g equals 7 days of effective therapy!

- Incidence of atypical pneumonia is **< 2 cases/10,000 adults** in the community.[1]
- **Combination of beta-lactam/macrolide therapy** was recommended based on low-quality observational/retrospective studies.[1]
- Recent randomized controlled trials have shown that **beta-lactam monotherapy** is not inferior to **combination of beta-lactam/macrolide therapy** for clinical outcomes such as 90-day mortality and length of stay in hospital.[1,2,3]
- Consider **beta-lactam monotherapy (ie. Ceftriaxone IV or Cefuroxime PO)** for patients with mild-moderate (non-ICU) CAP
    - Mild-Moderate: Pneumonia Severity Index (PSI) class I-III
    - PSI Calculator: https://www.mdcalc.com/psi-port-score-pneumonia-severity-index-cap
- Limit **azithromycin** course to **total of 1.5g**

References:

1. Current Infectious Disease Reports (2018) 20:45 2. N Engl J Med. 2015;372:1312 3. Respir Med. 2017;129:145-51

May 2019: 3 clinical pearls to help preserve vancomycin IV

Susceptibility data updated Aug2026

#1 Empiric Bacterial Meningitis Treatment

- Non-local guidelines recommend adding **vancomycin IV** to **ceftriaxone IV** to cover ceftriaxone-resistant Strep pneumoniae (not MRSA!)
- S. pneumoniae susceptibility to **ceftriaxone** is 100% in VCH[1,4].

For locally acquired or non-travel associated meningitis:

- Patient 18-50 y/o and immunocompetent: **ceftriaxone IV**
- pregnancy, >50yo, immunocompromised: **ampicillin IV** + **ceftriaxone IV**
- Patient with recent neurosurgery: **meropenem IV** + **vancomycin IV** + **involve ID**
- +/- **acyclovir IV** for viral meningitis coverage

#2 Cellulitis Treatment in patients with MRSA colonization

- Patients colonized with MRSA can still have cellulitis due to streptococci.
- MRSA cellulitis is more likely to present with purulence.
- Do not initiate empiric anti-MRSA coverage based on MRSA colonization status.
- When anti-MRSA coverage indicated, consider PO option such as **doxycycline PO** (susceptibility 89%[4])

#3 Hospital Acquired Pneumonia Treatment

- MRSA is not a common pathogen for pneumonia.
- MRSA nasal screen within 1 week has excellent negative predictive value (>95%) for ruling out MRSA CAP/HCAP/HAP. MRSA nasal screening collected after initiation of anti-MRSA therapy may still be reliable as respiratory tract eradication takes a few days.[2,3]
- Above not applicable to VAP patients, ICU patients, or patients with structural lung diseases (cystic fibrosis, bronchiectasis)
- Do-not-start/Stop **vancomycin IV** if MRSA nasal screen negative within 1 week

References:
1. VCH Coastal CoC Antibiogram 2017 2. Ann Pharmacother. 2019 Jun;53(6):627-638. 3. Clin Infect Dis. 2018 Jun 18;67(1):1-7 4. VCH Coastal CoC Antibiogram 2025

May 2020: cotrimoxazole (TMP-SMX) dosing

Low/Standard Dose: ~5mg/kg/day TMP, 1 DS PO BID

Moderate/Medium Dose: ~10mg/kg/day TMP, divided BID to QID			
Actual Body Weight	**CrCl > 50ml/min**	**CrCl 30-50 ml/min**	**CrCl 10-30ml/min**
< 45 kg	consult pharmacist		
45-59 kg	1.5 DS PO BID	1 DS PO BID	1 DS PO BID
60-74 kg	2 DS PO BID	1.5 DS PO BID	1 DS PO BID
75-89 kg	2.5 DS PO BID	2 DS PO BID	1.5 DS PO BID
90-100 kg	3 DS PO BID	2 DS PO BID	1.5 DS PO BID
> 100 kg	consult pharmacist		

Cotrimoxazole pseudo-AKI: the trimethorprim component competes with creatinine excretion. Expect to see 15-35% rise in SCr in 3 days. This is reversible with therapy discontinuation. (J Int Med 1999l246:247-52; TDM 1987;9:161-5)

Cotrimoxazole induced hyperkalemia: the trimethorprim component inhibits potassium excretion via sodium channel blockade. This rarely leads to serum K > 5.5. (Case Rep Emerg Med. 2012; 2012: 815907.)

Fluoroquinolones carry many black box warnings in addition to QT prolongation and CDI risk: Aortic dissections, tendon rupture, peripheral neuropathy, delirium, etc.

May 2021: stratify CAP patients using CRB-65

CRB-65 scoring, 1 point for each of the following:

- **C**onfusion (MMSE < 9 or new disorientation to person, place or time)
- **R**R ≥ 30 breaths/min
- S**B**P < 90 mmHg or D**B**P < 60 mmHg
- Age ≥ **65** years

CRB-65 score	Score 0-1	Score 2	Score 3-4
Risk stratification	**low risk**	**intermediate risk** (30-day mortality 1-10%)	**high risk** (30-day mortality >10%)
Usual pathogens	*S. pneumoniae* *M. pneumoniae* *C. pneumoniae*	As in Score 0-1, plus: *H. influenzae*	As in Score 2 plus: *S. aureus* *Group A Strep* *Enterobacterales*
1st line	**Amoxicillin**	**Cefuroxime**	**Ceftriaxone**
2nd line	Cefuroxime (if penicillin/amoxicillin allergy)	Amoxicillin-clavulanate	N/A
3rd line	Doxycycline* (if cefuroxime allergy)	Moxifloxacin* (if severe beta-lactam allergy)	Moxifloxacin* (if ceftriaxone allergy)
Atypical Coverage	No	Only if strongly suspected, add: Doxycycline* -or- Azithromycin*(total 1.5g)	Yes, add: Doxycycline* –or- Azithromycin*(total 1.5g)
Empiric MRSA coverage	No	No	If suspected, add: Vancomycin IV

*provides atypical coverage