aziTHROMYCIN

Newborn use only

2018

Alert	Azithromycin in the newborn period increases the risk of developing pyloric stenosis.[14-15]
Indication	1. Pertussis – post-exposure prophylaxis and treatment 2. Neonatal chlamydial conjunctivitis and pneumonia 3. Chlamydial and *Mycoplasma* pneumonia >3 months of age 4. Eradication of *Ureaplasma* in preterm infants 5. Prevention of BPD in preterm neonates – routine use is not recommended.
Action	Azithromycin inhibits protein synthesis by attaching to the 50S subunit of the bacterial ribosome in susceptible organisms. It exhibits bacteriostatic activity with higher potency than erythromycin against *Ureaplasma* isolates in vitro. Azithromycin inhibits neutrophil influx and chemoattractant/cytokine release in murine lung non-infectious, as well as pneumonia, injury models. It is preferentially concentrated in pulmonary epithelial lining fluid and alveolar macrophages.[14]
Drug Type	Macrolide antibiotic (subclass Azalide)
Trade Name	Azith, Azithromycin Alphapharm, Azithromycin DBL, Zithromax
Presentation	Oral: 200 mg/5 mL (15 mL) suspension, 500 mg tablet IV: 500 mg vial
Dosage/Interval	<u>Pertussis (post-exposure prophylaxis or treatment)</u> 10 mg/kg/dose daily orally or IV[2] for 5 days. <u>Treatment of neonatal chlamydial conjunctivitis and pneumonitis</u> 20 mg/kg/dose daily orally for 3 days. <u>Eradication of *Ureaplasma* in preterm infants</u> 20 mg/kg/dose daily IV for 3 days. <u>Pneumonia due to *Chlamydia* or *Mycoplasma pneumoniae* >3 months of age</u> Initial therapy or therapy for serious infection: 10 mg/kg/dose **IV** once a day on days 1 and 2, followed by oral therapy if needed. Step-down or Mild therapy: 10 mg/kg **ORALLY** on day 1, followed by 5 mg/kg once daily on days 2–5.
Route	Oral IV
Maximum Daily Dose	20 mg/kg
Preparation/Dilution	**Oral:** Add 9 mL of sterile water. Cap and shake well to produce 15 mL of suspension. Suspension expires 10 days after reconstitution. Write expiry date on bottle. **IV:** Add 4.8 mL of water for injection to the vial to make a concentration of 100 mg/mL solution. Shake until dissolved. Add 1 mL of reconstituted solution to 49 mL of sodium chloride 0.9% to make a concentration of 2 mg/mL and infuse over 1–3 hours. Maximum concentration for infusion is 2 mg/mL.
Administration	**Oral:** Shake well before use. May be given with or without feed. **IV:** Infuse over at least 1 hour.
Monitoring	During infusion – heart rate and blood pressure. IV site for signs of phlebitis. Liver function.
Contraindications	Hepatic dysfunction with prior azithromycin therapy. Concomitant therapy with QT interval prolonging drugs (e.g. cisapride)
Precautions	Hepatic dysfunction. IV solutions of a concentration greater than 2 mg/mL may cause local infusion-site reactions.
Drug Interactions	Drugs that can prolong QT interval. Digoxin – may result in digoxin toxicity.

Adverse Reactions	Common: Nausea, vomiting, abdominal pain and diarrhoea (all less than erythromycin). Rare: Hypertrophic pyloric stenosis, thrombophlebitis (after IV administration), ventricular dysrhythmias (after IV administration). In general, the risk of dysrhythmias is increased when these agents are administered in combination with other drugs that prolong the QT interval. Increased liver enzymes, hepatitis, hepatic necrosis, hypersensitivity reactions.
Compatibility	Fluids: Glucose 5%, glucose 5% in sodium chloride solutions, Hartmann's, sodium chloride 0.9%, sodium chloride 0.45% Y-site : Bivalirudin, ceftaroline fosamil, dexmedetomidine, tigecycline
Incompatibility	Fluids: No information Drugs: Amikacin, amiodarone, aztreonam, cefotaxime, ceftazidime, ceftriaxone, chlorpromazine, ciprofloxacin, clindamycin, fentanyl, furosemide (frusemide), gentamicin, imipenem-cilastatin, ketorolac, midazolam, morphine sulfate, mycophenolate mofetil, pentamidine, piperacillin-tazobactam (EDTA-free), potassium chloride, thiopental sodium, ticarcillin-clavulanate, tobramycin.
Stability	Oral suspension: After reconstitution, the suspension should be stored below 30 °C and any remaining suspension discarded after 10 days. Reconstituted IV solution: Stable for 24 hours at ≤30 °C.
Storage	Oral/IV store below 25 °C. Protect from light.
Special Comments	
Evidence summary	Refer to full version.
References	Refer to full version.

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