

AZITHROMYCIN

Trade Name	Zithromax® (Pfizer)
Class	Macrolide Antibiotic
Mechanism of Action	Binds 50S ribosomal subunits and inhibits bacteria RNA-dependent protein synthesis.
Indications	Indication 1: Prophylaxis and treatment of <i>Bordetella pertussis</i> , infections (Whooping cough) Indication 2: Treatment of <i>Ureaplasma</i> infection
Contraindications	Hypersensitivity to azithromycin or other macrolide antibiotics eg erythromycin Use with caution in patients with liver impairment.
Supplied As	200mg/5mL oral liquid = 40 mg/mL 500mg tablets
Dilution	Reconstitute the powder for oral use as per manufacturer's instructions. If oral liquid is not available the tablets can be dispersed (do not try to crush) in 12.5 mL water to make a 40 mg/mL solution
Dosage	Indication 1: Pertussis <6 months age: 10mg/kg Other doses included in case prophylaxis needed for nursery contacts: >6 months age: 10mg/kg on day 1 then 5mg/kg day 2-5 Adults: 500mg on day 1 then 250mg day 2-5 Indication 2: Ureaplasma 20 mg/kg
Interval	Indication 1: Once daily for 5 days Indication 2: Once daily for 3 days
Administration	Oral: shake well before use Nasogastric tube: - mix with 0.5mL milk + give with a feed, or - mix with 0.5mL sterile water if insufficient - milk available and give between feeds
Compatible With	Azithromycin oral liquid can be given with food.
Incompatible With	Do not mix azithromycin oral liquid with other medications.
Monitoring	Liver function tests, full blood count

Stability	<p>Oral Liquid : expiry =10 days following reconstitution</p> <p>Tablets: manufacturers expiry</p> <p>If preparing solution from tablets use a new tablet for each dose and discard the remainder immediately after use.</p>
Storage	Store below 30° C
Adverse Reactions	Nausea, diarrhoea, vomiting, reflux, rash, agitation, hypotension, arrhythmias, anaemia, thrombocytopenia, interstitial nephritis, elevated hepatic enzymes, cholestatic jaundice, tooth and tongue discolouration
Metabolism	<p>Rapidly absorbed from the GI tract</p> <p>Half life in children (4 months – 15 yrs) = 54.5 hours</p> <p>50% excreted unchanged in bile, 6%in urine</p>
Interactions	<p>Azithromycin has been associated with QT prolongation, caution with other QTc prolonging drugs (amiodarone, domperidone, erythromycin, sildenafil). Caution with drugs that may reduce potassium levels (eg. diuretics, steroids).</p> <p>Antacids may decrease absorption of azithromycin by up to 30% give at different times of the day (at least two hours apart).</p> <p>Azithromycin can increase digoxin levels with potential risk of toxicity.</p> <p>Azithromycin increases cyclosporin levels careful monitoring of patients taking these drugs concurrently is recommended.</p>
Comments	<p>Maximum of 5 days treatment on an outpatient prescription for pertussis management. Can be waived by special authority (see PHARMAC criteria)</p> <p>For <i>Pertussis</i> contacts or cases are deemed infectious until they have completed 5 days of azithromycin.</p>
References	<ol style="list-style-type: none"> 1. BNF for Children 2010-2011 2. Neofax 2009 3. Taketomo et al Pediatric Dosage handbook. Lexicomp 2009-2010 4. www.medsafe.govt.nz
Updated By	<p>A Lynn, B Robertshawe July 2012</p> <p>A Lynn, M Wallenstein, B Robertshawe, A Evison June 2020.</p> <p>A Lynn, B Robertshawe May 2023</p>