PRESENTATION:
Cebuten 400mg capsule:
Each capsule contains Cefituben dihydrate INN equivalent to Cefituben 400mg.

DESCRIPTION:
Cefituben is the dihydrate salt of Cefituben, is a semi synthetic Cephalosporin antibiotic for oral administration.

PHARMACOKINETICS:
Absorption:
Cefituben is rapidly absorbed after oral administration. When Cefituben capsules were administered once daily for 7 days, the average Cmax was 17.9 µg/mL on day 7. Therefore, Cefituben accumulation in plasma is about 20% at steady state.
Distribution: The average apparent volume of distribution (V/F) of Cefituben in 6 adult subjects is 0.21 L/kg (1 SD = 0.03 L/kg).
Protein Binding:
Cefituben is 65% bound to plasma proteins. The protein binding is independent of plasma Cefituben concentration.
Tissue Penetration:
Bronchial secretions:
In a study of 15 adults administered a single 400-mg dose of Cefituben and scheduled to undergo bronchoscopy, the mean concentrations in epithelial lining fluid and bronchial mucosa were 15% and 37%, respectively, of the plasma concentrations.
Sputum:
Cefituben sputum levels average approximately 7% of the concomitant plasma Cefituben level. In a study of 24 adults administered Cefituben 200 mg bid or 400 mg qd, the average Cmax in sputum (1.5µg/mL) occurred at 2 hours post dose and the average Cmax in plasma (17µg/mL) occurred at 2 hours.
Middle-ear fluid (MEF):
In a study of 12 pediatric patients administered 9 mg/kg, Cefituben MEF area under the curve (AUC) averaged approximately 70% of the plasma AUC. In the same study, Cmax values were 14.3±2.7 µg/mL in MEF at 4 hours post dose and 14.5±3.7 µg/mL in plasma at 2 hours post dose.
Tonsillar tissue:
Data on Cefituben penetration into tonsillar tissue are not available.
Cerebrospinal fluid: Data on Cefituben penetration into cerebrospinal fluid are not available.

METABOLISM AND EXCRETION:
Cefituben is excreted in the urine; 95% of the administered radioactivity was recovered either in urine or feces.

INDICATIONS:
Cefituben is used to treat acute bacterial exacerbations of chronic bronchitis (ABECB), acute bacterial otitis media, pharyngitis, and tonsilitis. It is also indicated for pneumonia, infections of the urinary tract, enteritis and gastroenteritis.

DOSAGE AND ADMINISTRATION:
The usual dose of Cefituben is 400mg once daily.

SPECIAL POPULATIONS:
Geriatric patients:
Cefituben pharmacokinetics have been investigated in elderly (65 years of age and older) men (n = 8) and women (n = 4). Each volunteer received Cefituben 200-mg capsules twice daily for 3.5 days. The average Cmax was 17.5 (3.7) µg/mL after 3.5 days of dosing compared to 12.9 (2.1) µg/mL after the first dose; Cefituben accumulation in plasma was 40% at steady state. Information regarding the renal function of these volunteers was not available; therefore, the significance of this finding for clinical use of CEFITIBUTEN Capsules in elderly patients is not clear. Cefituben dosage adjustment in elderly patients may be necessary.

Patients with renal insufficiency:
Cefituben pharmacokinetics has been investigated in adult patients with renal dysfunction. The Cefituben plasma half-life increased and apparent total clearance (CL/F) decreased proportionately with increasing degree of renal dysfunction. In 6 patients with moderate renal dysfunction (creatinine clearance 30 to 49 mL/min), the plasma half-life of Cefituben increased to 7.1 hours and CL/F decreased to 30 mL/min. In 6 patients with severe renal dysfunction (creatinine clearance 5 to 29 mL/min), the half-life increased to 13.4 hours and CL/F decreased to 16 mL/min. In 6 functionally anephric patients (creatinine clearance <5 mL/min), the half-life increased to 22.3 hours and CL/F decreased to 11 mL/min (a 7- to 8-fold change compared to healthy volunteers). Hemodialysis removed 65% of the drug from the blood in 2 to 4 hours. These changes serve as the basis for dosage adjustment recommendations in adult patients with mild to severe renal dysfunction.

CONTRAINDICATIONS:
Cefituben is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

WARNINGS:
Before therapy with the Cefituben product is instituted, careful inquiry Should be made to determine whether the patient has had previous Hypersensitivity reactions to cefituben, other cephalosporin, penicillin, or other drugs. If this product 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 the Cefituben product occurs, discontinue the drug. Serious acute hypersensitivity reactions may require treatment with epinephrine and other emergency measures.

PRECAUTIONS:
As with other broad-spectrum antibiotics, prolonged treatment may result in the possible emergence and overgrowth of resistant organisms. Careful observation of the patient is essential. If super infection occurs during therapy, appropriate measures should be taken. The dose of Cefituben may require adjustment in patients with varying degrees of renal insufficiency, particularly in patients with creatinine clearance less than 50 mL/min or undergoing hemodialysis Cefituben is readily dialyzable. Dialysis patients should be monitored carefully, and administration of Cefituben should occur immediately following dialysis.

STORAGE:
Store in a cool (below 30ºC) dry place, away from light and children.

PACK SIZE:
Each box of Cebuten 400 contains 2 X 7’s capsules.