SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

TRISPORIN

Cefdinir

1.1. Strength

300 mg

1.2. Pharmaceutical form

Film coated tablet

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

2.1 Qualitative declaration

Cefdinir

For the complete list of the excipients, see section 6.1

2.2 Quantitative declaration

Each film coated tablet contains 300 mg cefdinir

3. PHARMACEUTICAL FORM

Film coated tablet.

White-coloured, oblong, biconvex tablet

4. CLINICAL PARTICULARS

4.1. Therapeutic indications

- **Community-Acquired Pneumonia** caused by *Haemophilus influenzae* (including beta lactamase producing strains), *Haemophilus parainfluenzae* (including beta lactamese producing strains), *Streptococcus pneumoniae* (penicillin-sensitive strains only) and *Moraxella catarrhalis* (including beta-lactamase producing strains).

- **Acute exacerbation of chronic bronchitis** caused by *Haemophilus influenzae* (including beta lactamese producing strains), *Haemophilus parainfluenzae* (including beta lactamase producing strains), *Streptococcus pneumoniae* (penicillin-sensitive strains only) and *Moraxella catarrhalis* (including beta-lactamase producing strains).
- **Acute maxillary sinusitis** caused by *Haemophilus influenzae* (including beta lactamese producing strains), *Streptococcus pneumoniae* (penicillin-sensitive strains only) and *Moraxella catarrhalis* (including beta-lactamase producing strains).
- **Angina/tonsillitis** caused by *Streptococcus pyogenes.*
- **Uncomplicated skin infections** caused by *Staphylococcus aureus* (including beta-lactamase producing strains) and *Streptococcus pyogenes.*

4.2. Posology and method of administration

4.2.1 Posology

Adults and children from 13 years and older

Type of Infection	**Dosage**	**Duration**
Community-acquired Pneumonia	300 mg per 12 hour period	10 days
Acute exacerbation of chronic bronchitis	300 mg per 12 hour period or 600 mg single daily dose	5 to 10 days 10 days
Acute maxillary sinusitis	300 mg per 12 hour period or 600 mg single daily dose	10 days 10 days
Angina/tonsillitis	300 mg per 12 hour period or 600 mg single daily dose	5 to 10 days 10 days
Uncomplicated Skin Infections	300 mg per 12 hour period	10 days

- The daily dose should not exceed 600 mg.
- Once daily dosing for 10 days is as effective as BID dosing.
- Once-daily dosing have not been studied in community-acquired pneumonia and in skin infections; therefore, Trisporin Tablets should be administrated twice daily in this infection.

4.2.2 Special populations

Usage in the elderly

Dose adjustment in elderly patients is not necessary unless renal function is impaired.

Usage in patients with renal insufficiency

For adult patients with creatinine clearance < 30mL/min, the dose should be 300 mg given once daily. Hemodialysis removes cefdinir from the body. The recommended initial dosage is 300 mg (or 7 mg/kg) every other day. At the conclusion of each hemodialysis session, 300 mg (or 7 mg/kg) dose should be administrated. Subsequent doses should be 300 mg (or 7 mg/kg) every other day.

4.2.3 Paediatric population

Trisporin tablets are not indicated for children under the age of 13 years. For children under 12 years and from the age of 6 months on, there is a more suitable form available of Trisporin containing cefdinir in suspension.

4.2.4 Method of administration

Oral use

Trisporin tablets may be administrated without regard to meals.

4.3. Contraindications

Trisporin Tablets are contraindicated

- in patients with known hypersensitivity to the cephalosporin class of antibiotics.
- In patients presenting hypersensitivity to one of the exepients listed in section 6.1.

4.4. Special warnings and precautions for use

4.4.1 General information

Cross-hypersensitivity

Before starting therapy with cefdinir, inquiry should be made to determine whether the patient has shown previous hypersensitivity reactions to cefdinir, other cephalosporins, penicillins or other drugs. If cefdinir is to be given to penicillin-sensitive patients, caution should be exercised because cross-hypersensitivity among beta-lactam antibiotics has been clearly documented and may occur in up to 10% of patients with a history of penicillin allergy. If an allergic reaction to cefdinir occurs, the drug should be discontinued. Serious acute hypersensitivity reactions may require treatment with epinephrine and other emergency measures including intravenous fluids, intravenous antihistamines, corticosteroids, pressor amines and airway management with oxygen.

Pseudomembranous colitis

Cases of pseudomembranous colitis have been reported with nearly all antibacterial agents including cefdinir. Therefore, it is important to be careful in patients reporting diarrhea subsequent to the administration of antibacterial agents. Treatment with antibacterial agents alters the normal flora of the colon. Studies indicate that a toxin produced by *Clostridium difficile* is a primary cause of antibiotic-associated colitis. After diagnosis of pseudomembranous colitis has been established, appropriate therapy should be initiated. Mild cases of pseudomembranous colitis usually respond to drug discontinuation alone. In moderate to severe cases, consideration should be given to management with fluids and

electrolytes, protein supplementation and treatment with an antibacterial drug clinically effective against *Clostridium difficile*.

Superinfection

As with other broad-spectrum antibiotics, prolonged treatment may result in overgrowth of resistant organisms. Careful observation of the patient is essential. If superinfection occurs, appropriate alternative therapy should be administrated.

4.4.2 Pediatric population

Trisporin tablets are not indicated for children under the age of 13 years. For children above 13 years : see 4.4.1 General information.

4.5. Interactions with other medicinal products and food

- Cefdinir should be taken at least 2 hours before or after intake of an antiacid medicine.
- As with other drugs, probenecid inhibits the renal excretion of cefdinir.
- In the case of concomitant administration of cefdinir with iron containing drugs, cefdinir should be taken at least 2 hours before or after this drug.
- Alcohol may interfere with the actions of cefdinir.

4.6. Pregnancy, lactation and fertility

Pregnancy

There are no adequate and well-controlled studies in pregnant women, therefore it should be used during pregnancy only if clearly needed.

Lactation

After administration of single 600 mg doses, it was not detected in breast milk.

Fertility

No data available

4.7. Effects on ability to drive and use machines

Adverse effects on the ability to drive or to operate machinery have not been observed.

4.8. Undesirable effects

Undesirable effects after the use of cefdinir are mild and self-limiting.

The most common reported side effects are:

- Diarrhea (8-15%),
- Vaginal moniliasis (<4%),
- Nausea (3%),
- Rash (3%),
- Headache (2%),
- Increased urine leukocytes (2%),
- Increased urine protein (1-2%),
- Decreased lymphocytes (1%),
- Increased alkaline phosphatase (1%),
- Increased eosinophils (1%),
- Increased platelets (1%).
- Glycosuria (1%),

4.9. Overdosage

Information on cefdinir overdosage in humans is not available. Toxic signs and symptoms following overdosage with other beta-lactam antibiotics are nausea, vomiting, epigastric distress, diarrhea and convulsions. Hemodialysis removes cefdinir from the body.

5. PHARMACOLOGICAL PROPERTIES

5.1. Pharmacodynamic properties

Pharmacotherapeutic group: Other beta-lactam antibacterials, third-generation cephalosporins
ATC code: J01DD15.

Cefdinir is a broadspectrum semisynthetic cephalosporin. Cefdinir is a third generation cephalosporin having a bactericidal effect by disrupting the synthesis of bacterial cell walls. Some micro-organisms resistant to penicillins and certain cephalosporins are still sensitive to cefdinir. Cefdinir has more affinity to penicillin binding protein (PBP) 3,2,1 of *S.aureus* and penicillin binding protein (PBP) 2 and 3 of *E.faecalis* than the other cephalosporins. Cefdinir inhibits the myeloperoxidase excretion of neutrophils at the time of neutrophil stimulation by the mediators.

Microbiology

Cefdinir is effective on the following micro-organisms:

Aerobic Gram-Positive:

- *Staphylococcus aureus* (including beta-lactamase producing strains, excluding methicillin-resistant strains);
- *Streptococcus pneumoniae* (penicillin- sensitive strains only);
- *Streptococcus pyogenes; Staphylococcus epidermidis* (methicillin- sensitive strains only);
- *Streptococcus agalactiae*;
- *Streptococcus viridans species*;

Aerobic Gram-Negative:

- *Haemophilus influenzae* (including beta-lactamase producing strains);

- *Haemophilus parainfluenzae* (including beta-lactamase producing strains);
- *Moraxella catarrhalis* (including beta-lactamase producing strains);
- *Citrobacter diversus;*
- *Escherichia coli;*
- *Klebsiella pneumoniae;*
- *Proteus mirabilis*.

5.2. Pharmacokinetic properties

Absorption

Maximal plasma concentrations occur 2 to 4 hours postdose following oral administration. Cefdinir concentration in plasma increases with dosage, however not proportionally with the range of dosage increases. Bioavailability of cefdinir is determined 21% after using 300 mg and 16% after intake of a 600 mg cefdinir tablet.

After high-fat diet absorption of cefdinir (C_{max}) and amount (AUC) decreases respectively 16% and 10%, but this is clinical irrelevant. Cefdinir can be taken independently of meals.

Parameters following administration of one tablet of cefdinir.

	Single dose of 300 mg	Single dose of 600 mg
Cmax (µg/ml)	1,60	2,87
tmax (heures)	2,9	3,0
AUC (µg/hours/ml)	7,05	11,1

Cefdinir does not accumulate in plasma following once or twice daily administration to patients with normal renal functions.

Distribution

The mean volume of distribution is 0.67 l/kg (±0.29).

Cefdinir is 60% to 70% bound to plasma proteins in both adults and children. The protein binding is independent of concentration.

Metabolism and excretion

Cefdinir is not substantially metabolised and is eliminated maily unchanged via renal excretion with a mean plasma elimination half-life ($t_{½}$) of 1.7 hours. Renal clearance is 2.0(±1.0) ml/min/kg after taking 300 mg and 600 mg cefdinir tablet by patients with normal renal functions. The amount excreted unchanged in urine is respectively 18.4% (±6.4) and 11.6% (±4.6). Cefdinir clearance is reduced in patients with renal dysfunction. Because renal excretion is the predominant pathway of elimination, dosage should be adjusted in patients with renal function disorder or who are undergoing hemodialysis.

5.3 Preclinical safety data

No data available

6. PHARMACEUTICAL PROPERTIES

6.1. List of excipients

The tablet core contains **:**

- Calcium carmellose,
- Microcrystalline cellulose,
- Macrogol stearate,
- Magnesium stearate,
- Colloidal anhydrous silica.

The filmcoating contains:

- Hypromellose,

- Titanium dioxide (E171) ,
- Macrogol 400.

6.2 Incompatabilities

Not applicable

6.3 Shelf life

36 months.

Store below 30°C

6.4. Special precautions for storage

Store in original packaging

6.5 Nature and contents of container

10 tablets in a blister (AL/PVC/PE/PVDC)

6.6 Special precautions for disposal and other handlings

No special requirements for disposal.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7- MARKETING AUTHORISATION HOLDER AND MANUFACURING SITE ADDRESS

7.1 Marketing Authorisation Holder

Dafra Pharma GmbH Mühlenberg 7, 4052 Basel, Switzerland.

7.2 Manufacturer

PharmaVision Sanayi ve Ticaret A. Ş., Davutpaşa Cad. No: 145? 34010 Topkapı / Istanbul, Turkey.

8- MARKETING AUHORISATION NUMBER

See list of MAs per country

9- DATE OF FIRST REGISTRATION

See list of MAs per country

10- DATE OF REVISION OF TEXT

April 2019.