

CEFTRIAXONE

Third generation cephalosporin that exerts its effect by attaching to and inhibiting PBPs, thereby preventing the synthesis of the peptidoglycan component of the cell wall.

ANTIMICROBIAL SPECTRUM

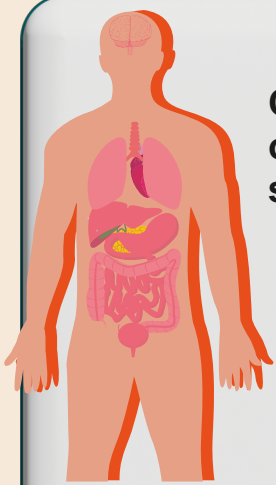
- ▣ **Gram-positive cocci:** *Streptococcus viridans*, *Streptococcus pyogenes* and most penicillin-susceptible *Streptococcus pneumoniae* (modest activity against methicillin-susceptible *Staphylococcus aureus*).
- ▣ **Gram-negative bacilli:** *Escherichia coli*, *Klebsiella* spp., *Proteus mirabilis*, *Morganella morganii*, *Yersinia enterocolitica*, *Haemophilus ducreyi*, *Haemophilus influenzae*, *Kingella* sp.
- ▣ **Gram-negative cocci:** *Neisseria gonorrhoeae*, *Neisseria meningitidis*.
- ▣ **Spirochetes:** *Borrelia burgdorferi*, *Treponema pallidum*, *Leptospira* sp.
- ▣ **No activity** against *Listeria* sp., enterococci, methicillin-resistant *S. aureus*, *Pseudomonas aeruginosa* and *Bacteroides fragilis*.

ROUTE
Parenteral
IV / IM

EXCRETION

33-67% excreted in urine unchanged; remainder secreted in bile.

MAIN INDICATIONS



Ceftriaxone should usually not be used as first-line treatment - many of the diseases listed below have better options with narrower spectrum:

- Empirical treatment of severe community-acquired infections
- Gonococcal infection
- Urinary tract infection
- Severe community-acquired pneumonia
- Mild-to-moderate intra-abdominal infection and pelvic inflammatory disease
- Bacterial meningitis
- Bloodstream infections
- Osteomyelitis and / or discitis, prosthetic joint infection, septic arthritis

ADULT DOSE

- ▣ **Usual Dose:** 1-2 g IV once daily
- ▣ **Bacterial meningitis:** 70-100 mg/kg/day
- ▣ **Gonococcal urethritis:** 500 mg IM one single dose



Renal adjustment

None if creatinine clearance > 5 ml/mn

SIDE EFFECTS



- ! Pseudocholelithiasis secondary to sludge in gallbladder, more likely with ≥ 2 g/day
- ! Rash
- ! Fever
- ! Diarrhoea

MONITORING

Observe for signs and symptoms of anaphylaxis.

PRECAUTIONS

- ▣ Fungal and bacterial superinfection with prolonged use.
- ▣ Infections caused by the following organisms should not be treated with third generation cephalosporins: *Enterobacter* spp., *Citrobacter freundii*, *Providencia* spp., *Morganella morganii* and *Serratia* spp. as these bacteria harbor chromosomally encoded inducible AmpC-lactamases that may allow the emergence of resistance during treatment.



PREGNANCY
FDA Category
B

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