

# Amlodipine – Product Information & Guidance

## 1. Brand & Formulation

- **Product Name:** Amlodipine
- **Presentation:** Oral tablets (commonly available in 2.5 mg, 5 mg, and 10 mg strengths)
- **Category:** Antihypertensive (Calcium Channel Blocker – Dihydropyridine class)

## 2. Composition

- **Active Ingredient:** Amlodipine besylate (equivalent to 2.5 mg, 5 mg, or 10 mg of amlodipine).
- **Excipients:** May include microcrystalline cellulose, dibasic calcium phosphate, sodium starch glycolate, and magnesium stearate (varies by manufacturer).

## 3. Mechanism of Action (MOA)

- **Key Component:** Amlodipine
- Amlodipine inhibits the influx of calcium ions into vascular smooth muscle and cardiac muscle cells.
- This leads to **vasodilation** of both peripheral and coronary arteries.
- **In hypertension:** Reduces peripheral vascular resistance, lowering blood pressure.
- **In angina:**
  - Dilates coronary arteries → improves oxygen supply to myocardium.
  - Reduces afterload → lowers myocardial oxygen demand.

## 4. Rationale & Positioning

### For Healthcare Professionals (HCPs) & Patients:

- Proven efficacy in **hypertension** and **angina (stable & variant/Prinzmetal's angina)**.
- **Once-daily dosing** → ensures better compliance and long-lasting BP control.
- Provides **cardiovascular protection**, including stroke and myocardial infarction risk reduction (when part of antihypertensive regimen).
- Well tolerated in most patients, including elderly populations.

## 5. Usage Guidance

### For HCPs to Communicate:

- **Indications:**
  - Hypertension (first-line or in combination therapy).
  - Coronary artery disease (chronic stable angina, vasospastic/variant angina).
- **Prescribing Tips:**
  - Typical starting dose: **5 mg once daily** (2.5 mg in elderly or frail patients).
  - Maximum dose: **10 mg once daily**.
  - Not for **acute relief** of chest pain (not a rescue drug).
  - Can be combined with **ACE inhibitors, ARBs, diuretics, or beta-blockers** when needed.
- **Monitoring:**
  - Blood pressure and heart rate regularly.
  - Assess for **ankle edema, palpitations, or dizziness**.
  - Liver function monitoring in patients with hepatic impairment.

## 6. Patient Counselling Points

- **How to Take:**
  - Once daily, at the same time every day.
  - Can be taken with or without food.
- **Most Common Side Effects:**
  - Headache, flushing, dizziness, palpitations, fatigue, ankle swelling, abdominal discomfort, muscle cramps.
  - **Advice:** Do not stop the medicine suddenly; report persistent swelling or severe dizziness.
- **Serious/Rare Side Effects:**
  - Hypotension, worsening chest pain (rare), allergic reaction (rash, swelling of face/tongue).
  - Seek immediate medical help if severe or unusual symptoms occur.
- **Precautions & Special Populations:**
  - Use with caution in **liver impairment**, elderly patients, and those with heart failure.
  - Inform doctor if **pregnant or breastfeeding**.
  - Avoid abrupt discontinuation.
  - Caution when driving or operating machinery until drug effects are known.
- **Drug Interactions:**
  - May interact with **CYP3A4 inhibitors/inducers** (e.g., ketoconazole, rifampicin, clarithromycin).
  - Alcohol may enhance dizziness or hypotension.
- **Lifestyle Advice:**

- Follow a **low-salt diet, regular exercise, weight management, avoid smoking and excessive alcohol** to improve treatment outcomes.

## 7. Call to Action / Closing

- **For Patients:**

- Always take Amlodipine as prescribed.
- Do not stop medication without consulting your doctor.
- Report persistent swelling, dizziness, or chest discomfort immediately.
- Regularly check your blood pressure at home, if advised.

- **For HCPs:**

- Reinforce **medication adherence** and **lifestyle modification**.
- Educate patients on expected benefits and side effects.
- Regularly monitor response and adjust dose as necessary.