1.5 Product Information

1.5.1 Prescribing information (Summary of Product Characteristics)

1. Name of the medicinal Product

Cefixime Tablets USP 400 mg (CEFEST TABLETS)

2. Qualitative and quantitative composition

Composition:

Each film coated tablet contains: Cefixime Trihydrate USP equivalent to Cefixime Anhydrous... 400 mg Excipients...... q.s

Colour: Titanium Dioxide BP

3. Pharmaceutical Form:

Film coated tablet

4. Pharmacological Particulars:

4.1 Pharmacodynamic properties

Pharmacotherapeutic group: -Antimicrobial (Chemotherapeutic) agents - Broad and Medium Spectrum Antibiotics, **ATC code:** J01DD08

Cefixime is an orally active cephalosporin antibiotic which has in-vitro bactericidal activity against a wide variety of gram-positive and gram-negative organisms including Streptococcus pneumonia, Streptococcus pyogenes, Escherichia coli, proteus mirabilis, klebsiella species, Haemophilus influenza (beta-lactamasePositive and negative), Moraxella (Branhamella) catarrhalis (beta- Lactamase positive and negative) and neisseria gonorrhoeae (including penicillinase - and nonpenicillinase - producing strains).

In vitro, cefixime has shown its activity against most strains of the following organisms. The gram-negative organisms include haemophilus parainfluenzae (beta-lactamase positive and negative strains), salmonella species, proteus vulgaris, klebsiella pneumoniae, klebsiella oxytoca, pasteurella multocida, serratia marcescens, citrobacter diversus, citrobacter amalonaticus, shigella species and providencia species. Streptococcus agalactiae inclusive as a gram-positive organism. Cefixime is stable in the presence of beta-lactamase enzymes. Most strains of enterococci (Group D Streptococcus.) and staphylococci (including coagulase positive and negative strains and methicillin resistant strains) are resistant to Cefixime. In addition, most strains of Enterobacter and Pseudomonas, Bacteroides fragilis, Listeria monocytogenes and Clostridia are resistant to Cefixime.

4.2 Pharmacokinetic properties

Cefixime, given orally, is about 40%-50% absorbed whether administered with or without food; however, time to maximal absorption is increased approximately 0.8 hours when administered with food. A single 400 mg tablet of Cefixime produces an average peak serum concentration of approximately 3.7 pg/ml (range 1.3 to 7.7 pg/ml); Peak serum concentrations occur between 2 and 6 hours following oral administration of a single 400 mg tablet of Cefixime.

Approximately 50% of the absorbed dose is excreted unchanged in the urine in 24 hours. In animal studies, it was noted that cefixime is also excreted in the bile in excess of 10% of the administered dose. Serum protein binding is concentration independent with a bound fraction of approximately 65%.

The serum half-life of cefixime in healthy subjects is independent of dosage form and averages 3.0 -4.0 hours but may range up to 9 hours in some normal volunteers. AverageAUC. at steady state in elderly patients are approximately 40% higher than averageAUC in other healthy adults.

In subjects with moderate impairment of renal function (20 to 40 ml/min creatinine clearance), the average serum half-life of cefixime is prolonged to 6.4 hours. In severe renal impairment (5 to 20 ml/min creatinine clearance), the half-life increased to an average of 11.5 hours. The drug is not cleared significantly from the blood by hemodialysis or peritoneal dialysis. However, a study indicated that with doses of 400 mg, patients undergoing hemodialysis have similar blood profiles as subjects with creatinine clearances of 21-60 ml/min. There is no evidence of metabolism of cefixime in vivo.

5. Clinical Particulars:

5.1 Therapeutic Indications:

Cefixime is indicated for the treatment of the following infections when caused by susceptible micro-organisms.

- 1. Upper Respiratory Tract Infections; e.g., bacterial pharyngitis, tonsillitis, otitis media, sinusitis.
- 2. Lower Respiratory Tract Infections; e.g., bronchitis.
- 3. Urinary Tract Infections; e.g., acute cystitis.
- 4. Uncomplicated gonorrhoea
- 5. Otitis media caused by Haemophilus influenzae (beta-lactamase positive and negative strains), Moraxella (branhamella) catarrhalis and S.pyogenes.

5.2 Posology and method of administration:

Absorption of Cefixime is not significantly modified by the presence of food. The usual course of treatment is 7 -14 days.

Pediatric Use: The recommended dose of cefixime is 8mg/kg/day of the suspension. This may be given as a single daily dose or may be given in two divided doses as 4mg/kg every 12hours. Safety and efficacy in infants aged less than six months have not been established.

Adults and Children over 12 Years:

The recommended adult dosage is 400 mg daily given either as a single dose or in divided doses. In lower respiratory tract infections, 400 mg daily is recommended. For upper respiratory tract infections and uncomplicated urinary tract infections, 400

mg once daily is usually effective. For sinusitis the therapeutic dosage must be administered for 10 to 14 days. Treatment of uncomplicated Gonorrhoea: The recommended dosage is 400 mg as a single oral dose.

The 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.

Dosage in Renal Impairment: Cefixime may be administered in the presence of impaired renal function. Normal dose and schedule may be given in patients with creatinine clearance of 20 ml/min or greater. In patients whose creatinine clearance is less than 60 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 clearance of less than 20 ml/min.

5.3 Contraindications:

Allergy to cephalosporins. Cefixime is contra-indicated in patients with renal impairment with a creatinine clearance below 60 ml/min.

5.4 Special warning and precaution for use:

Use in Pregnancy and Breast Feeding: Safe use in human pregnancy has not been established and it is not known whether Cefixime is excreted in human breast milk.

5.5 Interaction with other medicinal products and other forms of interaction:

No significant interactions have been reported to date. A false positive reaction for glucose in the urine may occur with Benedict's or Fehling's solution or with copper sulphate test tablets, but not 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 medicine.

5.6 Pregnancy and Lactation:

Use in Pregnancy and Breast Feeding: Safe use in human pregnancy has not been established and it is not known whether Cefixime is excreted in human breast milk.

5.7 Effects on the ability to drive and use machines:

Not Applicable

5.8 Undesirable effects:

Gastrointestinal Disturbances: The most frequent side effects seen with Cefixime are diarrhoea and stool changes. Moderate to severe diarrhoea has been reported. Other gastrointestinal side effects seen less frequently are nausea, abdominal pain, dyspepsia, vomiting and flatulence. Pseudombranous colitis has been reported.

Central Nervous System: Headache and dizziness.

Hypersensitivity Reactions: Allergies in the form of rash, pruritus urticaria, drug fever and arthralgia have been observed. These reactions usually subsided upon discontinuation of therapy.

Haematological and Clinical Chemistry: Thrombocytopenia, leukopenia and eosinophilia have been reported. These reactions were infrequent and reversible. Changes in liverand renal function tests have been observed.

Miscellaneous: Other possible reactions include genital pruritus and vaginitis.

5.9 Overdose:

No specific antidote exists.

Cefixime is not removed from the circulation in significant quantities by dialysis.

Treatment is symptomatic and supportive..

5.10 Pre-clinical Safety:

Not Applicable

6. Pharmaceutical Particulars:

List of excipients

Raw Materials	Specification
Maize Starch	BP
Microcrystalline Cellulose	ВР
Lactose	ВР
Co-Povidone(P.V.K-30)	ВР
Isopropyl Alcohol	BP
Purified Talc	ВР
Magnesium Stearate	ВР
Croscarmellose Sodium	ВР
Colloidal Anhydrous Silica	ВР
Uniqcoat FCNAQ White	IH
Isopropyl Alcohol	BP
Dichloromethane	BP

Incompatibilities:

Not Applicable

Special Precautions for storage:

Store below 30°C and Protect from moisture. In oral suspension replace the lid tightly after every use.

Nature and contents of container:

Alu - Alu Blister pack

Special precautions for disposal and other handling:

None

7. Manufacturing site Addresses:

(Company) Name

: Zest Pharma Ltd

Address

:275 Sector F Sanwer Road, Indore, India

8. Date of first Authorization /renewal of the authorization:

9. Date of revision of text:

Not applicable

10. Dosimetry (if applicable)

Not applicable

11. Instructions for preparation of radiopharmaceuticals (if applicable)

Not Applicable