

ANTIMICROBIAL SPECTRUM

- **Gram-negative cocci:** *Branhamella catarrhalis*, *Neisseria* sp. (high level of resistance in *Neisseria gonorrhoeae*).
- **Gram-negative bacilli:** *Enterobacterales* and *Pseudomonas aeruginosa* (with increasing resistance), *Haemophilus influenzae*, *Campylobacter* sp., *Vibrio* sp., methicillin-susceptible *Staphylococcus aureus*.
- **Intra-cellular bacteria:** *Legionella pneumophila* (2nd choice after macrolides), *Chlamydomphila* sp., *Mycoplasma pneumoniae*, *Rickettsia* spp., *Coxiella burnetti* (2nd choice after doxycycline).
- No activity on streptococci, enterococci, strict anaerobes.

ROUTE
PO / IV



EXCRETION

Kidney: 75%



MAIN INDICATIONS

1. Urinary tract infections

- Empirical treatment of pyelonephritis or prostatitis if no risk factor for resistance.
- Targeted treatment for drug-susceptible pathogens.

2. Digestive tract infections

- Empirical treatment of traveller's diarrhea with fever or abdominal pain.
- Targeted treatment of drug-susceptible pathogens (*Salmonella*, *Campylobacter* sp.).

3. Osteo-articular infections

- Rifampicin-fluoroquinolone combination = 1st-line treatment for prosthetic joint infections due to susceptible staphylococci.

ADULT DOSE

- **PO or IV:** 200 mg every 8-12 h

One of the main assets of fluoroquinolones is good bio-availability (>95% for ofloxacin) and high diffusion in most tissues, including central nervous system, bone and joints, and prostate.



Dosing in patients with renal failure

- Creatinine clearance 10-50 mL/mn: 200 mg every 24 h
- Creatinine clearance <10 mL/mn: 200 mg every 48 h

SIDE EFFECTS

- ! Neurotoxicity, especially in elderly patients (delirium); seizures.
- ! Cardiovascular toxicity and phototoxicity: see above.
- ! Rheumatologic toxicity:
 - avoid in children <15 years (cartilage toxicity during growth).
 - inform patients about risk of tendinitis (especially elderly patients, or on corticosteroids).



CAUTIONS

- ! Most bacteria have low barrier for fluoroquinolone resistance emergence: only use if no better alternative available; not to be used as empirical treatment if the patient took fluoroquinolone within the last 6 months.
- ! Do not take ciprofloxacin pills together with treatments that increase gastric pH (anti-acid drugs), or calcium => absorption would be decreased by 30-40%.

MONITORING

Biological monitoring is not necessary for treatment < 14 days.

Inform patients about the risks of:

- Rheumatologic side effects: tendinitis, up to Achilles sheath ruptures => consultation in case of pain.
- Cardiovascular side effects: rare (<30/100,000 prescription) but potentially lethal (aortic dissection) => emergency consultation in case of thoracic pain.
- Photosensitivity (avoid heavy sun exposure).



PREGNANCY

FDA Category

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Should be given only if the potential benefits outweigh the potential risk to the foetus