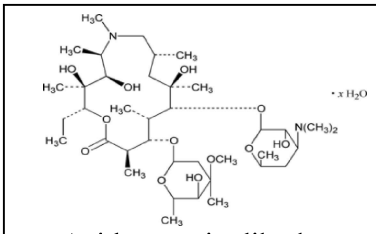
PACKAGE INSERT

AZBACT SUSPENSION
(AZITHROMYCIN POWDER FOR ORAL SUSPENSION USP)



Azithromycin dihydrate

1. Composition and dosage

Each 5 ml (after reconstitution) contains:
Azithromycin dihydrate USP
Eq. to Azithromycin……200 mg.
Excipients……..q.s.

2. Product Description

Physical Properties (e.g color, size, shape, marking or imprint, coating)

White to light pink colored free flowing powder, which is converted to pink color suspension after addition of water

Chemical Name :

1-Oxa-6-azacyclopentadecan-15-one,13-[(2,6-dideoxy-3-C-methyl-3-O-methyl-α-l-ribo-hexopyranosyl)oxy]-2-ethyl 3,4,10-trihydroxy-3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-3-(dimethylamino)-β-d-xylo-hexopyranosyl]oxy]- [2R (2R *,3S *,4R *,5R *,8R *,10R *,11R *,12S *,13S *,14R *)].

Molecular weight

785.02 g/mol

Empirical / Structural formula:

$C_{38}H_{72}N_2O_{12} \cdot x\ H_2O$

3. Pharmacodynamics/ Pharmacokinetics

PHARMACODYNAMICS

Azithromycin is an azalide, a sub-class of the macrolid antibiotics. By binding to the 50S-ribosomal sub-unit, azithromycin avoids the translocation of peptide chains from one side of the ribosome to the other. As a consequence of this, RNA-dependent protein synthesis in sensitive organisms is prevented

PHARMACOKINETICS

Absorption

After oral administration the bioavailability of azithromycin is approximately 37%. Peak plasma levels are reached after 2-3 hours (C_{max} after a single dose of 500 mg orally was approximately 0.4 mg/l).

Distribution

Kinetic studies have shown markedly higher azithromycin levels in tissue than in plasma (up to 50 times the maximum observed concentration in plasma) indicating that the active substance is heavily tissue bound (steady state distribution volume of approximately 31 l/kg). Concentrations in target tissues such as lung, tonsil, and prostate exceed the MIC_{90} for likely pathogens after a single dose of 500 mg.

Excretion

Plasma terminal elimination half-life closely reflects the tissue depletion half-life of 2 to 4 days. About 12% of an intravenously administered dose is excreted in the urine unchanged over a period of 3 days; the majority in the first 24 hours. Biliary excretion of azithromycin, predominantly in unchangedform, is a major route of elimination.

4. Indication

Azithromycin suspension can be applied in situation where microorganisms sensitive to azithromycin have caused.

- Upper respiratory infection : Sinusitis, pharyngitis, tonsillitis
- Acute otitis media
- Lower respiratory tract infection, acute bronchitis and mild to moderately severe community acquired oneumonia
- Skin and soft tissue infection
- Uncomplicated chlamydia trachomatis urethritis and cervictis

5. Recommended Dose and DIRECTIONS FOR USE:

Children and adolescents (< 18 years)

The total dosage in children aged 1 year and older is 30 mg/kg administered as 10 mg/kg once daily for three days, or over a period of five days starting with a single dose of 10 mg/kg on the first day,

followed by doses of 5 mg/kg per day for the following 4 days, according to the tables shown below. There are limited data on use in children younger than 1 year.

Weight (kg)	3-day therapy	5-day therapy		Contents of the bottle
	Day 1-3 10 mg/kg/day	Day 1 10 mg/kg/day	Day 2-5 5 mg/kg/day	
10 kg	2.5 ml	2.5 ml	1.25 ml	15 ml
12 kg	3 ml	3 ml	1.5 ml	15 ml
14 kg	3.5 ml	3.5 ml	1.75 ml	15 ml
16 kg	4 ml	4 ml	2 ml	15 ml
17 – 25 kg	5 ml	5 ml	2.5 ml	15 ml
26 – 35 kg	7.5 ml	7.5 ml	3.75 ml	22.5 ml
36 – 45 kg	10 ml	10 ml	5 ml	30 ml
> 45 kg	12.5 ml	12.5 ml	6.25 ml	22.5 ml + 15 ml

6. Contraindications

The use of azithromycin is contraindicated in patients with hypersensitivity to azithromycin, erythromycin, any macrolide or ketolide antibiotic, or to any of the excipients.

7. Warnings and Precautions

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 suspensioncontains soya lecithin which might be a source of soya protein and should therefore not be taken in patients allergic to soya or peanut due to the risk of hypersensitivity reactions.

C. difficile produces toxins A and B which contribute to the development of CDAD. Hypertoxin producing strains of *C. difficile* cause increased morbidity and mortality, as these infections can be refractory to antimicrobial therapy and may require colectomy. CDAD must be considered in all patients who present with diarrhoea following antibiotic use. Careful medical history is necessary since CDAD has been reported to occur over two months after the administration of antimicrobial agents. In case of CDAD anti-peristaltics are contraindicated.

Azithromycin suspensionare not suitable for treatment of severe infections where a high concentration of the antibiotic in the blood is rapidly needed.

Sinusitis

Often, azithromycin is not the substance of first choice for the treatment of sinusitis.

8. Interactions with Other medicaments

Antacids

In a pharmacokinetic study investigating the effects of simultaneous administration of antacids and azithromycin, no effect on the total bio-availability was seen, although the peak serum concentrations were reduced by approximately 25%. Azithromycin must be taken at least 1 hour before or 2 hours after the antacids.

Fluconazole

Coadministration of a single dose of 1200 mg azithromycin did not alter the pharmacokinetics of a single dose of 800 mg fluconazole. Total exposure and half-life of azithromycin were unchanged by the coadministration of fluconazole, however, a clinically insignificant decrease in C_{max} (18%) of azithromycin was observed.

Nelfinavir

Coadministration of azithromycin (1200 mg) and nelfinavir at steady state (750 mg three times daily) resulted in increased azithromycin concentrations. No clinically significant adverse effects were observed and no dose adjustment is required.

Atorvastatin

Coadministration of atorvastatin (10 mg daily) and azithromycin (500 mg daily) did not alter the plasma concentrations of atorvastatin (based on a HMG CoA-reductase inhibition assay).

Carbamazepine

In a pharmacokinetic interaction study in healthy volunteers, no significant effect was observed on the plasma levels of carbamazepine or its active metabolite in patients receiving concomitant azithromycin.

9. Fertility, Pregnancy and Lactation

There are no adequate data from the use of Azithromycin suspension 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. Therefore Azithromycin suspensionshould only be used during pregnancy if definitely indicated.

Azithromycin passes into breast milk. Because it is not known whether azithromycin may have adverse effects on the breast-fed infant, nursing should be discontinued during treatment with Azithromycin tablets. Among other things diarrhoea, fungus infection of the mucous membrane as well as sensitisation is possible in the nursed infant. It is recommended to discard the milk during treatment and up until 2 days after discontinuation of treatment. Nursing may be resumed thereafter.

10. Undesirable Effects: Adverse reactions

Immune system disorders: angioademea, hypersensitivity
Metabolism and nutrition disorder: Anorexia
Psychiatric disorders : Nervousness
Nervous system disorders: dizziness, headache, agitation
Eye disorders: visual impairment
Cardiac disorders : palpitation
Gastrointestinal disorders : diarrhea, vomiting, abdominal pain, nausea

11. Overdose and Treatment:

Adverse events experienced in higher than recommended doses were similar to those seen at normal doses. In the event of overdosage genaral symptomatic and general supportive measures are indicated as required.

12. Conditioning:

Dry powder for Suspension

STORAGE:

Unopened bottle: Store below 25°C. Protect from light & moisture.
Reconstituted suspension: Do not store above 25°C.

13. NAME AND ADDRESS OF MANUFACTURER

GLOBELA PHARMA PVT. LTD.
357-358, G.I.D.C,
Sachin, Surat – 394 230,
Gujarat, India.