# DOPAMINE (Intropin) EMSAC May 2023 FOR USE ONLY WHEN EPINEPHRINE ON SHORTAGE

### **ACTION: Sympathomimetic**

- Catecholamine with dose-dependent stimulation of alpha-adrenergic, beta-adrenergic, and dopaminergic receptors.
  - Low doses (2 to 5 mcg/kg/min): Stimulates dopaminergic receptors (renal and mesenteric artery dilation).
  - <u>Medium doses</u> (5 to 10 mcg/kg/min): Stimulates beta-adrenergic receptors (increased heart rate and contractility resulting in increased cardiac output).
  - <u>High doses</u> (greater than 10 mcg/kg/min): Stimulates alpha-adrenergic receptors (peripheral vasoconstriction, increased blood pressure).

INDICATION	ADULT	PEDIATRIC
1. Hypotension due to	Start 5 mcg/kg/min IV/IO.	MAKE BASE HOSPITAL
cardiogenic shock or	May titrate up to 20	CONTACT BEFORE
distributive shock (neurogenic,	mcg/kg/min to target SBP >	INITIATING. Start 5
septic, or anaphylactic subtype)	90 mmHg. If taking MAOIs	mcg/kg/min IV/IO. May
2. Symptomatic bradycardia	in the last 2 weeks, use	titrate up to 20
refractory to other treatments	1/10th of the normal dose.	mcg/kg/min. If taking
such as atropine and pacing		MAOIs in the last 2 weeks,
		use 1/10th of the normal
		dose.

# **CONTRAINDICATIONS:**

• Tachydysrhythmias

# **POTENTIAL SIDE EFFECTS:**

- Tachydysrhythmias including V-Tach and V-Fib
- Hypertension
- Nausea and vomiting

- Chest pain, ischemia, and acute MI exacerbation
- Extravasation causes tissue necrosis

### NOTES:

- Do not infuse in same line as sodium bicarbonate
- Ensure that the patient is not hypovolemic before infusing dopamine.
- Monoamine oxidase inhibitors (MAOIs) potentiate the effects of dopamine. MAOIs include selegiline (Emsam), tranylcypromine (Parnate), and phenelzine (Nardil).