

PYRIMETHAMINE

Trade Name	Daraprim (GlaxoSmithKlyne)
Class	Antiparasitic/antimalarial agent
Mechanism of Action	Inhibits parasitic dihydrofolate reductase resulting in inhibition of tetrahydrofolic acid synthesis
Indications	Congenital toxoplasmosis (Used in combination with sulfadiazine)
Contraindications	Known megaloblastic anaemia
Supplied As	Pyrimethamine suspension 1mg/mL (prepared by pharmacy)
Dilution	None required
Dosage	1mg/kg/dose If the patient has difficulty tolerating pyrimathamine give each dose with a feed to reduce the incidence of vomiting
Interval	Load: 1 mg/kg 12 hourly for 2 days then Maintenance: 1 mg /kg once a day for 6 months, then 1 mg/kg THREE times a week for a further 6 months.
Administration	Oral
Compatible With	N/A
Incompatible With	N/A
Interactions	Pyrimethamine reduces the anti-epileptic effect of phenytoin Antifolate effects are increased when pyrimethamine is given in combination with sulphonamides, trimethoprim, zidovudine or methotrexate. Folic Acid may reduce the anti-parasitic effect of pyrimethamine and also increase the risk of pyrimethamine induced bone marrow suppression, for these reasons folinic acid is used to counteract the antifolate effect of pyrimethamine. Avoid brands of sunblock that contain PABA as this may reduce the effectiveness of sulfadiazine.
Monitoring	Full blood count
Stability	30 days at 2 – 8 °C
Storage	In the fridge

Adverse Reactions	Skin rash (including Stevens Johnson Syndrome), nausea, vomiting, diarrhoea, blood dyscrasias, raised AST, sensory neuropathy
Metabolism	15-40% metabolised by liver, approx 60% of dose excreted as unchanged drug by kidneys.
Comments	Folinic Acid (also known as Calcium Folate or Leucovorin Calcium) is given three times a week to counteract the antifolate effects of pyrimethamine and sulfadiazine. Pyrimethamine is a section 29 medication and is not registered in NZ. Funded by Special Authority application SA1328
References	<ol style="list-style-type: none"> 1. Micromedex 2. Paediatric Dosage Handbook 6th Ed 1999-2000 3. BNF for Children 4. www.uptodate.com 5. NZ formulary for children www.nzf.org.nz
Updated By	A Lynn, B Robertshawe December 2008 A Lynn, B Robertshawe Dec 2012 (re-order profile) A Lynn, B Robertshawe February 2022 (updated dosing as per a NZFc and Special Authority form number added)