PACKAGE INSERT

SCHEDULING STATUS: S4

PROPRIETARY NAMES AND DOSAGE FORMS:

SANDOZ CEFPODOXIME 100 (Film-coated tablets)

SANDOZ CEFPODOXIME 40 mg/ 5 mℓ (Powder for suspension)

COMPOSITION:

Active ingredient:

Each Sandoz Cefpodoxime 100 film coated tablet contains: cefpodoxime proxetil equivalent to 100 mg of cefpodoxime.

Excipients:

Carboxymethylcellulose calcium, crospovidone (Kollidon CL) , hydroxypropylcellulose (Klucel LF), hypromellose (Methocel E 5), lactose monohydrate, magnesium stearate, sodium lauryl sulphate (Texapon K12), talc, titanium dioxide (C.I. 77891).

Each Sandoz Cefpodoxime 100 film coated tablet contains sugar (23,800 mg lactose monohydrate)

Sandoz Cefpodoxime 40 mg/ 5 mℓ suspension

Active ingredient:

Each Sandoz Cefpodoxime 5 mℓ suspension contains cefpodoxime proxetil equivalent to 40 mg of cefpodoxime.

Excipients:

Aspartame, citric acid anhydrous, guar galactomannan, lemon flavouring, orange flavouring, silicone dioxide, sodium benzoate, sodium chloride, sorbitan trioleate, sucrose, talc, yellow ferric oxide (E172).

Preservative: Sodium benzoate 0,5 % *m/m.*

Each Sandoz Cefpodoxime 5 mℓ suspension contains sugar (1848.58 mg sucrose)

Each Sandoz Cefpodoxime 5 mℓ contains artificial sweetener (25 mg/5ml aspartame)

PHARMACOLOGICAL CLASSIFICATION:

A 20.1.1 Broad and medium spectrum antibiotics

PHARMACOLOGICAL ACTION:

Pharmacokinetic properties:

Cefpodoxime proxetil is the prodrug of the bactericidal antibiotic cefpodoxime. Cefpodoxime is a semisynthetic β-lactam antibiotic, belonging to the third generation oral cephalosporins which has *in vitro* bactericidal activity against a wide range of Gram-negative and Gram-positive organisms. It inhibits the biosynthesis of the bacterial cell wall, enhanced by a high affinity for proteins at the cytoplasmic membrane.

In vitro sensitivity does not necessarily imply *in vivo* efficacy.

The following organisms are sensitive strains. Sensitivity tests must however be performed.

Gram-positive organisms*:*

- *Streptococcus pneumoniae*
- Streptococci of Groups A (*S. pyogenes)*, B *(S. agalactiae)*, C, F, and G.
- Other streptococci (*S. mitis, S. sanguis* and *S. salivarius*)
- *Propionibacterium acnes*
- *Corynebacterium diphtheriae*
- Methicillin-sensitive *S. aureus*, penicillinase and non-penicillinase producing strains

Gram-negative organisms:

- *Haemophilus influenzae*, β-lactamase and non β-lactamase producing strains
- *Haemophilus para-influenzae*, β-lactamase and non β-lactamase producing strains
- *Moraxella catarrhalis (Branhamella catarrhalis)*, β-lactamase and non β-lactamase producing strains
- *Neisseria gonorrhoeae*, β-lactamase and non β-lactamase producing strains
- *Escherichia coli*
- *Klebsiella pneumoniae, Klebsiella oxytoca*

The following organisms are not sensitive: Group D streptococci, Methicillin-resistant staphylococci *(S. aureus* and *S. epidermidis)*, *Staphylococcus saprophyticus*, Corynebacteria, groups J and K, *Listeria monocytogenes*, *Pseudomonas aeruginosa* and *Pseudomonas spp*., *Acinetobacter baumanii, Clostridium difficile, Bacteroides fragilis* and related species.

Pharmacokinetic properties:

Absorption:

Cefpodoxime proxetil is administered orally and is absorbed in the gastrointestinal tract and then hydrolysed by non-specific esterases to the active metabolite cefpodoxime.

The bioavailability of cefpodoxime is increased when given with food or when the gastric pH is reduced. Bioavailability is reduced when the gastric pH is increased.

Distribution:

Cefpodoxime diffuses in the pleural fluid, bronchial mucosa, lung parenchyma and tonsils.

Adults:

The maximum plasma concentration (C_{max}) obtained following oral administration of 100 mg of cefpodoxime is 1 to 1, 2 mg/ℓ and 2, 2 to 2, 5 mg/ℓ after 200 mg cefpodoxime. The time to reach maximum concentration (T_{max}) is between 2 to 3 hours. About 40 % of cefpodoxime is bound to plasma proteins mainly albumin.

Children:

The time taken to reach maximum concentration (T_{max}) is 2 to 4 hours.

Elimination:

The elimination half-life of cefpodoxime is 2,4 hours. 80 % of cefpodoxime is excreted unchanged in the urine.

INDICATIONS:

Adults:

SANDOZ CEFPODOXIME 100 is indicated for short-term treatment of upper and lower respiratory tract infections due to susceptible microorganisms:

- Acute bronchitis, relapses or acute exacerbations of chronic bronchitis and bacterial pneumonia
- Pharyngitis and tonsillitis
- Community-acquired bronchopneumonia
- Acute sinusitis

Use in children:

SANDOZ CEFPODOXIME 40 mg/ 5 mℓ is indicated for short-term treatment of infections due to susceptible microorganisms:

Upper and lower respiratory tract infections:

- Otitis media
- Tonsillitis and pharyngitis
- Pneumonia

CONTRAINDICATIONS :

Hypersensitivity to cephalosporin antibiotics (see “WARNINGS AND SPECIAL PRECAUTIONS”).

SANDOZ CEFPODOXIME 40 mg/5 mℓ must not be given to children with phenylketonuria, since the formulation contains aspartame (25 mg/5 mℓ).

Children below 1 year of age (see “DOSAGE AND DIRECTIONS FOR USE”).

WARNINGS AND SPECIAL PRECAUTIONS:

Before initiating therapy with SANDOZ CEFPODOXIME careful enquiry should be made concerning previous hypersensitivity reactions to penicillins and other beta-lactams as cross sensitivity occurs between penicillins and cephalosporins (see “CONTRAINDICATIONS”).

Serious and occasionally fatal hypersensitivity (anaphylactic) reactions have been reported in patients on SANDOZ CEFPODOXIME. If an allergic reaction occurs, SANDOZ CEFPODOXIME should be discontinued.

SANDOZ CEFPODOXIME should be used with care in patients with renal impairment (see “DOSAGE AND DIRECTIONS FOR USE”).

Caution should be exercised in patients with a history of gastrointestinal disease, especially ulcerative colitis, regional enteritis or antibiotic associated colitis.

A positive antiglobulin (Coombs) test has been reported during treatment with cephalosporins.

SANDOZ CEFPODOXIME contains sugar, which may have an effect on the glycaemic control of patients with diabetes mellitus.

SANDOZ CEFPODOXIME 100 contains lactose monohydrate. Patients with the rare hereditary conditions of galactose intolerance e.g. galactosaemia, Lapp lactase deficiency, glucose-galactose malabsorption or fructose intolerance should not take SANDOZ CEFPODOXIME 100.

SANDOZ CEFPODOXIME 40 mg/5 mℓ contains sucrose. Patients with rare hereditary conditions such as fructose intolerance, glucose-galactose mal-absorption or sucrase-isomaltase insufficiency should not take SANDOZ CEFPODOXIME 40 mg/5 mℓ.

SANDOZ CEFPODOXIME 40 mg/5 ml contains artificial sweetener aspartame 25 mg/5ml caution is advised in patients with phenylketonuria.

INTERACTIONS:

Absorption of SANDOZ CEFPODOXIME is decreased by concurrent ingestion of antacids or histamine H_2-receptor antagonists such as ranitidine. Probenecid reduces the renal excretion of SANDOZ CEFPODOXIME.

PREGNANCY AND LACTATION:

Safety and efficacy have not been established in pregnancy and lactation.

DOSAGE AND DIRECTIONS FOR USE:

Each film-coated tablet contains 100 mg of SANDOZ CEFPODOXIME.

Tonsillitis, pharyngitis and acute bronchitis:

One tablet (100 mg) every 12 hours with meals (200 mg/day). In the treatment of beta-haemolytic streptococcal infections, the dose has to be administered for at least 10 days.

Acute sinusitis, acute exacerbations of chronic bronchitis, pneumonia:

Two tablets (200 mg) every 12 hours with meals (400 mg/day).

Elderly patients: Dosage adjustment is not necessary where renal function is normal.

Renal insufficiency in adults and children:

The following dosing schedule is proposed:

Creatinine clearance	***Dosage***
> 40 mℓ / minute	No change
< 40 mℓ/ minute	
– 10 to 39 mℓ/minute	½ (50 mg) tablet daily
– < 10 mℓ/minute	½ (50 mg) tablet every second day

For patients undergoing haemodialysis the dosage should be administered after each dialysis session.

In children:

Each 5 mℓ of suspension contains 40 mg of cefpodoxime.

Preservative: Sodium benzoate 0, 5 % m/m

Contains aspartame 25 mg/5 mℓ.

The dosage depends on the weight of the child being treated. The average dose is 8 mg/kg/day administered in two doses at 12 hourly intervals with meals.

The following table may be used as a dosage guide:

Weight (kg)	***Dose***
Between 10 and 15 kg	5 mℓ (40 mg) every 12 hours
≥ 15 kg	10 mℓ (80 mg) every 12 hours

There is insufficient experience with SANDOZ CEFPODOXIME 40 mg/5 mℓ to make dosage recommendations for children less than 1 year of age.

Directions for preparation of suspension:

1. Before preparing the suspension, remove and dispose of the desiccant contained in a capsule inside the bottle cap.
2. Add 37 mℓ water for the 50 mℓ pack and 74 mℓ water for the 100 mℓ pack. Replace the cap.
3. Shake thoroughly to obtain an evenly dispersed suspension.

SHAKE THE BOTTLE WELL BEFORE USE.

SIDE EFFECTS:

The following side effects have been reported:

Gastrointestinal disorders:

Frequent: Nausea, vomiting, flatulence, abdominal pains and diarrhoea.

Severe and persistent watery diarrhoea which occurs during treatment or the first weeks after treatment may be a result of antibiotic related pseudomembranous enterocolitis caused by *Clostridium difficile.*

The diagnosis of this rare and possibly fatal condition should be confirmed by colonoscopy or histology. SANDOZ CEFPODOXIME should be discontinued if symptoms suggestive of pseudomembranous enterocolitis arise and appropriate antibiotic therapy should be initiated.

Hypersensitivity disorders:

Frequent: Skin rashes, urticaria, pruritus, purpura, eosinophilia, fever, reactions resembling serum sickness, cutaneous eruptions. Cases of bullous eruptions have been reported.

Less frequent: Anaphylactic reactions such as bronchospasm, angioedema and anaphylactic shock may occur. Erythema multiforme or Stevens-Johnson syndrome.

Haematological disorders:

Frequent: Thrombocytosis, leucopenia and eosinophilia, reduction of haemoglobin.

Less frequent: Neutropenia and thrombocytopenia. Agranulocytosis has been associated rarely with SANDOZ CEFPODOXIME. Haemolytic anaemia with a positive Coombs test may occur.

Hepatic disorders:

The following side effects have been reported and frequencies are unknown:

Elevated aspartate transaminase (AST), alanine transaminase (ALT) and alkaline phosphatase. Hepatitis and cholestatis may occur.

Central Nervous system disorders:

Less frequent Headache, dizzy sensations, paraesthesia.

Renal and urinary disorders:

Less frequent Increase in blood urea and creatinine.

Ear and labyrinth disorders:

Less frequent: Tinnitus.

Other:

Less frequent Asthenia or malaise.

KNOWN SYMPTOMS OF OVERDOSAGE AND PARTICULARS OF ITS TREATMENT:

In cases of overdosage, particularly in patients with renal insufficiency, there is a risk of reversible encephalopathy for several cephalosporins.

Convulsions have also been reported with very high doses especially in patients with renal impairment.

Treatment is symptomatic and supportive.

IDENTIFICATION:

Sandoz Cefpodoxime 100: White yellowish round film-coated tablets with a diameter of approx. 9 mm.

Sandoz Cefpodoxime 40 mg/5 mℓ: Cream tinged to orange-yellow powder for reconstitution. The reconstituted suspension is orange-yellow in colour and has a slightly fruity odour.

PRESENTATION:

Sandoz Cefpodoxime 100: PVC/PVDC/aluminium foil or Aluminium foil with PE backing blister pack of 10 tablets.

Sandoz Cefpodoxime 40 mg/ 5 mℓ: 60 mℓ or 100 mℓ amber glass bottle with polypropylene white screw cap containing powder for reconstitution up to 50 mℓ or 100 mℓ of suspension. The bottle is packed in a carton.

STORAGE INSTRUCTIONS:

SANDOZ CEFPODOXIME 100:

Store at or below 25 ºC. Protect from light and moisture.

Store in the original packaging.

SANDOZ CEFPODOXIME 40 mg/5 mℓ:

Before reconstitution: Store at or below 25 °C.

Keep container tightly closed.

Protect from light

After reconstitution: Shake the bottle before use.

Use within 14 days. Discard any unused portion.

Store in a refrigerator (2 to 8°C).

KEEP OUT OF THE REACH OF CHILDREN.

REGISTRATION NUMBER:

Sandoz Cefpodoxime 100: A39/20.1.1/0398

Sandoz Cefpodoxime 40 mg/5 mℓ: A39/20.1.1/0397

NAME AND BUSINESS ADDRESS OF THE HOLDER OF THE REGISTRATION:

Sandoz SA (Pty) Ltd[1]

72 Steel Road

Spartan

Kempton Park

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1619

DATE OF PUBLICATION OF THE PACKAGE INSERT:

Date of registration:

Sandoz Cefpodoxime 100: 08 February 2008

Sandoz Cefpodoxime 40 mg/5 mℓ: 15 August 2008

Date of most recent approval of professional information: 19 March 2010

Additional countries registration details:

Country	*Product name*	*Scheduling status (or Category of distribution)*	*Registration number*
Botswana	Sandoz Cefpodoxime 100 (10 tablets)	S2	BOT1803325
	Sandoz Cefpodoxime 100 (12 tablets)	S2	BOT1803325A
	Sandoz Cefpodoxime 100 (20 tablets)	S2	BOT1803325B
	Sandoz Cefpodoxime 100 (30 tablets)	S2	BOT1803325C
	Sandoz Cefpodoxime 40 mg/ 5 mℓ (50 ml)	S2	BOT1803326B
	Sandoz Cefpodoxime 40 mg/ 5 mℓ (60 ml)	S2	BOT1803326A
	Sandoz Cefpodoxime 40 mg/ 5 mℓ (100 ml)	S2	BOT1803326
Namibia	Sandoz Cefpodoxime 100	NS2	08/20.1.1/0166
	Sandoz Cefpodoxime 40 mg/ 5 mℓ	NS2	08/20.1.1/0167

Name and address of manufacturer:

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