

HEMODYNAMIC EFFECTS OF VASOACTIVE INFUSIONS

Drug STD. ICU CONC. Dose Range	HR	SBP	DBP	CVP	MAP	CO	PCWP	SVR	MVO ₂	CBF	RBF
Dobutamine 1 gm/250 2.5-20 mcg/kg/min	↑	NC ↑	NC ↑	↓	↑↓	↑	↓	↓	↑	↑	↑
Dopamine 800 mg/250 2-4 mcg/kg/min	NC	NC ↑	NC ↑	NC	NC ↓	NC	NC	↓	↑	↑	↑
Dopamine 800 mg/250 5-20 mcg/kg/min	↑	↑	↑	↑	↑	↑	↑	↓	↑	↑	↓
Epinephrine 15 mg/250 .05-.15 mcg/kg/min	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓
Levophed 16 mg/250 .03-.15 mcg/kg/min	NC	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓
Nipride 100 mg/250 .5-8mcg/kg/min	↑	↓	↓	↓	↓	↑	↓	↓	↓	NC ↓	↑↓
Neosynephrine 60 mg/250 20-180 mcg/min	↓	↑	↑	↑	↑	↓	↑	↑	↑	↑	↓

Drug STD. ICU CONC. Dose Range	HR	SBP	DBP	CVP	MAP	CO	PCWP	SVR	MVO2	CBF	RBF
Nitroglycerin 50mg/250 3mcg/min to effect	NC ↑	↓	↓	↓	↓	NC ↑	↓	↓	↓	↑	↑↓
Milrinone 20mg/100cc .3-.75 mcg/kg/min	NC	↓	↓	↓	↓	↑	↓	↓	NC		↑
Esmolol 5g/250 50-200 mcg/kg/min	↓	↓	↓	↓	↓						
Amiodarone 600mg/500 .5mg/min=25cc	↓	↓	↓	↓	↓	↓		↓	↓		
Nicardipine 25mg/250 5-15 mg/hr	↑	↓	↓	↓	↓	↑	NC ↓	↓	↑	↑	↑
Labetalol 400mg/80cc 2mg/min to effect	↓	↓	↓	↓	↓						
Lidocaine 2g/250 1-5 mg/min	↓	NC ↓	NC ↓								
Cardizem 125mg/125cc 5-15 mg/hr	↓	↓	↓	↓		↑	NC	↓			

	To INCREASE	To DECREASE
Preload	Volume expanders NS, LR, Hespan, Albumin, Blood products	Diuretic agents Furosemide, etc. Venous dilators Morphine, Nitroglycerin, Nitroprusside
Afterload	Vasopressors Dopamine (higher doses), Epinephrine, Norepinephrine, Neosynephrine	Vasodilators Nitroprusside, Nitroglycerin, (higher doses), PDE inhibitors, CA channel blockers, ACE inhibitors, Hydralazine
Contractility	Positive Inotropic agents Dobutamine, Dopamine, Epinephrine, Norepinephrine, Isoproterenol, PDE inhibitors, Digoxin	Negative Inotropic agents Beta blockers, CA channel blockers