SUMMARY OF PRODUCTS CHARACTERISTICS

1. Name of Medicinalproduct:

Brand Name: OMNAPIL-200
Generic Name: Cefixime Tablets USP 200mg

2. Qualitative and Quantitative Composition:

S.No.	Name of Ingredients
01	Cefixime(Compacted)*
02	Microcrystalline Cellulose (pH 102) **
03	Cross Carmellose Sodium (Primollose)
04	Colloidal Silicon Dioxide
05	Magnesium Stearate
06	Purified Talc
01	Hypromellose
02	Isopropyl Alcohol e
03	Methylene Chloride
04	Purified Talc
05	Titanium Dioxide
06	Polyethylene Glycol-6000

3. Pharmaceuticalform: d

Form **:** Solid Oral (Film Coated Tablets)

4. Clinical Particulars :

4.1 Therapeutic Indications :

Cefixime is an orally active Ce ɼ halosporin antibiotic which has marked *in vitro* bactericidal activity

against a wide variety of Gram-positive and Gram-negative organisms.

It is indicated for the treatment of the following acute infections when caused by susceptible micro-organisms:

Upper Respiratory Tract Infections (URTI):
Otitis media; and other URTI where the causative organism is known or suspected to be resistant to other commonly used antibiotics, or where treatment failure may carry significant risk.

Lower Respiratory Tract Infection: e.g. bronchitis.

Urinary Tract Infections: e.g. cystitis, cystourethritis, uncomplicated pyelonephritis.
Clinical efficacy has been demonstrated in infections caused by commonly occuring pathogens including *Streptococcus pneumoniae, Streptococcus pyogenes, Escherichia coli, Proteus mirabilis, Kliebsiella* species, *Haemophilusinfluenzae* (beta-lactamase positive and negative), *Branh mellacatarrhalis* (beta-lactamase positive and negative) and *Enterobacter* species. Cefixime is highly stable in the presence of beta-lactamase enzymes.

Most strains of enterococci (*Streptococcus faecalis,* group D Streptococci) and Staphylococci (including coagulase positive and negative strains and meticillin-resistant strains) are resistant to Cefixime. In addition, most strains of *Pseudomonas, Bacteriodesfragalis, Listeria monocytogenes* and *Clostridia* are resistant to Cefixime.

4.2 Posology and method of Administration :

The usual course of treatment is 7 days. This may be continued for up to 14 days if required.

Posology

Adults and Children over 10 Years or weighing more than 50 kg:
The recommended adult dosage is 200-400 mg daily according to the severity of infection, given either as a single dose or in two divided doses.

Elderly:

Elderly patients may be given the same dose as recommended for adults. Renal function should be assessed and dosage should be adjusted in severe renal impairment.

Children under 10 Years:

Cefixime Tablet 200 mg is not recommended for use in children under 10 years old.The safety and

efficacy of cefixime has not been established in children less than 6 months.

Renal Impairment:

Cefixime may be administered in the presence of impaired renal function. Normal dose and schedule may be given in patients with creatinine clearances of 20 ml/min or greater. In patients whose creatinine clearance is less than 20 ml/min, it is recommended that a dose of 200 mg once daily should not be exceeded. The dose and regimen for patients who are maintained on chronic ambulatory peritoneal dialysis or haemodialysis should follow the same recommendation as that for patients with creatinine clearances of less than 20 ml/min.

4.3 Method of administration: For oral administration

4.4 Contraindications:

Hypersensitivity to cephalosporin antibiotics or to any of the excipients

4.5 Special warnings and precautions for use:

Encephalopathy

Beta-lactams, including cefixime, predispose the patient to encephalopathy risk (which may include convulsions, confusion, impairment of consciousness, movement disorders), particularly in case of overdose or renal impairment.

Severe Cutaneous adverse reactions

Severe cutaneous adverse reactions such as toxic epidermal necrolysis, Stevens-Johnson syndrome and drug rash with eosinophilia and systemic symptoms (DRESS) have been reported in some patients on cefixime. When severe cutaneous adverse reactions occur, cefixime should be discontinued and appropriate therapy and/or measures should be taken.

Cefixime should be given with caution to patients who have shown hypersensitivity to other drugs.

Hypersensitivity to Penicillins

As with other cephalosporins, Cefixime should be given with caution to patients with a history of hypersensitivity to penicillin, as there is some evidence of partial cross-allergenicity between the penicillins and cephalosporins.

Patients have severe reactions (including anaphylaxis) to both classes of drugs. If an allergic effect

occurs with Cefixime, the drug s l ould be discontinued and the patient treated with appropriate agents if necessary.

Haemolyticanaemia

Drug-induced haemolyticanaemia, including severe cases with a fatal outcome, has been described for cephalosporins (as a class). The recurrence of haemolyticanaemia after re-administration of cephalosporins in a patient with a history of cephalosporin (including Cefixime) –associated haemolyticanaemia has also been reported.

Acute renal failure

As with other cephalosporins, cefixime may cause acute renal failure including tubulointerstitial nephritis as an underlying pathological condition. When acute renal failure occurs, cefixime should be discontinued and appropriate therapy and/or measures should be taken.

Renal impairment

Cefixime should be administered with caution in patients with markedly impaired renal function.

4.6 Paediatric population:

Safety and effectiveness in pediatric patients below the age of 16 have not been established.

4.7 Interaction with other medi c inal products and other forms of interaction:

Anticoagulants

In common with other cephalosp c rins, increases in prothrombin times have been noted in a few patients. Care should therefore be taken in patients receiving anticoagulation therapy.

Cefixime should be administered with caution to patients receiving coumarin-type anticoagulants, e.g. warfarin potassium. Since cefixime may enhance effects of the anticoagulants, prolonged prothrombin time with or without bleeding may occur.

Other forms of interaction

A false positive reaction for glucose in the urine may occur with Benedict's or Fehling's solutions or with copper sulphate test tablets, but n c t with tests based on enzymatic glucose oxidase reactions.

A false positive direct Coombs test has been reported during treatment with cephalosporin antibiotics,

therefore it should be recognised that a positive Coombs test may be due to the drug.

4.8 Additional information on special populations

Not known

4.9 Paediatric population

The safety and efficacy of cefixime has not been established in children less than 6 months.

4.10 Fertility, pregnancy and lactation

Reproduction studies have been performed in mice and rats at doses up to 400 times the human dose and have revealed no evidence of impaired fertility or harm to the foetus due to cefixime. In the rabbit, at doses up to 4 times the human dose, there was no evidence of a teratogenic effect; there was a high incidence of abortion and maternal death which is an expected consequence of the known sensitivity of rabbits to antibiotic-induced changes in the population of the microflora of the intestine. There are no adequate and well-controlled studies in pregnant women. Cefixime should therefore not be used in pregnancy or in nursing mothers unless considered essential by the physician.

4.11 Effects on ability to drive and use machines

In the case of side effects such as encephalopathy (which may include convulsion, confusion, impairment of consciousness, movement disorders), the patient should not operate machines or drive a vehicle.

4.12 Undesirable effects

Cefixime is generally well tolerated. The majority of adverse reactions observed in clinical trials were mild and self-limiting in nature.

The following adverse reaction will be considered listed:

Infections and infestations:

Pseudomembranous colitis

Blood and lymphatic disorders

Eosinophilia, Hypereosinophilia, Agranulocytosis, Leucopenia, Neutropenia, Granulocytopenia, Haemolyticanaemia, Thrombocytopenia and Thrombocytosis.

Immune system disorders,administrative site conditions, skin and subcutaneous tissue disorders:

Anaphylactic reaction, Serum sickness-like reaction, Drug rash with eosinophilia and systemic

symptoms (DRESS).

Nervous system disorders

- Dizziness, Headache
- Cases of convulsions have been reported with cephalosporins including cefixime.
- Beta-lactams, including cefixime, predispose the patient to encephalopathy risk (which may include convulsions, confusion, impairment of consciousness, movement disorders), particularly in case of overdose or renal impairment.

Gastrointestinal tract disorders

Abdominal pain, Diarrhoea, Dyspepsia, Nausea, Vomiting, Flatulence**.**

Hepatobiliary disorders: Jaundice

Renal and urinary disorders

Renal failure acute including tubulointerstitial nephritis as an underlying pathological condition.

Respiratory, thoracic and mediastinal disorders: Dyspnoea

Investigations:

Aspartate aminotransferase increased

Alanine aminotransferase increased

Blood bilirubin increased

Blood urea increased

Blood creatinine increased

4.13 Overdose

There is a risk of encephalopathy in cases of administration of beta-lactam antibiotics, including cefixime, particularly in case of overdose or renal impairment.

Adverse reactions seen at dose levels up to 2 g Cefixime in normal subjects did not differ from the profile seen in patients treated at the recommended doses. Cefixime is not removed from the circulation in significant quantities by dialysis.

No specific antidote exists. General supportive measures are recommended.

5. Pharmacological Properties :

5.1 Pharmacodynamic properties

Pharmacotherapeutic group:

third generation cephalosporin

ATC code: J01DD08

Cefixime is an oral third generation cephalosporin which has marked in vitro bactericidal activity against a wide variety of Gram-positive and Gram-negative organisms.

Clinical efficacy has been demonstrated in infections caused by commonly occurring pathogens including *Streptococcus pneumoniae, Streptococcus pyogenes, Escherichia coli, Proteus mirabilis, Klebsiella* species,*Haemophilusinfluenzae* (beta-lactamase positive and negative), *Branhamellacatarrhalis* (beta-lactamase positive and negative) and *Enterobacter*species. It is highly stable in the presence of beta-lactamase enzymes.

Most strains of enterococci (*Streptococcus faecalis,* group D Streptococci) and Staphylococci (including coagulase positive and negative strains and meticillin-resistant strains) are resistant to cefixime. In addition, most strains of *Pseudomonas, Bacteroidesfragilis, Listeria monocytogenes* and *Clostridia* are resistant to cefixime

5.2 Pharmacokinetic properties :

The absolute oral bioavailability of cefixime is in the range of 22-54%. Absorption is not significantly modified by the presence of food. Cefixime may therefore be given without regard to meals.

From *in vitro* studies, serum or urine concentrations of 1 mcg/mL or greater were considered to be adequate for most common pathogens against which cefixime is active. Typically, the peak serum levels following the recommended adult or paediatric doses are between 1.5 and 3mcg/mL. Little or no accumulation of cefixime occurs following multiple dosing.

The pharmacokinetics of cefixime in healthy elderly (age > 64 years) and young volunteers (11-35) compared the administration of 400 mg doses once daily for 5 days. Mean C_{max} and AUC values were

slightly greater in the elderly. Elderly patients may be given the same dose as the general population.

Cefixime is predominantly eliminated as unchanged drug in the urine. Glomerular filtration is considered the predominant mechanism. Metabolites of cefixime have not been isolated from human serum or urine.

Serum protein binding is well characterized for human and animal sera; cefixi e is almost exclusively bound to the albumin fraction, the mean free fraction being approximately 30%. Protein binding of cefixime is only concentration dependent in human serum at very high concentrations which are not seen following clinical dosing.

Transfer of ^{14}C-labelled cefixime from lactating rats to their nursing offspring through breast milk was quantitatively small (approximately 1.5% of the mothers' body content of cefixime in the pup). No data are available on secretion of cefi ime in human breast milk. Placental transfer of Cefixime was small in pregnant rats dosed with labelled Cefixime.

5.3 Preclinical safety data :

Not available.

6.0 Pharmaceutical Particulars :

6.1 List of Excipients

Tablet Core

Microcrystalline Cellulose (pH 102), Cross Carmellose Sodium (Primollose), Colloidal Silicon Dioxide Magnesium Stearate & Purified Talc.

Film Coating

Hypromellose, Isopropyl Alcohol, Methylene Chloride, Purified Talc, Titanium Dioxide & Polyethylene Glycol-6000.

6.2 Incompatibilites:

Not applicable.

6.3 Shelf life:

36 Months

6.4 Special precaution for storage :

Store at a temperature below 30° C. Protect from light& moisture.

6.5 Nature and contents of container :

10 Tablets packed in an ALU/ALU Blister. Such 10 Blister packed in a printed carton having leaflet

inside.

6.6 Special precautions for disposal and other handling:

None

7.0 Marketing authorisation holder:

Psychotropics India Limited
Plot no.12 & 12 A, Industrial Park 2 Phase-I
Salempur Mehdood2, Hardiwar-249403, (Uttarakhand)

8.0 Marketing authorisation numbers :

07426/08685/NMR/2020

9.0 Date of the first authorization or renewal:

May 28, 2022

10.0 Date of revision of the text :

Not Applicable

11.0 Dosimetry (If Applicable) :

Not Applicable

12.0 Instructions for Preparation of Radiopharmaceuticals (If Applicable) :

Not Applicable