

Ceftaroline (Teflaro®)

IV Only

Use requires formal ID Consult

Activity: Coverage against *Staphylococcus aureus* (MSSA and MRSA), *Staphylococcus epidermidis* (including MSRE), *Streptococcus pneumoniae*, most gram-negatives, and some gram-positive anaerobic bacteria

NOT ACTIVE against *Pseudomonas spp.*, *Acinetobacter spp.*, resistant gram-negative bacteria (ESBL producers, carbapenemase producers, and AmpCs) or *Enterococcus spp.*

Criteria for Use:

- Acute bacterial skin and skin structure infection (ABSSSI) caused by MRSA +/- bacteremia or community-acquired bacterial pneumonia (CABP)
- Unable to use vancomycin (VAN; due to intolerance, MIC \geq 2 mg/mL, or infection unresponsive to VAN despite therapeutic concentrations)
- Unable to use other agents (refer to empiric therapy for ABSSSI/CABP)

Unacceptable Uses:

- Treatment of *P. aeruginosa*, *Enterococcus spp.*, or *Acinetobacter spp.* Infections (limited to no activity)
- Treatment of ESBL producing organisms, such as *E. coli* or *Klebsiella spp.* (inactivated by AmpC and ESBL beta-lactamases)
- Known serious hypersensitivity to ceftaroline or other members of the cephalosporin class. Cross-reactivity may occur in patients with a history of other beta-lactam allergies

Dosing in Adults:

- Standard dose: 600 mg IV Q12H
For MSSA/MRSA bacteremia consider: 600 mg IV Q8H
- Renal dose adjustment:
 - CrCl 30-50 mL/min: 400 mg IV Q12H
 - CrCl 15-30 mL/min: 300 mg IV Q12H
 - CrCl <15 mL/min: 200 mg IV Q12H
 - Hemodialysis: 200 mg IV Q12H
- All infusions should be over 1 hour
- No hepatic dose adjustment

Monitoring:

- Monitor **CBC** for drug-induced **hemolytic anemia** (none observed in studies, but seroconversion from negative to positive Direct Coombs' Test is observed in 10.8% on ceftaroline vs 4.4% on comparator)

ABSSSI= Acute bacterial skin and skin structure infection; CABP= community-acquired bacterial pneumonia; CBC= Complete blood count; CrCl= Creatinine clearance; ESBL= Extended spectrum beta-lactamase; H= hour(s); ID= infectious diseases; IV= Intravenous; MIC= Minimum inhibitory concentration; MRSA= Methicillin-resistant *Staphylococcus aureus*; MSSA= Methicillin-susceptible *Staphylococcus aureus*; Q= every; *spp*= Species; VAN= vancomycin