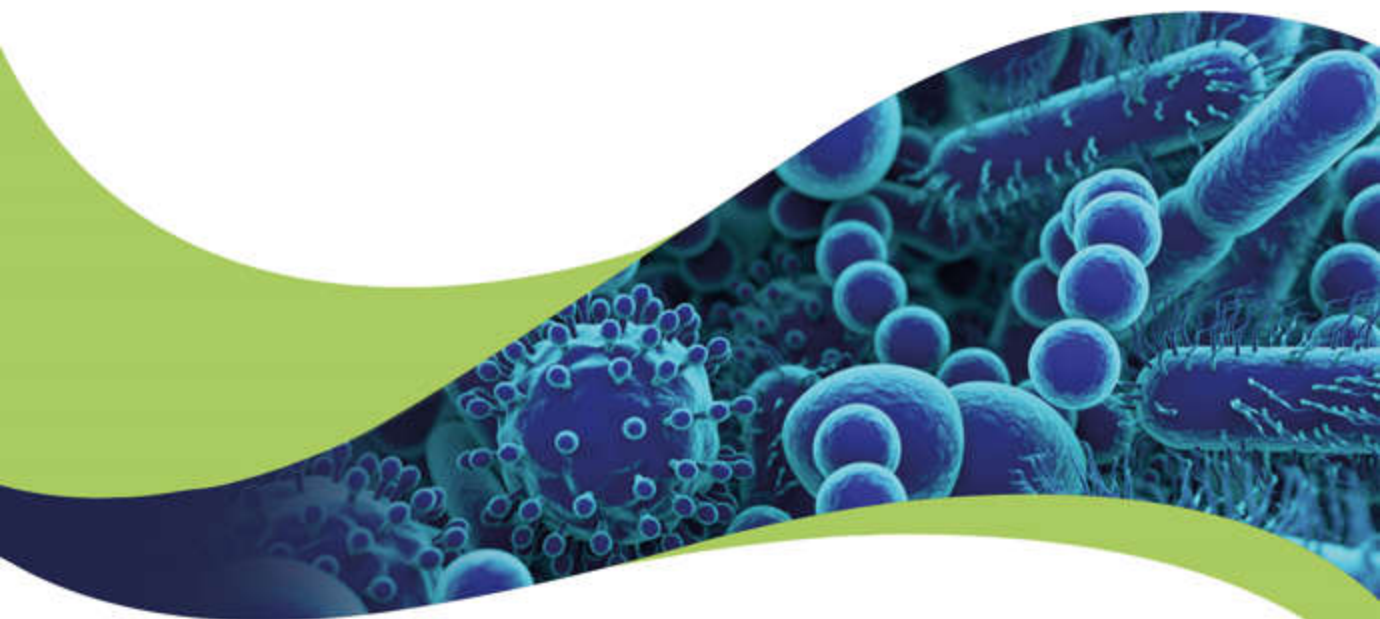
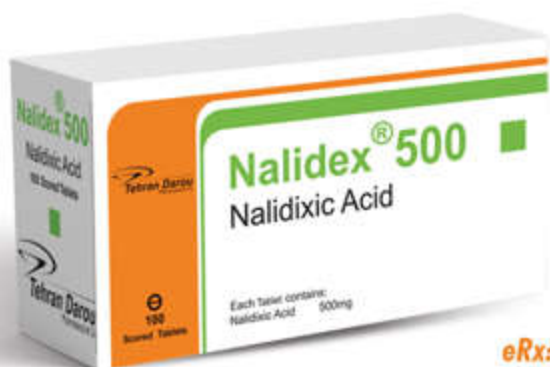


Nalidex[®]

Nalidixic Acid



Nalidixic acid is a quinolone antibiotic used to treat urinary tract infections



eRx:62088



Medicinal product

Nalidixic acid® 500 mg Scored-Tablet

Pharmacologic category

Antibiotic, Quinolone

Indication

treatment of urinary tract and infections caused by susceptible gram-negative microorganisms, including the majority of *E. coli*, *Enterobacter* species, *Klebsiella* species, and *Proteus* species.

Dosing

The recommended dosage for initial therapy:

Children ≥ 3 months: 50 to 55 mg/kg/day divided every 6 hours; reduce to 30 to 33 mg/kg/day divided every 6 hours for chronic infections

Adults: 1 g every 6 hours for at least 7 days; then reduce to 500 mg every 6 hours for chronic infections (total daily dose, 4 g).

For prolonged therapy, the total daily dose may be reduced to 2 g after the initial treatment period.

Underdosage during initial treatment may predispose to the emergence of bacterial resistance.

Dosing comments in renal impairment: $\text{CrCl} \leq 20$ mL/minute: Administer 50% of the recommended dose.

Mechanism of action

Evidence exists for Nalidixic acid that its active metabolite, hydroxy nalidixic acid, binds strongly, but reversibly, to DNA, interfering with the synthesis of RNA and, consequently, with protein synthesis.

Pregnancy and breastfeeding

Pregnancy Category C

Since nalidixic acid is excreted in breast milk, it is contraindicated during lactation.

Adverse effects

Common side effects include:

drowsiness, weakness, headache, dizziness, vertigo, abdominal pain, nausea, vomiting, stomach cramps, diarrhea, rash, skin sensitivity to sunlight, itching, hives, skin swelling, reversible visual disturbances (difficulty focusing, double vision, sensitivity to bright lights, changes in color perception, and decreases in visual sharpness), and joint pain and stiffness.

Contraindication

Nalidixic acid is contraindicated in patients with known hypersensitivity to nalidixic acid or to related compounds, infants less than three months of age, and in patients with porphyria or a history of convulsive disorders. also contraindicated in patients undergoing concomitant therapy with melphalan or other related cancer chemotherapeutic alkylating agents because of serious gastrointestinal toxicity such as hemorrhagic ulcerative colitis or intestinal necrosis.

Interactions

Nalidixic acid has major interaction with Warfarin, tetracycline, chloramphenicol, nitrofurantoin, probenecid, melphalan, didanosine, and cyclosporine.

Additional information

Avoid excess sunlight while taking nalidixic acid. Do not drive, use machinery, or do other activities requiring full alertness while using Nalidixic acid.

References

NegGram (Nalidixic Acid): Uses, Dosage, Side Effects, Interactions, Warning (rxlist.com)
Nalidixic acid: Uses, Interactions, Mechanism of Action | DrugBank Online
Nalidixic acid: International drug information | UpToDate