# Intravenous Nicardipine Quick Reference
## Cardene®

<table>
<thead>
<tr>
<th>Who administers</th>
<th>RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must MD be present during administration</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring required</th>
<th>Patients are always placed on telemetry and noninvasive BP monitoring. 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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement of intervals required</td>
<td>None</td>
</tr>
<tr>
<td>Suggested bedside equipment for emergency</td>
<td>Primed IV line of normal saline to treat hypotension.</td>
</tr>
</tbody>
</table>

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

## Indication:
I.V. Nicardipine is indicated for the treatment of hypertension, including hypertensive urgency and hypertensive emergency.

## Adverse Effects:
Hypotension, headache, and tachycardia may occur. In patients who are taking beta-blocking agents, Nicardipine may precipitate or exacerbate heart failure.

## Medication Administration:
For rapid treatment of severe hypertension, including stroke patients not eligible for thrombolytic therapy and during and after the administration of thrombolytic therapy:

### Intravenous Administration
- Visually inspect parenteral products for particulate matter and discoloration prior to administration whenever solution and container permit.

#### Dilution:
- Ampuls must be diluted prior to infusion. Dilute each ampul (25 mg/10 ml) with 240 ml normal saline to make 250 ml of IV solution. The final concentration should be 0.1 mg/ml.

  If a peripheral vein is used, the infusion site should be changed every 12 hours.

  Initiate therapy at 5 mg/hour as a continuous IV infusion. The initial infusion rate of 5mg/hr IV may be increased by 2.5 mg/hr every 5 minutes to a maximum of 15 mg/hr, to maintain a SBP less than 220 mm Hg and DBP <110 mm Hg. In general, aim for a 10-15% reduction in SBP.

  **For each 250 ml of IV solution:**
  - 3mg/hr = 30ml/hr
  - 5 mg/hr = 50 ml/hr
  - 7.5 mg/hr = 75 ml/hr
  - 10 mg/hr = 100 ml/hr
  - 12.5 mg/hr = 125 ml/hr
  - 15 mg/hr = 150 ml/hr

## Documentation:
Document in MAR dose administered.

## Contraindications/ Cautions:
Nicardipine is contraindicated in patients with hypotension and in advanced aortic stenosis. It should be used cautiously in those with impaired renal or hepatic function or in combination with a beta-blocker in CHF or significant left ventricular dysfunction patients and in patients with portal hypertension. Cyclosporine and digoxin levels should be closely monitored during therapy.