

NIFEDIPINE

Class: Calcium Channel Blocker, Dihydropyridine

Indications: Management of chronic stable or vasospastic angina; treatment of hypertension (sustained release products only). **Unlabeled** : Management of pulmonary hypertension, preterm labor, and Raynaud's phenomenon; prevention and treatment of high altitude pulmonary edema

Available dosage form in the hospital: 10MG CAPS, RETARD 20MG TAB

Dosage: Note: Dosage adjustments should occur at 7- to 14-day intervals, to allow for adequate assessment of new dose; when switching from immediate release to sustained release formulations, use same total daily dose.

-Chronic stable or vasospastic angina: Oral:

-Immediate release: Initial: 10 mg 3 times/day; usual dose: 10-20 mg 3 times/day; coronary artery spasm may require up to 20-30 mg 3-4 times/day; single doses >30 mg and total daily doses >120 mg are rarely needed; maximum: 180 mg/day. **Note:** Do not use for acute anginal episodes; may precipitate myocardial infarction

-Extended release: Initial: 30 or 60 mg once daily; maximum: 120-180 mg/day

-Hypertension: Oral: Extended release: Initial: 30 or 60 mg once daily; maximum: 90-120 mg/day

-High altitude pulmonary edema: Oral:

-Prevention: Extended release: 30 mg every 12 hours starting the day before ascent and may be discontinued after staying at the same elevation for 5 days or if descent initiated

-Treatment: Extended release: 30 mg every 12 hours

-Pulmonary hypertension: Oral: Extended release: Initial: 30 mg twice daily; may increase cautiously to 120-240 mg/day

-Raynaud's phenomenon: Oral: Extended release: Dosage range: 30-120 mg once daily.

Geriatric

Refer to adult dosing. In the management of hypertension, consider lower initial doses and titrate to response (Aronow, 2011).

Renal Impairment:

No dosage adjustment provided in manufacturer's labeling (has not been studied); use with caution.

-Hemodialysis: Supplemental dose is not necessary.

-Peritoneal dialysis effects: Supplemental dose is not necessary.

Hepatic Impairment:

No dosage adjustment provided in manufacturer's labeling (has not been studied); use with caution.

Clearance of nifedipine is reduced in cirrhotic patients, which may lead to increased systemic exposure; monitor closely for adverse effects/toxicity and consider dose adjustments.

Common side effect: Cardiovascular: Flushing (10% to 25%; extended release products 3% to 4%), peripheral edema (dose related 7% to 30%)

Central nervous system: Dizziness/lightheadedness/giddiness (10% to 27%), headache (10% to 23%)

Gastrointestinal: Nausea/heartburn (10% to 11%)

Pregnancy Risk Factor: C