SUMMARY OF PRODUCTS CHARACTERISTICS

1. NAME OF THE FINISHED PHARMACEUTICAL PRODUCT :

1.1 Brand Name : **Ciproleb-500 Tablet**
1.2 Generic Name : Ciprofloxacin Tablets BP
1.3 Strength : 500 mg per tablet
1.4 Pharmaceutical Form: Tablet

2. QUALITATIVE & QUANTITATIVE COMPOSITION :

Each film-coated tablet contains:
Ciprofloxacin Hydrochloride BP
eq. to Ciprofloxacin BP 500 mg.
Colour: Sunset Yellow FCF & Titanium Dioxide BP

3. PHARMACEUTICAL FORM

Tablet.
Orange coloured, elongated, biconvex film coated tablet having central breakline on one face of each tablet.

3. CLINICAL PARTICULARS

4.1 Therapeutic indications

Ciprofloxacin is indicated for the treatment of Fistulating Crohn's disease, Respiratory-tract infections, Pseudomonal lower respiratory-tract infection in cystic fibrosis, Urinary-tract infections, acute uncomplicated cystitis in women, Acute or chronic prostatitis, Gonorrhoea.

4.2 Posology and method of administration

Fistulating Crohn's disease: Adult: 500 mg twice daily.
Respiratory-tract infections : Adult: 500 –750 mg twice daily.
Pseudomonal lower respiratory-tract infection in cystic fibrosis:
Adult: 750 mg twice daily.
Urinary-tract infections: Adult: 250–750 mg twice daily.
Acute uncomplicated cystitis in women: Adult: 250 mg twice daily for 3 days.
Acute or chronic prostatitis: Adult: 500 mg twice daily for 28 days.
Gonorrhoea: Adult: 500 mg for 1 dose.

4.3 Contraindications:

Ciprofloxacin is contraindicated in patients with history of tendon disorders related to quinolone use.

4.4 Special warnings and special precautions for use:

Acute myocardial infarction (risk factor for QT interval prolongation), avoid excessive alkalinity of urine (risk of crystalluria), bradycardia (risk factor for QT interval prolongation), congenital long QT syndrome (risk factor for QT interval prolongation), electrolyte disturbances (risk factor for QT interval prolongation), ensure adequate fluid intake (risk of crystalluria), heart failure with reduced left ventricular ejection fraction (risk factor for QT interval prolongation), history of symptomatic arrhythmias (risk factor for QT interval prolongation).

4.5 Interaction with other FPPs and Other forms of Interaction

Renal Impairment: Dose adjustments: With oral use in adults Give 250–500mg every 12 hours if 30–60 mL/minute/1.73m^2 (every 24 hours if eGFR less than 30 mL/minute/1.73 m^2). In children reduce dose if estimated glomerular filtration rate less than 30 mL/minute/1.73m^2 consult product literature.

4.6 Pregnancy and lactation

Pregnancy: A single dose of ciprofloxacin may be used for the prevention of a secondary case of meningococcal meningitis. Lactation: Amount too small to be harmful, it should be avoided during breast feeding.

4.7 Effects on ability to drive and use machines

Ciprofloxacin may impair performance of skilled tasks (e.g. driving); effects enhanced by alcohol.

4.8 Undesirable effects

Common or very common: Arthropathy (in children). **Uncommon:** Akathisia, fungal superinfection, musculoskeletal pain, oedema, renal impairment, sensation abnormal, thrombocytosis vasodilation. **Rare or very rare:** Antibiotic associated colitis, asthma, bone marrow disorders, crystalluria, erythema nodosum, gait abnormal, haematuria, intracranial pressure increased, leucocytosis, migraine, muscle cramps, muscle tone increased, olfactory nerve disorder, pete chiae, status epilepticus. **Frequency not known:** Mood altered.

4.9 Overdose

An overdose of 12 g has been reported to lead to mild symptoms of toxicity. In acute overdose of 16 g has been reported to cause acute renal failure. In the event of overdose, symptomatic treatment should be implemented. ECG monitoring should be undertaken, because of the possibility of QT interval prolongation.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group:

Mechanism of action:

Ciprofloxacin is active against both Gram-positive and Gram-negative bacteria. It is particularly active against Gram-negative bacteria, including Salmonella, Shigella, Campylobacter, Neisseria, and Pseudomonas. Ciprofloxacin has only moderate activity against Grampositive bacteria such as Streptococcus pneumonia and Enterococcus faecalis; it should not be used For pneumococcal pneumonia. It is active against Chlamydia and some mycobacteria. Most anaerobic organisms are not susceptible. Ciprofloxacin can be used for respiratory tract infections (but not for pneumococcal pneumonia)

5.2 Pharmacokinetic properties

Ciprofloxacin following oral administration absorbed rapidly and extensively, mainly from the small intestine, reaching maximum serum concentrations 1-2 hours later. The absolute bioavailability is approximately 70-80%. Protein binding of Ciprofloxacin is low (20-30%). Ciprofloxacin is largely excreted unchanged both renally and, to a smaller extent, faecally.

5.3 Preclinical safety data

None Known

6. PHARMACEUTICAL PARTICULARS

6.1 List of Excipients

SN	Ingredients	Spec.
1	Starch (Maize)	BP
2	Microcrystalline Cellulose	BP
3	Sodium Methyl Hydroxybenzoate	BP
4	Sodium Propyl Hydroxybenzoate	BP
5	Purified Talc (Talcum)	BP
6	Magnesium Stearate	BP
7	Colloidal Anhydrous Silica (Colloidal Silicon Dioxide)	BP
8	Sodium Starch Glycolate	BP
9	Citric Acid Monohydrate	BP
10	Hydroxypropyl Methylcellulose	BP
11	Diethyl Phthalate	BP
12	Colour Titanium Dioxide	BP
13	Macrogol-4000 (P.E.G.- 4000)	BP
15	Sunset Yellow FCF	IH
16	Dichloromethane (Methylene Chloride)	BP
17	Methyl Alcohol	BP

6.2 Incompatibilities

Not Known

6.3 Shelf life

36 months

6.4 Special precautions for storage

Store at a temperature not exceeding 30^0C. Protect from light. Keep away from moisture. Keep out of reach of children.

6.5 Nature and contents of container

10 blisters of 10 tablets packed in an inner carton. (10 x 10)

6.6 Instructions for use and handling

Please see the package insert.

7. MARKETING AUTHORISATION HOLDER AND MANUFACTURING SITE ADDRESS

LEBEN LABORATORIES PVT. LTD.,

Business Address:

RO & Works : Plot No. L-4, Phase-III, MIDC, AKOLA–444 104 (MS), INDIA
Ph.:0091-724-2259401/02/03 & Fax:2258371
E-mail- export@lebenlab.com, qad@lebenlab.com, ra@lebenlab.com

Mumbai Off. : 11, Mahavir Mansion, 70, Trinity Street, Near Metro Cinema, MUMBAI–400 002 (MS), INDIA
Ph.: 0091-22-2207-5301, 02, Fax: 2207-5303
E-mail – mumbai@lebenlab.com.

Country : INDIA

8. MARKETING AUTHORISATION NUMBER

06861/07400/REN/2020

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

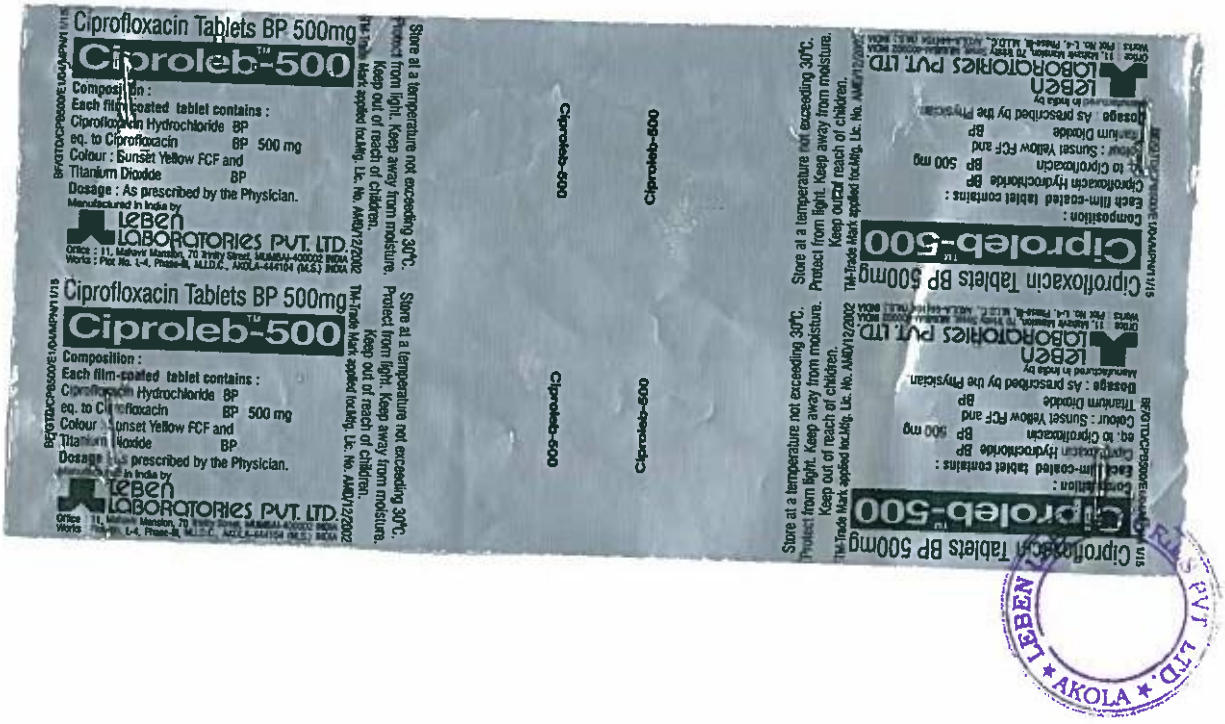
Date of latest renewal: Nov 28, 2021

10. DATE OF REVISION OF THE TEXT

01/01/2023

1.10.1. LABELLING INFORMATION (IMMEDIATE AND OUTER LABEL)

Copy Attached



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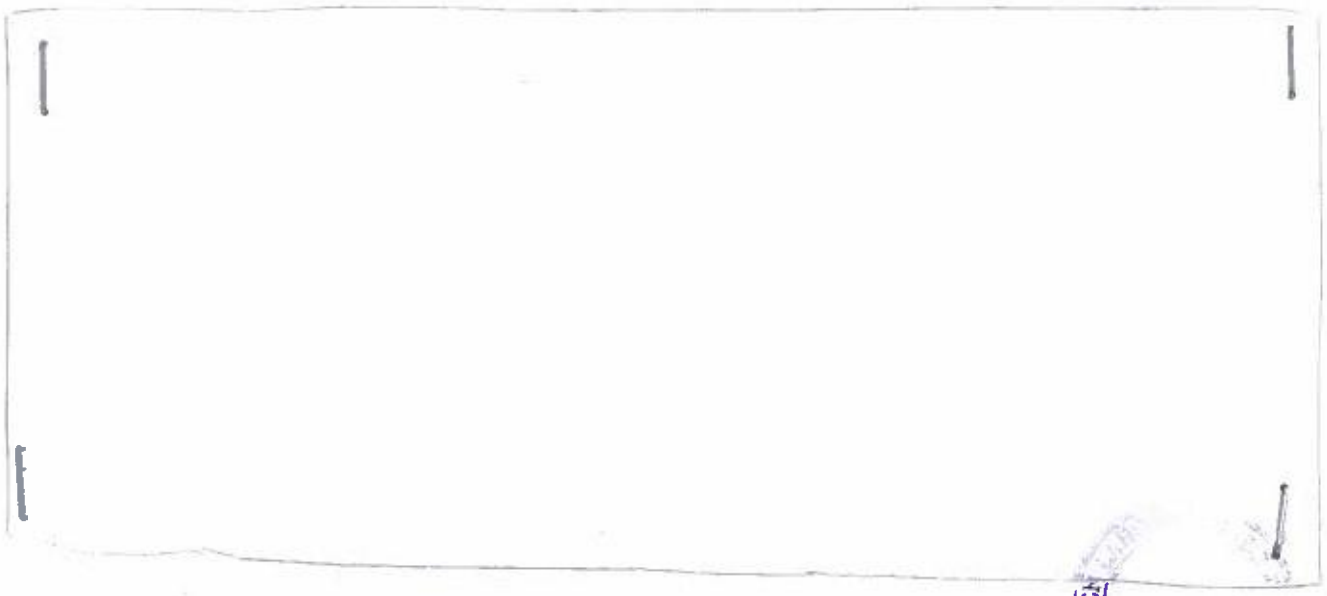
Chandrakant D. Dhote
B.Sc., AVTS (IC)
QA Manager



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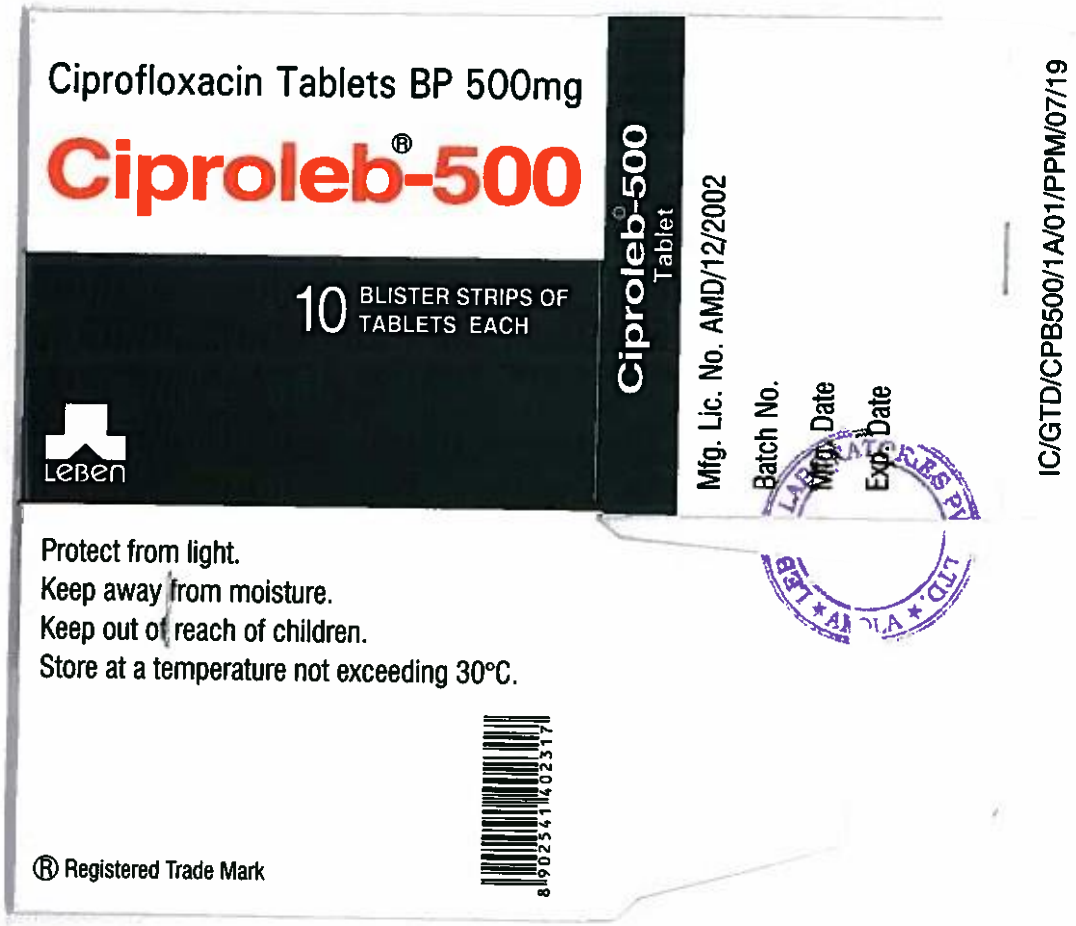
QA Manager



Chandrakant D. Dhote
B.Sc., AVTS (IC)
QA Manager

1.10.2. PATIENT INFORMATION LEAFLET (PIL)

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PRODUCT INFORMATION LEAFLET

Ciprofloxacin Tablets BP
Ciproleb™

DESCRIPTION : Ciprofloxacin Hydrochloride (Ciproleb) - film coated tablets, administered orally, having a broad spectrum antimicrobial activity. It is a fluorinated quinolone derivative. Like the other fluoroquinolones, Ciprofloxacin is a piperazinyl-substituted congener of Nalidixic acid, but in addition it has a cyclopropyl group.

COMPOSITION

Ciproleb-250 Tablet Each film coated tablet contains	Ciproleb-500 Tablet Each film coated tablet contains
Ciprofloxacin Hydrochloride BP eq. to Ciprofloxacin BP 250 mg Colour : Sunset Yellow FCF & Titanium Dioxide BP	Ciprofloxacin Hydrochloride BP eq. to Ciprofloxacin BP 500 mg Colour : Sunset Yellow FCF & Titanium Dioxide BP

PHARMACOLOGY: Ciprofloxacin is a broad-spectrum antiinfective agent of the fluoroquinolone class. Ciprofloxacin has in vitro activity against a wide range of gram-negative and gram-positive microorganisms. The mechanism of action of quinolones, including ciprofloxacin, is different from that of other antimicrobial agents such as beta-lactams, macrolides, tetracyclines, or aminoglycosides; therefore, organisms resistant to these drugs may be susceptible to ciprofloxacin. There is no known cross-resistance between ciprofloxacin and other classes of antimicrobials. Notably the drug has 100 times higher affinity for bacterial DNA gyrase than for mammalian. The bactericidal action of ciprofloxacin results from inhibition of the enzymes topoisomerase II (DNA gyrase) and topoisomerase IV, which are required for bacterial DNA replication, transcription, repair, strand supercoiling repair, and recombination.

P'KINETIC PARAMETER : Ciprofloxacin is absorbed rapidly and extensively, mainly from the small intestine, reaching maximum serum concentrations 1-2 hours later. Protein binding of ciprofloxacin is low (20-30%). Ciprofloxacin is present in plasma largely in a non-ionised form and has a large steady state distribution volume of 2-3 L/kg body weight. Ciprofloxacin reaches high concentrations in a variety of tissues such as lung (epithelial fluid, alveolar macrophages, biopsy tissue), sinuses, inflamed lesions (cantharides blister fluid), and the urogenital tract (urine, prostate, endometrium) where total concentrations exceeding those of plasma concentrations are reached. Low concentrations of four metabolites have been reported, which were identified as: desethylenecipro floxacin (M1), sulphociprofloxacin (M2), oxociprofloxacin (M 3) and formylciprofloxacin (M 4). The metabolites display in-vitro antimicrobial activity but to a lower degree than the parent compound. Ciprofloxacin is known to be a moderate inhibitor of the CYP 450 1A2 iso-enzymes. Ciprofloxacin is largely excreted unchanged both renally and, to a smaller extent, faecally. The serum elimination half-life in subjects with normal renal function is approximately 4-7 hours.

INDICATIONS : Ciprofloxacin is active against both Gram-positive and Gram-negative bacteria. It is particularly active against Gram-negative bacteria. It is indicated in Respiratory tract infection, Urinary tract infection, Acute or Chronic Prostatitis, Gonorrhoea, Surgical prophylaxis, Prophylaxis of meningococcal meningitis & Fistulating Crohn's disease.

CONTRAINDICATION : Ciprofloxacin must not be used in cases of hypersensitivity to ciprofloxacin or any of the excipients or other chemotherapeutic agents of the quinolone type.

DRUG INTERACTION:
Analgesics: possible increased risk of convulsions when quinolones given with ,NSAIDs. Ciprofloxacin advises avoid premedication with opioid analgesics (reduced plasma concentration of ciprofloxacin) when ciprofloxacin used for surgical prophylaxis.
Antacids: Ciprofloxacin absorption is reduced by antacids
Anticoagulants: Ciprofloxacin enhance anticoagulant effect of Coumarins.
Antidepressants: Ciprofloxacin inhibits metabolism of duloxetine therefore avoid concomitant use.
Antidiabetics: Ciprofloxacin possibly enhance effects of glibenclamide.
Antiepileptics: Ciprofloxacin increases or decreases plasma concentration of phenytoin.
Antipsychotic: Ciprofloxacin increases plasma concentration of clozapine & olanzapine hence avoid concomitant use.
Calcium Salts: Ciprofloxacin absorption is reduced by calcium salts.
Dopaminergics: Ciprofloxacin inhibits metabolism of ropinirole (increased plasma concentration).
Muscle Relaxants: Ciprofloxacin increases plasma concentration of tizanidine (increased risk of toxicity)—avoid concomitant use.
Ulcer-healing Drugs: Ciprofloxacin absorption is reduced by sucralfate.
Vaccines: Antibacterials are inactivate by oral typhoid.

PRECAUTIONS & WARNING : Quinolones should be used with caution in patients with a history of epilepsy or conditions that predispose to seizures, in G6PD deficiency , myasthenia gravis (risk of exacerbation), in renal impairment , pregnancy , during breast-feeding and in children or adolescents (arthropathy has developed in weight bearing joints in young animals). Exposure to excessive sunlight should be avoided (discontinue if photosensitivity occurs).

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CSM Advice : The CSM has warned that quinolones may induce convulsions in patients with or without a history of convulsions; taking NSAIDs at the same time may also induce them. Use in children quinolones cause arthropathy in the weight bearing joints of immature animals and are therefore generally not recommended in children and growing adolescents. However, the significance of this effect in humans is uncertain and in some specific circumstances short-term use of a quinolone in children may be justified. Ciprofloxacin is licensed for pseudomonal infections in cystic fibrosis (for children above 5 years of age), and for treatment and prophylaxis of inhalational anthrax.

Pregnancy and Lactation: Quinolones should be avoided in pregnancy because they have been shown to cause arthropathy in animal studies, safer alternatives are available, however a single dose of ciprofloxacin may be used for prevention of a secondary case of meningococcal meningitis.

Breast-feeding: Ciprofloxacin excreted amount in breast feeding is too small to be harmful but it is advises to avoid during breast feeding.

SIDE EFFECTS: Side Effect related to flatulence, pain and phlebitis at injection site; rarely dysphagia, pancreatitis, chest pain, tachycardia, syncope, oedema, hot flushes, abnormal dreams, sweating, hyperglycaemia, erythema nodosum; very rarely movement disorders, tinnitus, and tenosynovitis also reported peripheral neuropathy and polyneuropathy.

ADVERSE EFFECT : The most frequently reported adverse effect of Ciprofloxacin were nausea, diarrhea, liver function tests abnormal, vomiting and rash.

DOSAGE:
By mouth:
Respiratory-tract infections: 500–750 mg twice daily. (750 mg twice daily in pseudomonal lower respiratory tract infection in cystic fibrosis).
Urinary-tract infections: 250–750 mg twice daily (250 mg twice daily for 3 days usually adequate for acute uncomplicated cystitis in women)
Acute or chronic prostatitis : 500 mg twice daily for 28 days
Gonorrhoea : 500 mg as a single dose.
Most other infections : 500mg twice daily (increased to 750 mg twice daily in sever or deep seated infection.
Surgical prophylaxis (unlicensed): 750 mg 60 minutes before procedure.
Prophylaxis of meningococcal meningitis: Ciprofloxacin 500 mg as a single dose.
Child (unlicensed) under 5 years: 30 mg/kg (max 125 mg) as a single dose; 5-12 years 250 mg as a single dose.
Fistulating Crohn's Disease: Ciprofloxacin by mouth is given at a dose of 500 mg twice daily.

Renal impairment: By Mouth: 250-500 mg every 12 hours if eGFR 30-60mL/minute/1.73 m^2
(Every 24 hours if eGFR less than 30mL/minute/1.73 m^2).

OVERDOSE:
Toxicity: There is limited experience on overdose, but ciprofloxacin is considered to be of low toxicity.
Symptoms: Dizziness, tremor, headache, tiredness, seizures, hallucinations, confusion, gastrointestinal upset, liver and kidney abnormalities, crystalluria & haematuria.
Treatment: In acute overdosage, reversible kidney damage is seen. Gastric emptying by eliciting vomiting or gastric lavage is therefore recommended. Activated charcoal, Mg or Ca containing antacids are administered in order to reduce the absorption of ciprofloxacin. The patient should be kept under accurate observation receiving both symptomatic and supportive treatment. The renal function should be monitored. At haemodialysis or peritoneal dialysis only a modest amount of ciprofloxacin (<10%) is eliminated. Adequate hydration must be maintained to minimise the risk of crystalluria.

STORAGE INSTRUCTIONS : Store at a temperature not exceeding 30°C. Protect from light. Keep out of reach of children. Keep away from moisture.

PRESENTATION : (SUPPLIED PACKAGE QUANTITIES)

Ciproleb-250	: 10's x 10 blisters in an inner carton. 1000 tablets in a well closed HDPE jar.
Ciproleb-500	: 10's x 10 blisters in an inner carton.

TM - Trade Mark applied for.

PIL/GTD/CPB/E1/08/KPA/02/16

Manufactured in India by
Leben LABORATORIES PVT. LTD.
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Works : Plot No. L-4, Phase-III, M.I.D.C. AKOLA-444104 (M.S.) INDIA
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