

AMLODIPINE

Trade Name	Amlodipine Suspension (prepared by pharmacy)
Class	Calcium channel blocker
Mechanism of Action	Inhibits calcium ions from entering voltage sensitive channels in vascular smooth muscle and the myocardium resulting in vasodilatation and a reduction in blood pressure.
Indications	Management of hypertension - second line agent Use when other options such as ACE inhibitors and beta-blockers are contraindicated ie: renal impairment or myocardial dysfunction
Contraindications	Hypersensitivity to amlodipine or other calcium channel blockers Use with caution in patients with renal or hepatic impairment, congestive heart failure, sick sinus syndrome, cardiomyopathy or other concurrent cardiac impairment.
Interactions	Azole antifungals eg. Fluconazole, and macrolides such as erythromycin may inhibit calcium channel blocker metabolism and increase amlodipine exposure Additive risk of hypotension when used in combination with other antihypertensives. Phenobarbitone and phenytoin are predicted to decrease exposure to calcium channel blockers.
Supplied As	Amlodipine Suspension 1mg/mL
Dilution	None required
Dosage	0.1- 0.4 mg/kg/day Start at 0.1 mg/kg/day and increase as required
Interval	24 hourly but can be given 12 hourly
Administration	Oral
Compatible With	N/A
Incompatible With	Do not mix with other medications
Monitoring	Heart rate, blood pressure, signs and symptoms of heart failure, peripheral oedema.
Stability	30 days at 2 – 8 °C
Storage	In the fridge

Adverse Reactions	Peripheral oedema, rash, itching, hypotension, sweating, stomach upset, breathing difficulties (pulmonary oedema).
Metabolism	90% metabolised by the liver Peak effect: 6 – 12 hours (adults) Half life: 30 – 50hrs (adults)
Comments	Amlodipine has a long half life so its effects will be gradual. Other anti-hypertensive agents may need to be continued for 48 hours after starting amlodipine to prevent rebound hypertension Avoid abrupt discontinuation of amlodipine as this may cause chest pain. Suspension may require funding on discharge
References	<ol style="list-style-type: none"> 1. www.medsafe.govt.nz/datasheets 2. Drug Information Handbook , Lacy et al 2006. 3. BNF for Children 2007
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