

Prescribing Tips for Amlodipine in Hypertension and Stable Angina

A range of amlodipine preparations are available. Different salts are interchangeable (e.g. besilate, maleate). An up-to-date listing is available on the Health Products Regulatory Authority (HPRA) website at www.hpra.ie.

Therapeutic Indications

- Hypertension
- Chronic stable angina
- Vasospastic (Prinzmetal's) angina

Hypertension and Stable Angina: Dosing and Administration

Full prescribing information is available in the Summary of Product Characteristics (SmPC) which may be accessed freely online at www.hpra.ie or www.medicines.ie. Please consult the SmPC for guidance on prescribing in special patient populations e.g. renal or hepatic impairment.

Table 1: Dosing and administration of amlodipine in hypertension and stable angina

Hypertension and stable angina	Starting dose	Maximum daily dose
Adults	5mg once daily	Increase up to a maximum of 10mg daily
Elderly (>65 years)	Dose as per adults, increase dose with care	

MONITOR

- ✓ **Blood pressure**
- ✓ **Adverse Drug Reactions (ADRs):** Peripheral oedema, headache, dizziness, fatigue, flushing, nausea, abdominal pain and sleep disturbance.*
- Peripheral oedema caused by calcium channel blockers does not respond to diuretics. Patients who experience peripheral oedema while taking amlodipine may benefit from switching to **lercanidipine**.

* A full list of adverse-effects is available in the SmPC.

TARGET FOR BLOOD PRESSURE LOWERING

- ✓ In most patients the **target systolic blood pressure is <140mmHg**. A **diastolic blood pressure target of <90mmHg** is generally recommended, except in patients with **diabetes** in whom values **<85mmHg** are recommended.
- ✓ In patients **≥80 years old** the target is **<150/90mmHg**.

Further advice on blood pressure targets including specific populations is available from NICE at www.NICE.org.uk and through the ESC website at www.escardio.org.

CONTRAINDICATIONS

- Cardiogenic shock
- Significant aortic stenosis
- Unstable angina
- Severe hypotension
- Unstable heart failure
- Obstruction of outflow to the left ventricle

CAUTIONS

- Heart failure: ↑ risk of pulmonary oedema
- Hepatic impairment: initiate at low dose
- Renal impairment: normal dose recommended
- Elderly patients: ↑ dose with caution

INTERACTIONS*

- **Strong/moderate inhibitors of CYP3A4:** concomitant use may ↑ levels of amlodipine causing ↑ side effects e.g. azole antifungals (itraconazole), macrolide antibiotics (erythromycin, clarithromycin) and protease inhibitors (ritonavir). Monitor and ↓ dose of amlodipine if required.
- **Inducers of CYP3A4:** concomitant use may ↓ effects of amlodipine e.g. phenytoin, carbamazepine and rifampicin. Monitor and ↑ dose of amlodipine if required.
- **Antihypertensives:** enhanced hypotensive effect, ↑ risk of first dose hypotension with alpha-blockers.
- **Simvastatin:** concomitant use may ↑ levels of simvastatin, ↑ risk of myopathy. Maximum of 20mg simvastatin daily should be administered with amlodipine.
- **Grapefruit juice:** not recommended, may ↑ effect of amlodipine.

*a full list of interactions can be found in the SmPC for amlodipine and Stockley's drug interactions 11th edition.