Table 1. ASCAP 2002 Guidelines — Empiric Antimicrobial Therapy of Choice for Outpatient[‡] and In-Hospital Management of Patients with CAP

PATIENT PROFILE/ETIOLOGIC AGENTS	FIRST-LINE ANTIBIOTIC THERAPY	ALTERNATIVE FIRST-LINE ANTIBIOTIC THERAPY
Otherwise Healthy < 60 years of age (Patients deemed to be suitable for outpatient/oral therapy, i.e., no systemic toxicity, high likelihood of compliance, and supportive home environment)*	Azithususi RO	Moxifloxacin PO (preferred) <i>OR</i> Levofloxacin PO <i>OR</i> Clarithromycin <i>OR</i> Gatifloxacin PO
Otherwise Healthy > 60 years of age (Patients deemed to be suitable for outpatient/oral therapy, i.e., no systemic toxicity, high likelihood of compliance, and supportive home environment)*	Azithromycin PO	Moxifloxacin PO (preferred) <i>OR</i> Levofloxacin PO <i>OR</i> Clarithromycin <i>OR</i> Gatifloxacin PO
In-hospital (not in intensive care unit) underlying risk factors or comorbid conditions: In-hospital management (COPD, history of pneumonia, diabetes, etc.)	Ceftriaxone IV plus azithromycin I	V ^{†††} Moxifloxacin <i>OR</i> Levofloxacin IV <i>OR</i> Gatifloxacin IV
CAP acquired in the nursing home environment (increased likelihood of gram-negative, <i>E. coli, Klebsiella pneumoniae</i>)	Ceftriaxone IV plus azithromycin I	V Moxifloxacin <i>OR</i> Levofloxacin IV <i>OR</i> Gatifloxacin IV
CAP in the elderly individual with chronic alcohol (Increased likelihood of <i>Klebsiella pneumoniae</i> infection)	ism Ceftriaxone IV plus azithromycin I	V Cefotaxime ^{††} plus erythromycin IV <i>OR</i> Levofloxacin IV <i>OR</i> Cefepime IV plus azithromycin IV
Severe bacteremic CAP with documented S. pneumoniae species showing high-level resistance to macrolides and/or penicillin, but maintaining high sensitivity to extended- spectrum quinolones and cephalosporins	Ceftriaxone IV plus moxifloxacin OR Ceftriaxone IV plus levofloxacin IV	Vancomycin [¶] plus azithromycin IV
Severe CAP complicated by structural disease of the lung (bronchiectasis): Increased likelihood of <i>Pseudomonas</i> and polymicrobial infection	Cefepime IV plus levofloxacin IV plus/minus aminoglycoside <i>OR</i> Ciprofloxacin IV plus aminoglycosi IV plus azithromycin IV	Ciprofloxacin IV plus cefepime IV plus azithromycin IV <i>OR</i> ide Imipenem IV plus azithromycin IV plus aminoglycoside
CAP in a patient with suspected aspiration (increases the likelihood of gram-negative and anaerobic infection**)	Ceftriaxone IV plus azithromycin IV plus clindamycin IV	V Levofloxacin IV plus clindamycin IV <i>OR</i> Levofloxacin IV plus metronidazole IV <i>OR</i> Gatifloxacin IV plus clindamycin IV
Severe CAP in a compromised host with a previous hospitalization for, or who resides in, a community or facility with a high reported incidence of methicillin-resistant <i>S. aureus</i> (MRSA)***	Moxifloxacin IV plus vancomycin I ^N <i>OR</i> Levofloxacin IV plus vancomycin I ^N	vancomycin IV
CAP patient with severe pneumonia requiring ICU hospitalization***	Ceftriaxone IV plus levofloxacin IV plus/minus aminoglycoside (<i>Pseudomonas</i> strongly suspected Ceftriaxone IV plus azithromycin IV plus/minus anti-pseudomonal agent	plus azithromycin IV OR

Adapted from references 4, 12, 34-47.

§ Quinolones generally are restricted for use in patients > 18 years of age.

- First-line therapy recommendations take into consideration cost of the drug (which may vary from one institution to another), convenience of dosing, daily dose frequency, spectrum of coverage, side effects, and risk of drug-drug interactions.
- Cefotaxime IV should be dosed on a q 8 hours basis when used for treatment of CAP.
- the Some institutions may use oral macrolide therapy for patients with mild-to-moderate CAP.
- ** When anaerobic organisms are suspected as one of the possible etiologic pathogens in a patient with CAP, clindamycin or a β-lactam/β-lactamase inhibitor (ampicillin/sulbactam, ticarcillin/clavulanate, or ticarcillin/tazobacatam) is recommended.
- *** High community prevalence of, previous history of hospitalization, or increasing local incidence of methicillin-resistant *S. aureus* (MRSA) in a patient with a clinical presentation consistent with *S. aureus* pneumonia; vancomycin should be considered as component for initial therapy.

§§ Cefotaxime may be substituted for ceftriaxone, although ceftriaxone is preferred because of its once-daily dosing.

Oral therapy/outpatient treatment recommendations are appropriate only for those otherwise healthy patients with CAP of mild enough severity that they are judged to be suitable candidates for outpatient management with oral antibiotics.

If *S. pneumoniae* demonstrates complete resistance to extended spectrum quinolones (very rare), third-generation cephalosporins, and macrolides, then vancomycin may be required as part of initial therapy, although this would be necessary only in rare circumstances.