SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

Cefaclor Capsules 250mg
Keftid Capsules 250mg

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

	Per Capsule
Cefaclor Monohydrate Ph Eur Equivalent to Cefaclor	250.00mg.

3 PHARMACEUTICAL FORM

Capsules.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

Cefaclor is indicated for the treatment of infections caused by sensitive microorganisms. These are infections of the respiratory tract which include pneumonia, bronchitis (including deteriorations in chronic bronchitis), tonsillitis, pharyngitis and the management of sinusitis. Cefaclor is also effective in otitis media. It is active in acute and chronic urinary tract infections including cystitis and pyelonephritis and also in infections of the skin and soft tissues. Cefaclor may also be used in the eradication of

nasopharyngeal streptococci but resulting prevention of rheumatic fever and/or bacterial endocarditis has not been proven.

The following microorganisms are susceptible *in vitro* to cefaclor:

- Alpha and beta-haemolytic streptococci
- Staphylococci (including coagulase-negative, coagulase-positive and penicillinase- producing strains)
- *Strep. pneumoniae*
- *Strep. pyogenes* (group A beta-haemolytic streptococci)
- *Branhamella catarrhalis*
- *E. ccli*
- *Proteus mirabilis*
- *Klebsiella spp.*
- *Haemophilus influenzae* (including ampicillin-resistant strains)

Cefaclor is inactive against *Pseudomonas* and *Acinetobacter* spp., most strains of *Enterobacter* and *Serratia* spp., *Morganella morganii*, *Proteus vulgaris* and *Providencia rettgeri*. Methicillin-resistant staphylococci and most strains of enterococci including *Strep. faecalis* are resistant to cefaclor.

4.2 Posology and method of administration

Posology

Adults and the elderly:

The usual dosage is 250mg every eight hours, may be doubled to 500mg every eight hours for more severe infections or those caused by less susceptible organisms. Doses of 4g per day have been administered safely to normal subjects for 28 days, but the total daily dosage should not exceed this amount.

Cefaclor may be administered in the presence of impaired renal function. Under such conditions dosage is usually unchanged (see section 4.4).

Patients undergoing haemodialysis: Haemodialysis shortens serum half-life by 25-30%. In patients undergoing regular haemodialysis, a loading dose of 250mg-1g administered prior to dialysis and a therapeutic dose of 250-500mg every six to eight hours maintained during interdialytic periods is recommended.

Paediatric population

The usual recommended daily dosage for children is 20mg/kg/day in divided doses every eight hours, as indicated. For bronchitis and pneumonia, the dosage is 20mg/kg/day in divided doses administered 3 times daily. For otitis

media and pharyngitis, the total daily dosage may be divided and administered every twelve hours. Safety and efficacy have not been established for use in infants aged less than one month.

Doses may generally be administered three times daily as follows:

Age	Dose
1 month to 1 year	62.5mg
1-5 years	125.0mg
Over 5 years	250.0mg

In more serious infections, otitis media, sinusitis and infections caused by less susceptible organisms, 40mg/kg/day in divided doses is recommended, up to a daily maximum of 1g.

In infections caused by beta-haemolytic streptococci, treatment should be continued for at least 10 days.

Method of administration

Cefaclor is administered orally.

4.3 Contraindications

Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.

Hypersensitivity to other cephalosporins.

4.4 Special warnings and precautions for use

Warnings:
Before instituting therapy with cefaclor, every effort should be made to determine whether the patient has had previous hypersensitivity reactions to cefaclor, cephalosporins, penicillins or other drugs. Cefaclor should be given cautiously to penicillin-sensitive patients, because cross-hypersensitivity, including anaphylaxis, among beta-lactam antibiotics has been clearly documented.

If an allergic reaction to cefaclor occurs, the drug should be discontinued and the patient treated with the appropriate agents.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics, including macrolides, semi-synthetic penicillins and cephalosporins. It is important, therefore, to consider its diagnosis in patients who develop diarrhoea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening. Mild cases usually respond to drug discontinuance alone. In moderate to severe cases, appropriate measures should be taken.

Precautions:
Cefaclor should be administered with caution in the presence of markedly impaired renal function. Since the half-life of cefaclor in anuric patients is 2.3 to 2.8 hours (compared to 0.6-0.9 hours in normal subjects), dosage adjustments for patients with moderate or severe renal impairment are not usually required. Clinical experience with cefaclor under such conditions is limited; therefore, careful clinical observation and laboratory studies should be made.

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Prolonged use of cefaclor may result in the overgrowth of non-susceptible organisms. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In haematological studies or in transfusion cross-matching procedures, when anti-globulin tests are performed on the minor side, or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognised that a positive Coombs' test may be due to the drug.

A false-positive reaction for glucose in the urine may occur with Benedict's or Fehling's solutions or with copper sulphate test tablets.

4.5 Interaction with other medicinal products and other forms of interaction

There have been rare reports of increased prothrombin time, with or without clinical bleeding, in patients receiving cefaclor and warfarin concomitantly. It is recommended that in such patients regular monitoring of prothrombin time should be considered, with adjustment of dosage if necessary.

The renal excretion of cefaclor is inhibited by probenecid.

4.6 Fertility, Pregnancy and lactation

Pregnancy
Animal studies have shown no evidence of impaired female fertility or teratogenicity. However, since there are no adequate or well controlled studies in pregnant women, caution should be exercised when prescribing for the pregnant patient.

Breastfeeding
Small amounts of cefaclor have been detected in breast milk following administration of single 500mg doses. Average levels of about 0.2 micrograms/ml or less were detected up to 5 hours later. Trace amounts were detected at one hour. As the effect on nursing infants is not known, caution should be exercised when cefaclor is administered to a nursing woman.

4.7 Effects on ability to drive and use machines

Cefaclor does not affect the ability to drive or operate machinery.

4.8 Undesirable effects

Gastro-intestinal: The most frequent side-effect has been diarrhoea. It is rarely severe enough to warrant cessation of therapy. Colitis, including rare instances of pseudomembranous colitis, has been reported. Nausea and vomiting have also occurred.

Hypersensitivity: Allergic reactions such as morbilliform eruptions, pruritus and urticaria have been observed. These reactions usually subside upon discontinuation of therapy. Serum sickness-like reactions (erythema multiforme minor, rashes or other skin manifestations accompanied by arthritis/arthralgia, with or without fever) have been reported. Lymphadenopathy and proteinuria are infrequent, there are no circulating immune complexes and no evidence of sequelae. Occasionally, solitary symptoms may occur, but do not represent a serum sickness-like reaction. Serum sickness-like reactions are apparently due to hypersensitivity and have usually occurred during or following a second (or subsequent) course of therapy with cefaclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and usually subside within a few days of cessation of

therapy. Antihistamines and corticosteroids appear to enhance resolution of the syndrome. No serious sequelae have been reported.

There are rare reports of erythema multiforme major (Stevens-Johnson syndrome), toxic epidermal necrolysis, and anaphylaxis. Anaphylaxis may be more common in patients with a history of penicillin allergy. Anaphylactoid events may present as solitary symptoms, including angioedema, asthenia, oedema (including face and limbs), dyspnoea, paraesthesias, syncope, or vasodilatation.

Rarely, hypersensitivity symptoms may persist for several months.

Haematological: Eosinophilia, positive Coombs' tests and, rarely, thrombocytopenia. Transient lymphocytosis, leucopenia and, rarely, haemolytic anaemia, aplastic anaemia, agranulocytosis and reversible neutropenia of possible clinical significance (see section 4.5).

Hepatic: Transient hepatitis and cholestatic jaundice have been reported rarely, slight elevations in AST, ALT or alkaline phosphatase values.

Renal: Reversible interstitial nephritis has occurred rarely, also slight elevations in blood urea or serum creatinine or abnormal urinalysis.

Central Nervous System: Reversible hyperactivity, agitation, nervousness, insomnia, confusion, hypertonia, dizziness, hallucinations and somnolence have been reported rarely.

Miscellaneous: Genital pruritus, vaginitis and vaginal moniliasis.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continues monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme Website: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

The symptoms of cefaclor overdose are non-specific and are generally nausea, vomiting, diarrhoea and epigastric distress.

Treatment

Unless 5 times the normal total daily dose has been ingested, gastrointestinal decontamination will not be necessary.

General management may consist of supportive therapy.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Second-generation cephalosporins, ATC code: J01DC04

Cefaclor is active against the following organisms *in vitro:*

Alpha- and beta-haemolytic streptococci

Staphylococci; including coagulase-positive, coagulase-negative and penicillinase-producing strains

Streptococcus pneumoniae

Streptococcus pyogenes (group A beta-haemolytic streptococci)

Branhamella catarrhalis

Escherichia coli

Proteus mirabilis

Klebsiella species

Haemophilus influenzae, including ampicillin-resistant strains.

Cefaclor has no activity against *Pseudomonas* species or *Acinetobacter* species.
Methicillin-resistant staphylococci and most strains of enterococci (eg, *Str. faecalis)* are resistant to cefaclor. Cefaclor is not active against most strains of *Enterobacter* spp, *Serratia* spp, *Morganella morganii, Proteus vulgaris* and *Providencia rettgeri.*

5.2 Pharmacokinetic properties

Cefaclor is well absorbed after oral administration to fasting subjects. Total absorption is the same whether the drug is given with or without food; however, when it is taken with food, the peak concentration achieved is 50-75% of that observed when the drug is administered to fasting subjects and generally appears from ¾ to one hour later. Following administration of 250mg, 500mg and 1G doses to fasting subjects, average peak serum levels of approximately 7, 13 and 23 mg/L respectively were obtained within 30 - 60 minutes. Approximately 60 - 85% of the drug is excreted unchanged in the urine within eight hours, the greater portion being excreted within the first two hours. During the eight hour period, peak urine concentrations following the 250mg, 500mg and 1G doses were approximately 600, 900 and 1,900 mg/L respectively. The serum half-life in normal subjects is 0.6 - 0.9 hours. In patients with reduced renal function, the serum half-life of cefaclor is slightly prolonged. In those with complete absence of renal function, the plasma half-life of the intact molecule is 2.3 - 2.8 hours. Excretion pathways in patients with markedly impaired renal function have not been determined. Haemodialysis shortens the halflife by 25 - 30%.

5.3 Preclinical safety data

No further preclinical safety data.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Pregelatinised Maize Starch	BP
Silicon Dioxide	Ph Eur
Magnesium Stearate	Ph Eur

Capsule Shell Components:

Gelatin	Ph Eur
Indigotine (E132)	Pharm Fr
Erythrosine (E127)	Pharm Fr
Black Ferric Oxide (E172)	Pharm Fr
Titanium Dioxide (E171)	Ph Eur

Printing Ink Components:

Shellac	Ph Eur
Propylene Glycol	Ph Eur
Strong Ammonia Solution	Ph Eur
Yellow Iron Oxide (E172)	USP/NF

6.2 Incompatibilities

Cefaclor has no major incompatibilities.

6.3 Shelf life

24 months.

6.4 Special precautions for storage

Store below 25°C in a dry place, protected from light.

6.5 Nature and contents of container

PVC blister backed by hard-temper aluminium foil or polypropylene containers with polyethylene press-fit caps containing 3, 15, 21, 50 or 100 capsules.

6.6 Special precautions for disposal

Not applicable.

7 MARKETING AUTHORISATION HOLDER

Crescent Pharma Limited
Key House
Sarum Hill, Basingstoke
RG21 8SR
United Kingdom

8 MARKETING AUTHORISATION NUMBER(S)

PL 20416/0958

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

03/01/1997

10 DATE OF REVISION OF THE TEXT

23/08/2024