

Drug Name: **Nicardipine**
Trade Name: **Cardene**

REVISED: **November 1, 2018**

Class:

- Calcium Channel Blocker

Mechanism of Action:

- Nicardipine is a dihydropyridine calcium-channel blocker that inhibits the contractile processes of smooth muscle cells resulting in coronary and systemic vasodilatation.

Indications:

- Hypertension, including hypertensive urgency and hypertensive crisis
- Prevention/prophylaxis and treatment of hypertension in certain conditions, such as acute stroke

Contraindications:

- Hypersensitivity
- Hypotension
- Advanced aortic stenosis

Precautions:

- Hypotension, headache, and tachycardia may occur.
- In patients who are taking beta-blocking agents, Nicardipine may precipitate or exacerbate heart failure.
- Use with caution in patients with impaired renal or hepatic function
- Use in caution in patients who are on other calcium channel blockers.

Dosage:

Doses are highly variable and based on institutional guidelines and patient laboratory values. Double check orders with transferring physician.

- IV/IO Infusion: **Initial infusion rate of 5mg/hr IV , titrated by 2.5 mg/hr every 5 minutes to a maximum of 15 mg/hr,**
 - **ISCHEMIC CVA:** Titrated to maintain a SBP less than 185 mm Hg and DBP <110 mm Hg.
 - **HEMORRHAGIC CVA:** Titrated to maintain a SBP less than 160 mm Hg and DBP <110 mm Hg.
 - **HTN Crisis:** Titrated to maintain a SBP less than 220 mm Hg and DBP <110 mm Hg.

Onset:

- IV/IO: Onset: (IV) Immediate

Duration:

- Based on infusion duration

Side Effects:

- Hemorrhage
- Thrombocytopenia

Interactions:

- Additive effect on bleeding with other anticoagulants, ASA, NSAID

IFT

REFERENCE ONLY

This document is for **reference only**. Please refer to Physician Order's for specific indications, dosages, and applications

IFT DRUG: Nicardipine

PEARLS:

Hypotension is the most common side effect. Monitor closely and have a line of IV fluids to treat hypotension. If patient becomes hypotensive, discontinue infusion and treat accordingly.

Blood pressure parameters are condition, patient, and physician specific. Confirm blood pressure parameters prior to transport.

- In general, Nicardipine is used after other interventions, such as beta blockers, have been unsuccessful.
- **Acute Stroke patients** should not have their blood pressure lowered to “normal” (i.e. 120/60). A goal of 150-170 is permissible, with most guidelines recommending SBP <185 mmHg and DBP < 110 mmHg.
- **HTN urgency/crisis patients** should not have their blood pressure lowered to “normal” (i.e. 120/60). In general, aim for a 10-15% reduction in SBP is desired.
- Monitor BP before initial dose and every 15 minutes for 1 hour after the infusion is initiated and after a dose change. Thereafter, blood pressure is followed at a minimum of every 30 minutes and if clinical deterioration occurs.
- Be prepared for hypotension.
- Ampuls must be diluted prior to administration.
- If a peripheral vein is used, the infusion site should be changed every 12 hours.

REFERENCE ONLY