

TRIMETHOPRIM

Trade Name	Trimethoprim Suspension (made by Pharmacy)
Class	Antibiotic, folate antagonist
Mechanism of Action	Trimethoprim inhibits enzymes in the folic acid pathway.
Indications	<p>Indication 1: Prophylaxis of urinary tract infections in those neonates known to have antenatal renal dilatation or other predisposing factors</p> <p>Indication 2: Infections sensitive to trimethoprim.</p>
Contraindications	<p>Known Fragile X – decreased folate reserves can worsen psychomotor regression.</p> <p>Megaloblastic anaemia.</p> <p>Use with caution in patients with impaired renal or hepatic function.</p>
Supplied As	Trimethoprim Suspension 10 mg/mL (made by Pharmacy)
Dilution	N/A
Dosage / Interval	<p>Indication 1: Urinary Tract Infection Prophylaxis: 2 mg/kg Nocte</p> <p>Indication 2: Infections sensitive to trimethoprim 4 mg/kg TWICE a day</p>
Administration	Oral – shake well before use.
Compatible With	Do not mix with any other medicines in the oral syringe prior to administration.
Incompatible With	N/A
Interactions	<p>Trimethoprim inhibits metabolism of phenytoin and digoxin and may increase serum concentrations of these medicines.</p> <p>Rifampicin may decrease trimethoprim concentrations.</p> <p>Risk of QTc prolongation with phenytoin, spironolactone</p>
Monitoring	CBC, platelets, liver function tests, bilirubin, serum creatinine, blood urea nitrogen. (Consider monthly monitoring of CBC if on prolonged therapy)
Stability	30 days

Storage	Store in the fridge @ 2-8°C
Adverse Reactions	<p>Nausea, vomiting, diarrhoea, itching, rash, hyperkalaemia, reduction of haematopoiesis.</p> <p>Potential to cause hyponatraemia and hyperkalaemia especially in combination with potassium sparing diuretics eg amiloride, spironolactone.</p> <p>Very rare but serious: photosensitivity reactions, drug induced immune thrombocytopenia, angioedema and anaphylaxis.</p>
Metabolism	<p>Bioavailability = 90-100%</p> <p>Time to peak concentration 1-4 hours</p> <p>Half-life: trimethoprim = 19 hrs (newborn) 3 – 6 hrs 2 month – 1yr</p> <p>Hepatic metabolism via 2C9, oxidation, hydroxylation, acetylation and glucuronidation pathways.</p> <p>Excreted by the kidneys</p>
Comments	<p>Trimethoprim use is not licensed for treatment of children less than 1 month of age.</p> <p>Advise parents contact their GP if high fever, sore throat, unusual bleeding or bruising, rash or mouth ulcers occur.</p>
References	<ol style="list-style-type: none"> 1. www.nzf.org.nz 2. Medicines for Children, RCPCH,2003 3. www.medsafe.govt.nz 4. Lacy et al Paediatric and Neonatal Dosage Handbook 19th Edition, Lexicomp 2012/13
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