

Summary of Product Characteristics

1 NAME OF THE MEDICINAL PRODUCT

Cefaclor 500 mg Capsules

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each capsule contains 500 mg of cefaclor (as monohydrate).

For a full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Capsule, hard.

Cefaclor 500 mg capsules are grey and green.

4 CLINICAL PARTICULARS

4.1 Therapeutic Indications

Cefaclor is indicated for the treatment of the following infections due to susceptible microorganisms:

Rispiratory tract infections, including pneumonia, bronchitis, exacerbations of chronic bronchitis, pharyngitis and tonsillitis, and as part of the management of sinusitis.

Otitis media.

Skin and soft tissue infections.

Urinary tract infections, including pyelonephritis and cystitis.

Cefaclor has been found to be effective in both acute and chronic urinary tract infections.

Cefaclor is generally effective in the eradication of streptococci from the nasopharynx, however, data establishing efficacy in the subsequent prevention of either rheumatic fever or bacterial endocarditis are not available.

4.2 Posology and method of administration

Posology

Adults (including the elderly):

The usual adult dosage is 250 mg every eight hours. A dosage of 250 mg, administered 3 times daily for 10 days, is recommended for sinusitis. For more severe infections or those caused by less susceptible organisms, doses may be doubled. Doses of 4 g per day have been administered safely to normal subjects for 28 days, but the total daily dosage should not exceed this amount.

Children:

The usual recommended daily dose for children is 20 mg/kg/day, in divided doses, every eight hours, as indicated. For bronchitis and pneumonia, the dosage is 20 mg/kg/day in divided doses, administered 3 times daily. For otitis media and pharyngitis, the total daily dosage may be divided and administered every 12 hours. Safety and efficacy have not been established for use in infants aged less than one month.

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

In the treatment of beta-haemolytic streptococcal infections, therapy should be continued for at least 10 days.

Patients with impaired renal function:

Cefaclor may be administered in the presence of impaired renal function. Under such conditions, dosage is unchanged. 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 to 0.9 hours in normal subjects), dosage adjustments for patients with moderate or severe renal impairment are not usually required. Clinical experiences with cefaclor under such conditions is limited; therefore, careful clinical observation and laboratory studies should be made.

Patients undergoing haemodialysis:

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

Method of administration

Cefaclor is administered orally.

4.3 Contraindications

Hypersensitivity to 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

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastro-intestinal 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.

Cross-resistance may exist between penicillins and cephalosporins.

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:

Cefaclor should not be administered during pregnancy unless considered essential by the physician. Animal studies have shown no evidence of impaired fertility or teratogenicity. However there are no adequate or well-controlled studies in pregnant women.

Breast-feeding:

Small amounts of cefaclor have been detected in breast milk following administration of single 500 mg 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 has no known influence on the ability to drive and use machines.

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 'Drug Interactions'.

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 continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via: HPRA Pharmacovigilance, Earlsfort Terrace, IRL – Dublin 2. Tel: +353 1 6764971; Fax: +353 1 6762517; Website: www.hpra.ie; email: medsafety@hpra.ie

4.9 Overdose

Symptoms of nausea, vomiting, epigastric distress and diarrhoea would be anticipated.

Treatment: Unless 5 times the normal total daily dose has been ingested, gastro-intestinal 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 a semi-synthetic cephalosporin antibiotic. The bacterial action of the cephalosporins results from their inhibition of cell-wall synthesis.

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 pyogenes*; *Str. Pneumoniae* penicillin-sensitive strains; *Branhamella catarrhalis*; *Escherichia coli*; *Proteus mirabilis*; *Klebsiella* spp; *Haemophilus influenzae*, including beta-lactamase producing strains.

Cefaclor has no activity against *Pseudomonas* spp. or *Acinetobacter* spp. Methicillin-resistant staphylococci and most strains of enterococci (eg, *Str. faecalis*) and penicillin-resistant *Str. Pneumoniae* are resistant to cefaclor. Cefaclor is not active against most strains of *Enterobacter* spp, *Serratia* spp, *Morganella morganii*, *Proteus vulgaris* and *Providencia rettgeri*. The rare beta-lactamase-negative, ampicillin-resistant *H. influenzae* should be considered resistant to cefaclor.

5.2 Pharmacokinetic properties

Cefaclor is well absorbed after oral administration in fasting subjects.

Total absorption is unchanged in the presence of food; however, peak plasma levels are reduced by about half and the peak is delayed. Following administration of 250 mg, 500 mg and 1 g to fasting subjects, average peak plasma concentration of 7, 13 and 23 mg/l, respectively were obtained within 30 to 60 minutes. The serum half-life in normal subjects is 0.6 to 0.9 hour. Probenecid significantly prolongs the half-life.

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 to 2.8 hours. Haemodialysis shortens the half-life by 25 – 30 %. Cefaclor is about 50 % bound to plasma proteins. The drug is rapidly excreted by the kidneys; up to 85 % appears unchanged in the urine within 8 hours, the greater part within 2 hours. During this 8 hour period, peak urine concentrations following 250 mg, 500 mg and 1g doses were about 600, 900 and 1900 mg/l, respectively.

5.3 Preclinical safety data

There are no pre-clinical data of relevance to the prescriber in addition to that summarised in other sections of the Summary of Product Characteristics.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium Starch Glycollate (Type A)
Silica, Colloidal Anhydrous
Magnesium Stearate

Capsule Shell:

Indigo carmine (FD & C Blue 2) (E 132)
Titanium Dioxide (E171)
Black Iron Oxide (E 172)
Yellow Iron Oxide (E 172)
Gelatin

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

3 years.

6.4 Special precautions for storage

This medicinal product does not require any special storage conditions.

6.5 Nature and contents of container

Blister strips composed of PVC/PVdC and Aluminium foil.
Cartons of 8, 10, 16, 20, 24, 30, 32, 40, 48, 50, 56, 60, 64, 70, 72, 80, 88, 90, 96 or 100; not all pack sizes may be marketed.

6.6 Special precautions for disposal

No special requirements.

7 MARKETING AUTHORISATION HOLDER

Chanelle Medical
Loughrea
Co. Galway
Ireland

8 MARKETING AUTHORISATION NUMBER

PA0688/013/002

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation 13th April 2007

Date of last renewal 13th April 2012

10 DATE OF REVISION OF THE TEXT

March 2017