



## ULTRACIN

Caplets

### Composition

Each tablet contains Ofloxacin 200 mg

### Action

Ofloxacin is a synthetic broad-spectrum antimicrobial agent for oral administration; it has thought to exert a bactericidal effect on susceptible micro-organisms by inhibiting DNA gyrase, an essential enzyme that is a critical catalyst in the duplication, transcription, and repair of bacterial DNA.

Ofloxacin is rapidly absorbed from the gastrointestinal tract following oral administration. Ofloxacin diffuses readily into most body tissues and fluids but not into the brain and spinal fluid. It achieves good penetration into bronchial secretions and achieves high urinary concentrations of the unchanged antibiotic.

The wide range of organisms sensitive to the bactericidal action of Ultracin includes:

#### Gram-Positive Aerobes

*Enterococcus Faecalis*, *Staphylococcus Epidermidis* (including methicillin-resistant strains).  
*Staphylococcus Saprophyticus*, *Streptococcus Agalactiae* (Group B)

#### Gram-Negative Aerobes

*Acinetobacter Calcoaceticus*, *Aeromonas Hydrophila*, *Bordetella Parapertussis*, *Bordetella Pertussis*,  
*Campylobacter Jejuni*, *Citrobacter Freundii*, *Enterobacter Cloacae*, *Haemophilus Ducreyi*, *Klebsiella Oxytoca*,  
*Moraxella (Branhamella) Catarrhalis*, *Morganella Morganii*, *Meisseria Meningitidis*,  
*Plesiomonas Shigelloides*, *Proteus Vulgaris*, *Providencia Rettgeri*, *Providencia Stuartii*,  
*Pseudomonas Fluorescens*, *Serratia Marcescens*.

#### Anaerobes

*Bacteroides Fragilis*, *Bacteroides Intermedius*, *Clostridium Perfringens*, *Clostridium Welchii*,  
*Eikenella Corrodens*, *Gardnerella Vaginalis*, *Peptococcus Niger*, *Peptostreptococcus species*.

#### Other Organisms

*Chlamydia Pneumoniae*, *Legionella Pneumophila*, *Mycobacterium Tuberculosis*, *Mycoplasma Hominis*,  
*Mycoplasma Pneumoniae*, *Ureaplasma Urealyticum*.

Many strains of other streptococcal species, Enterococcus species, and anaerobes are resistant to Ofloxacin.

#### Pharmacokinetics

Ofloxacin is readily absorbed and excreted mainly unchanged in the urine. The serum elimination half-life is approximately 6 to 8 hours. Following oral administration, peak serum concentrations reached within one to two hours. The plasma level usually achieved by the recommended dosage



regimes (3 to 4 micrograms/ml) is in excess of the average MIC that is 1 to 2 micrograms/ml for susceptible organisms.

Ofloxacin has a low (9.4%) plasma protein binding.

## Indications

Ultracin tablets indicated for the treatment of adults with mild to moderate infections caused by susceptible strains of the designated microorganisms in the infections listed below.

### Lower respiratory tract

- Acute bacterial exacerbation of chronic bronchitis.
- Community- acquired pneumonia.
- Both due to *Haemophilus Influenza* or *Streptococcus Pneumoniae*.

### Skin and skin structure

- Uncomplicated skin and skin structure infections due to *Staphylococcus Aureus*, *Streptococcus Pyogenes*, or *Proteus Mirabilis*.
- Sexually transmitted diseases.
- Acute, uncomplicated urethral and cervical gonorrhea due to *Neisseria Gonorrhoea*.
- Nongonorrheal urethrititis and cervicitis due to *Chlamydia Trachomatis*.
- Mixed infections of the urethra and cervix due to *Chlamydia Trachomatis* and *Neussaria Gonorrhoeae*.

### Urinary tract

- Uncomplicated cystitis due to *Citrobacter Diversus*, *Enterobacter Aerogenes*, *Escherichia Coli*, *Klebsiella Pneumoniae*, *Proteus Mirabilis*, or *Pseudomonas Aeruginosa*.
- Complicated urinary tract infections due to *Escherichia Coli*, *Klebsiella Pneumoniae*, *Proteus Mirabilis*, *Citrobacter Diversus*, or *Pseudomonas Aeruginosa*.

### Prostate

Prostatitis due to *Escherichia Coli*.

## Contraindications

- Ofloxacin should not be used in patients with known hypersensitivity to 4-quinolone antibacterials or any of the tablet excipients.
- Ofloxacin should not be used in patients with a past history of tendinitis.
- Ofloxacin, like other 4-quinolones, is contra-indicated in patients with a history of epilepsy or with a lowered seizure threshold.
- Ofloxacin is contra-indicated in children or growing adolescents, and in pregnant or breast-feeding women, since animal experiments do not entirely exclude the risk of damage to the cartilage of joints in the growing subject.
- Patients with latent or actual defects in glucose-6-phosphate dehydrogenase activity may be prone to haemolytic reactions when treated with quinolone antibacterial agents.

## Warnings



Even when used as instructed, Ofloxacin Tablets may alter reactivity to such an extent that the ability to drive vehicles or operate machinery may be impaired.

**Animal studies have shown that ofloxacin may affect joint development in immature animals. Do Not give Ofloxacin to patients under 18 years of age.**

*Clostridium difficile - associated disease:*

Diarhoea, particularly if severe and/or persistent, occurring during treatment or in the initial weeks following treatment with ofloxacin or with various other antibiotics, but especially broad-spectrum antibiotics, may be symptomatic of Clostridium difficile-associated disease, the most severe form of which is pseudo-membranous colitis.

If a diagnosis of pseudomembranous colitis suspected, stop ofloxacin immediately and appropriate specified antibiotic therapy should be started immediately (e.g. vancomycin or metronidazole).

Tendinitis, less frequently observed, may occasionally lead to rupture, involving more particularly Achilles tendon, and occurring especially in elderly patients. Rupture seems favored by treatment with corticosteroids. The onset of signs of tendinitis requires stopping the treatment, to rest both Achilles tendons by appropriate immobilization or special heelpieces, and to take orthopedic advice.

Ofloxacin may aggravate myasthenia gravis. Ofloxacin may negativate the isolation of Mycobacterium tuberculosis, giving false negative results, in the bacteriological diagnosis of tuberculosis.

Monitor the serum concentration of ofloxacin in patients with severe renal impairment and haemodialysis patients. Although this has not been reported, the possibility cannot be ruled out that fluoroquinolones may trigger an attack of porphyria in predisposed patients.

### **Pregnancy**

*Category D*

There is positive evidence of human fetal risk based on adverse reaction data from investigational or marketing experience or studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.

### **Nursing Mothers**

Since Ofloxacin excreted in breast milk, administration of this drug to nursing mothers may lead to sensitisation of their infants. Therefore, having taken into account the importance of the drug to the mother, either discontinue nursing or discontinue the drug.

### **Use in Infants**

Ofloxacin excreted largely unchanged by the kidney. Because renal function is incompletely developed in infants, the rate of elimination of the drug tends to be slow.

Administer Penicillin-type drugs with caution, particularly in neonates, and evaluate organ system function frequently.



## **Adverse Reactions**

### **General**

Nausea, insomnia, headache, dizziness, diarrhea, vomiting, rash, pruritus, external genital pruritus in women, vaginitis, dysgeusia.

### **Body as a whole**

Asthenia, chills, malaise, extremity pain, pain, epistaxis.

### **Cardiovascular System**

Cardiac arrest, edema, hypertension, hypotension, palpitations, vasodilatation, cerebral thrombosis, pulmonary edema, tachycardia, hypotension/shock, syncope

### **Gastrointestinal System**

Dyspepsia, intestinal perforation; pseudomembranous colitis, GI hemorrhage; hiccough, painful oral mucosa, pyrosis.

### **Genital/Reproductive System**

Burning, irritation, pain and rash of the female genitalia, dysmenorrhea, menorrhagia, metrorrhagia vaginal candidiasis.

### **Musculoskeletal System**

Arthralgia, myalgia, tendinitis/rupture: weakness.

### **Central Nervous System**

Seizures, anxiety, cognitive change, depression, dream abnormality, euphoria, hallucinations, paresthesia, syncope, vertigo, tremor, confusion, nightmares; suicidal thoughts or acts, disorientation, psychotic reactions, paranoia; phobia, agitation, restlessness, aggressiveness/hostility, manic reaction, emotional liability; peripheral neuropathy, ataxia, in coordination; possible exacerbation of: myasthenia gravis and extrapyramidal disorders; dysphasia, light-headedness.

### **Nutritional/Metabolic**

Thirst, weight loss.

### **Respiratory System**

Respiratory arrest, cough, rhinorrhea, dyspnea, bronchospasm, allergic pneumonitis, stridor.

### **Skin/Hypersensitivity**

Angioedema, diaphoresis, urticaria, vasculitis, anaphylactic reactions/shock; purpura, serumsickness, erythema multiform/Stevens-Johnson syndrome, erythema nodosum, exfoliative dermatitis, hyperpigmentation, toxic epidermal necrolysis, conjunctivitis, photosensitivity, vesiculobullous eruption.

### **Special Senses**



Decreased hearing acuity, tinnitus, photophobia, diplopia, nystagmus, blurred vision, disturbances of: taste, smell, hearing and equilibrium, usually reversible following discontinuation.

#### **Urinary System**

Dysuria, urinary frequency, urinary retention, anuria, polyuria, renal calculi, renal failure, interstitial nephritis, hematuria.

#### **Hematopoietic**

Anemia, leukopenia, leukocytosis, neutropenia, neutrophilia, increased band forms, lymphocytopenia, eosinophilia, lymphocytosis, thrombocytopenia, thrombocytosis, elevated ESR.

#### **Hepatic**

Hepatic dysfunction including hepatic necrosis, jaundice (cholestatic or hepatocellular), hepatitis elevated: alkaline phosphatase, AST (SGOT), ALT (SGPT).

#### **Endocrine/Metabolic**

Hyper- or hypoglycemia, especially in diabetic patients on insulin or oral hypoglycemic agents.

#### **Precautions**

Adequate hydration of patients receiving Ofloxacin maintained to prevent the formation of highly concentrated urine.

Administer Ofloxacin with caution in the presence of renal or hepatic insufficiency/impairment. In patients with known or suspected renal or hepatic insufficiency/impairment, careful clinical observation and appropriate laboratory studies should be performed prior to and during therapy since elimination of Ofloxacin may be reduced. In patients with impaired renal function (creatinine clearance  $\leq$  50 mg/ml), alteration of the dosage regimen is necessary.

Moderate to severe phototoxicity reactions observed in patients exposed to direct sunlight while receiving some drugs in this class, including Ofloxacin. Excessive sunlight should be avoided; therapy should be discontinued if phototoxicity (e.g., a skin eruption, etc.) occurs.

Ofloxacin should be used with caution in any patient with a known or suspected CNS disorder that may predispose to seizures or lower the seizure threshold (e.g., severe cerebral arteriosclerosis, epilepsy, etc.) or in the presence of other risk factors that may predispose to seizures or lower the seizure threshold (e.g., certain drug therapy, renal dysfunction, etc.).

Disturbances of blood glucose, including symptomatic hyperglycemia- and hypoglycemia, have been reported, usually in diabetic patients receiving concomitant treatment with an oral hypoglycemic agent (e.g., glyburide/Glibenclamide, etc.) or with insulin. In these patients, careful monitoring of blood glucose is recommended. If a hypoglycemic reaction occurs in a patient treated with Ofloxacin, discontinue Ofloxacin immediately and consult a physician.

As with any potent drug, periodic assessment of organ system functions, including renal, hepatic, and hematopoietic, is advisable during prolonged therapy.



## Drug Interactions

### *Quinolones/ Antacids/Sucralfate/ Metal Cations/Multi-Vitamins*

These agents interfere with the absorption of quinolones resulting in systemic levels considerably lower than desired. These agents should not be taken within the two-hour period before or within the two-hour period after Ofloxacin administration.

### *Quinolones/ Cimetidine*

Cimetidine has demonstrated interference with the elimination of some quinolones.

### *Quinolones/ Cyclosporine/Theophylline (methylxanthines)/ Warfarin*

Most quinolone antimicrobial drugs inhibit cytochrome P450 enzyme activity. This may result in a prolonged half-life for some drugs that also metabolized by this system when co administered with quinolones. The extent of this inhibition varies among different quinolones.

### *Quinolones/ Non-Steroidal Anti-Inflammatory Drugs*

The concomitant administration of a non-steroidal anti-inflammatory drug, with a quinolone, including Ofloxacin, may increase the risk of CNS stimulation and convulsive seizures.

### *Quinolones/ Probenecid*

The concomitant use of probenecid with certain other quinolones has been reported to affect renal tubular secretion.

## Diagnostic Interference

Treatment with quinolones may result in prolongation of prothrombin time, acidosis, and elevation of: serum triglycerides, cholesterol serum potassium, liver function tests including GGTP, LDH, Bilirubin, albuminuria, candiduria.

## Dosage and Administration

Ultracin Tablets swallowed with a little liquid, they may be taken on an empty stomach or with meals. The dosage should be determined according to the sensitivity of the causative organism and the severity of the infection.

### **The following dosages are recommended:**

#### *Uncomplicated Cystitis*

100 mg twice daily for 3 - 7 days.

#### *Pyelonephritis*

200 mg twice daily for 5 - 7 days.

#### *Infections of the lower respiratory tract*

400 mg twice daily for 7 -10 days. The daily dose may be altered depending on the severity of the infection.



*Uncomplicated urethral and cervical gonorrhoea*

A single dose of 400 mg.

*Urethritis and cervicitis due to Chlamydia trachomatis*

600 mg daily in divided doses for up to 7 days.

### **Renal Impairment**

For patients with impaired renal function and elderly patients, the dosage of Ultracin Tablets should be adjusted according to the degree of impairment. With a creatinine clearance of less than 50 ml to 20 ml/minute, a normal single dose should be administered every 24 hours, e.g. 200 mg once daily.

With a creatinine clearance of less than 20 ml/minute, the normal single dose should be given initially. This dose should then be reduced to half and administered every 24 hours, e.g. 200 mg initially, thereafter 100 mg once daily.

### **Over Dosage**

In the event of acute overdose, the stomach should be emptied. The patient should be observed and appropriate hydration maintained. Hemodialysis or peritoneal dialysis does not efficiently remove Ofloxacin.

### **Presentation**

Box of 10 caplets.