# AZITHROMIL - 500

## AZITHROMYCIN TABLETS USP

Each film coated tablet contains:
Azithromycin USP (as Dihydrate)
Eq.to Azithromycin Anhydrous 500 mg
Excipients q.s.
Colour : Quinoline Yellow Lake

**PHARMACOLOGICAL PROPERTIES**

Azithromycin is a macrolide antibiotic belonging to the azalide group. Bioavailability of azithromycin after oral administration is approximately 37%. Peak plasma concentrations are attained after 2-3 hours. Orally administered azithromycin is widely distributed throughout the body. The terminal plasma elimination half-life closely reflects the elimination half-life from tissues of 2-4 days.

**Therapeutic indications**

Azithromycin is indicated for the following bacterial infections induced by micro-organisms susceptible to azithromycin :

- Acute bacterial sinusitis (adequately diagnosed)
- Acute bacterial otitis media (adequately diagnosed)
- Pharyngitis, tonsillitis
- Acute exacerbation of chronic bronchitis (adequately diagnosed)
- Mild to moderately severe community acquired pneumonia
- Infections of the skin and soft tissues of mild to moderate severity e.g. folliculitis, cellulitis, erysipelas
- Uncomplicated Chlamydia trachomatis urethritis and cervicitis

Consideration should be given to official guidance on the appropriate use of antibacterial agents.

**Posology and method of administration**

*Adults, children and adolescents with a body weight of 45 kg or over:*
The total dose 1500 mg, administered as 500 mg once daily for 3 days. Alternatively, the same total dose (1500 mg) can be administered in a period of 5 days, 500 mg on the first day and 250 mg on day 2 to 5.

*Children and adolescents with a body weight below 45 kg:*
Azithromycin tablets are not suitable for patients under 45 kg body weight. Other dosage forms are available for this group of patients.

*Elderly patients:*
For elderly patients the same dose as for adults can be applied. Since elderly patients can be patients with ongoing proarrhythmic conditions a particular caution is recommended due to the risk of developing cardiac arrhythmia and torsades de pointes.

*Patients with renal impairment:*
Dose adjustment is not required in patients with mild to moderate renal impairment (GFR 10-80 ml/min).

*Patients with hepatic impairment:*
Dose adjustment is not required for patients with mild to moderate hepatic dysfunction.

**CONTRAINDICATION:**

Hypersensitivity to azithromycin, erythromycin, any macrolide or ketolide antibiotic, or to any of the excipient which are included in formulation.

**SPECIAL WARNING AND PRECAUTIONS FOR USE**

As with erythromycin and other macrolides, rare serious allergic reactions including angioneurotic oedema and anaphylaxis (rarely fatal), have been reported. Some of these reactions with azithromycin have resulted in recurrent symptoms and required a longer period of observation and treatment. Azithromycin administration should be stopped if liver dysfunction has emerged.

*Superinfections:*
As with any antibiotic preparation, it is recommended to pay attention to signs of superinfection with non-susceptible micro-organisms like fungi. A superinfection may require an interruption of the azithromycin treatment and initiation of adequate measures.

*Clostridium difficile* associated diarrhoea (CDAD) has been reported with use of nearly all antibacterial agents, including azithromycin, and may range in severity from mild diarrhoea to fatal colitis. Treatment with antibacterial agents alters the normal flora of the colon leading to overgrowth of *C. difficile*.

**Interaction with other medicinal products and other forms of interaction**

Antacids:In a pharmacokinetic study investigating the effects of simultaneous administration of antacids with azithromycin, no effect on overall bioavailability was seen. Azithromycin must be taken at least 1 hour before or 2 hours after antacids.

*Cetirizine:*In healthy volunteers, coadministration of a 5-day regimen of azithromycin with cetirizine 20 mg at steady-state resulted in no pharmacokinetic interaction and no significant changes in the QT interval.

*Didanosins (Dideoxyinosine):* Coadministration of 1200 mg/day azithromycin with 400 mg/day didanosine in 6 HIV-positive subjects did not appear to affect the steady-state pharmacokinetics of didanosine as compared with placebo.

*Digoxin (P-gp substrates):* Concomitant administration of macrolide antibiotics, including azithromycin, with P-glycoprotein substrates such as digoxin, has been reported to result in increased serum levels of the P-glycoprotein substrate.

*Zidovudine:* Single 1000 mg doses and multiple doses of 600 mg or 1200 mg azithromycin had little effect on the plasma pharmacokinetics or urinary excretion of zidovudine or its glucuronide metabolite. However, administration of azithromycin increased the concentrations of phosphorylated zidovudine, the clinically active metabolite, in peripheral blood mononuclear cells.

*Ergotamine derivatives:* Due to the theoretical possibility of ergotism, the concurrent use of azithromycin with ergot derivatives is not recommended.

Pharmacokinetic studies have been conducted between azithromycin and the following drugs known to undergo significant cytochrome P450 mediated metabolism.

*Carbamazepine:* In a pharmacokinetic interaction study in healthy volunteers, no significant effect was observed on the plasma levels of carbamazepine.

*Cimetidine:* In a pharmacokinetic study investigating the effects of a single dose of cimetidine, given 2 hours before azithromycin, on the pharmacokinetics of azithromycin, no alteration of azithromycin pharmacokinetics was seen.

*Coumarin-Type Oral Anticoagulants:* In a pharmacokinetic interaction study, azithromycin did not alter the anticoagulant effect of a single 15-mg dose of warfarin administered to healthy volunteers

*Cyclosporin:* In a pharmacokinetic study with healthy volunteers that were administered a 500 mg/day oral dose of azithromycin for 3 days and were then administered a single 10 mg/kg oral dose of cyclosporin, the resulting cyclosporin Cmax and AUC0-5 were found to be significantly elevated.

*Indinavir:* Coadministration of a single dose of 1200 mg azithromycin had no statistically significant effect on the pharmacokinetics of indinavir administered as 800 mg three times daily for 5 days.

*Midazolam:* In healthy volunteers, coadministration of azithromycin 500 mg/day for 3 days did not cause clinically significant changes in the pharmacokinetics and pharmacodynamics of a single 15 mg dose of midazolam.

Neutropenia was observed in subjects receiving concomitant treatment of azithromycin and rifabutin. Although neutropenia has been associated with the use of rifabutin, a causal relationship to combination with azithromycin has not been established.

**Fertility, Pregnancy and Lactation**

*Pregnancy*
There are no adequate data from the use of azithromycin in pregnant women. In reproduction toxicity studies in animals azithromycin was shown to pass the placenta, but no teratogenic effects were observed. The safety of azithromycin has not been confirmed with regard to the use of the active substance during pregnancy.

*Lactation*
Azithromycin has been reported to be secreted into human breast milk, but there are no adequate and well-controlled clinical studies in nursing women that have characterized the pharmacokinetics of azithromycin excretion into human breast milk.

**Undesirable Effects**

**The more common side effects of azithromycin oral tablet can include:**
Diarrhea, nausea, stomach pain, vomiting, Anorexia, Dizziness, headache, paraesthesia, dysgeusia Visual impairment, Deafness, Rash, pruritus, Arthralgia

**OVERDOSE**

*Symptoms*
The typical symptoms of an overdose with macrolide antibiotics include reversible loss of hearing, severe nausea, vomiting and diarrhoea.

*Treatment*
In the event of overdose, general symptomatic and supportive measures are indicated as required.

**Presentation** : Box of 3 Tablets
**Storage Condition** : Store in a cool, dry place below 30°C. Protect from light.

Manufactured :
**BAROQUE PHARMACEUTICALS PVT. LTD.**
Sokhada-388 620, Ta.-Khambhat
Dist.-Anand (Gujarat) INDIA.

MA Holder :
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