Inpatient Pneumonia Antibiotic Recommendations

The current North American antibiotic guidelines for Community-Acquired Pneumonia in immunocompetent patients are from the Centers for Disease Control and Prevention (CDC), the Infectious Disease Society of America (IDSA), the Canadian Infectious Disease Society/Canadian Thoracic Society (CIDS/CTS) and the American Thoracic Society (ATS).

For discharges 01/01/14 (1Q14) - 9/30/14 (3Q14).

ICU Patient

Macrolide (IV) + either β-lactam (IV) or Antipneumococcal/Antipseudomonal β-lactam (IV)

OR

Antipseudomonal Quinolone (IV) + either β-lactam (IV)

OR

Antipneumococcal/Antipseudomonal β-lactam (IV)

OR

Antipneumococcal Quinolone (IV) + either β-lactam (IV)

OR

Antipneumococcal/Antipseudomonal β-lactam (IV)

OR

Antipneumococcal/Antipseudomonal β-lactam (IV) + Aminoglycoside (IV) + either Antipneumococcal Quinolone (IV) or Macrolide (IV)

If the patient has Francisella tularensis or Yersinia pestis risk as determined by Another Source of Infection (see data element) the following is another acceptable regimen:

Doxycyline (IV) + either β-lactam (IV) **or** Antipneumococcal/Antipseudomonal β-lactam (IV)

β-lactam = Ceftriaxone, Cefotaxime, Ampicillin/Sulbactam

Antipneumococcal/Antipseudomonal β-lactam = Cefepime, Imipenem, Meropenem, Piperacillin/Tazobactam, Doripenem

Macrolide = Erythromycin, Azithromycin

Antipneumococcal Quinolones = Levofloxacin[1], Moxifloxacin

Antipseudomonal Quinolone = Ciprofloxacin, Levofloxacin[1]

Aminoglycoside = Gentamicin, Tobramycin, Amikacin

Non-ICU Patient

β-lactam (IV or IM) + Macrolide (IV or PO)

OR

Antipneumococcal Quinolone monotherapy (IV or PO)

OR

β-lactam (IV or IM) + Doxycycline (IV or PO)

OR

Tigecycline monotherapy (IV)

β-lactam = Ceftriaxone, Cefotaxime, Ampicillin/Sulbactam, Ertapenem, Ceftaroline

Macrolide = Erythromycin, Clarithromycin, Azithromycin

Antipneumococcal Quinolones = Levofloxacin[1], Moxifloxacin, Gemifloxacin

Doxycycline

Tigecycline1 - Levofloxacin should be used in 750 mg dosage when used in the management of patients with pneumonia.

Non-ICU Patient with Pseudomonal Risk

These antibiotics are acceptable for non-ICU patients with Pseudomonal Risk **ONLY:**

Antipneumococcal/Antipseudomonal β-lactam (IV) + Antipseudomonal Quinolone (IV or PO)

OR

Antipneumococcal/Antipseudomonal β-lactam (IV) + Aminoglycoside (IV) + either Antipneumococcal Quinolone (IV or PO) or Macrolide (IV or PO)

These antibiotics are acceptable for non-ICU patients with β-lactam allergy and Pseudomonal Risk ONLY:

Aztreonam (IV or IM) + Antipneumococcal Quinolone (IV or PO) + Aminoglycoside (IV)

OR

Aztreonam[2] (IV or IM) + Levofloxacin1 (IV or PO)

Antipseudomonal Quinolone = Ciprofloxacin, Levofloxacin[1]

Antipneumococcal/Antipseudomonal β-lactam = Cefepime, Imipenem, Meropenem, Piperacillin/Tazobactam, Doripenem

Aminoglycoside = Gentamicin, Tobramycin, Amikacin

Antipneumococcal Quinolone = Levofloxacin[1], Moxifloxacin, Gemifloxacin

Macrolide = Erythromycin, Clarithromycin, Azithromycin

2—For patients with renal insufficiency.

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

AQAF
THE BUSINESS OF QUALITY

This material was produced by AQAF, the Medicare Quality Improvement Organization (QIO) for Alabama, under contract with the Centers for Medicare & Medicaid (CMS), an agency of the US. Department of Health and Human Services. Contents do not necessarily reflect CMS policy. 10SOW-AL-C7-14-121