Cefprozil is a third generation cephalosporin antibiotic indicated for the treatment of the following infections:

- Infections of the upper and lower respiratory tract
- Uncomplicated urinary tract infections
- Skin and soft tissue infections

Cefprozil is not active against methicillin-resistant staphylococcus aureus (MRSA).

**Precautions**

Elimination of Cefprozil from the organism is carried out by the kidneys, and in patients who have an impaired renal function (*creatinine clearance less than 30 mL / min*) dose should be reduced by 50%.\(^1\) The use of this drug in patients with renal impairment leads to slower elimination of the drug and its accumulation in the body, which increases the risk of Cefprozil toxicity. In addition, simultaneous administration with other drugs that exhibit nephrotoxicity (*such as: aminoglycoside antibiotics and diuretics*) should be avoided.

Cefprozil should not be administered to patients with known allergic reaction to cephalosporin or penicillin antibiotics.

Generally, Cefprozil is a drug with a very good safety profile and clinical trials report gastrointestinal problems as a most common side effects \(^2\), although diarrhea occurs less frequently than with other cephalosporins.
Cefprozil, pregnancy and lactation

The FDA has classified this drug to a group B as animal studies have shown that Cefprozil does not exhibit adverse effects on the fetus. However, there are no controlled clinical trials on humans to confirm the safety of its use in human pregnancy.

W.C. Shy et al have shown that infants get about 0.3% of maternal dose through the mother's milk (about 3 mg per day), which is considered as a low dose, so this drug can be used during lactation when indicated.

How to use

The recommended dosage for patients older than 12 years, is located in the table below:

<table>
<thead>
<tr>
<th>Infection</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower respiratory tract infections (bacterial bronchitis including exacerbation)</td>
<td>500 mg twice a day</td>
</tr>
<tr>
<td>Inflammation of the pharynx caused by sensitive bacteria</td>
<td>500 mg once a day</td>
</tr>
<tr>
<td>Tonsillitis caused by sensitive bacteria</td>
<td>500 mg once a day</td>
</tr>
<tr>
<td>Bacterial sinusitis</td>
<td>250 mg twice a day</td>
</tr>
<tr>
<td>Mild to moderate infections of the skin</td>
<td>500 mg once a day</td>
</tr>
<tr>
<td>Severe infections of the skin</td>
<td>500 mg twice a day</td>
</tr>
<tr>
<td>Uncomplicated urinary tract infections (e.g. cystitis)</td>
<td>500 mg once a day</td>
</tr>
</tbody>
</table>

Cefprozil may be administered in children under the age of 12 years and the dose is calculated based on the child's body weight, and range from 7.5 mg / kg to 20 mg / kg, depending on the severity of the infection.

Pill is taken regardless of food.

Interactions

Cefprozil should not be administered concurrently with the following drugs:

- **Loop diuretics** (bumetanide, torasemide and furosemide). Concomitant use with these drugs increases the risk of nephrotoxicity.
- **Oral contraceptives.** Cefprozil reduce the effectiveness of oral contraceptives, and it is necessary to use alternative contraceptive methods.
- **Probenecid (drug used for the treatment of gout).** Probenecid increases the concentration of Cefprozil in the blood thus increasing the risk of its toxicity.
- **Balsalazide (drug used for the treatment of inflammatory bowel disease).** Cefprozil reduces the efficacy of this drug.
- **Bacteriostatic antibiotics (e.g. macrolides, sulphonamides and chloramphenicol).**
• Nimodipine (a drug used to prevent brain damage due to decreased blood flow in the brain). Co-administration of this drug with the Cefprozil increases the risk of kidney and nerve damage.

### Side effects

Cefprozil may cause the following side effects:

- **Gastrointestinal adverse events**
  - diarrhea
  - nausea
  - vomiting
  - flatulence
  - abdominal cramps
  - abdominal pain
  - black stools
- Headache
- Insomnia
- Increase of bilirubin levels in the blood
- Cholestatic jaundice
- Muscle pain
- Shortness of breath
- Wheezing
- Inflammation of the joints
- Increased thirst
- Pale skin
- Difficulty urinating
- Allergy

### References

1. NCBI link 1
2. NCBI link 2
3. NCBI link 3