Vasopressor Use Recommendations

First Line Vasopressor: Norepinephrine

Mechanism	Dose	Clinical Pearls
α1 agonist (strong), β1 agonist (weak)	0.01-1 mcg/kg/hr Starting dose: 0.1 mcg/kg/min	- Goal mean arterial pressure (MAP) is 65 mm Hg - High MAP goals may be necessary in patients with baseline hypertension or acute coronary syndrome - Safe to administer peripherally for up to 24 hours

Second Line Vasopressor: Vasopressin

Mechanism	Dose	Clinical Pearls
Vasopressin receptor agonist	0.03 units/minute	- Often unnecessary in COVID patients, as they do not require high doses of norepinephrine - May be preferred in patients with atrial arrhythmias or pulmonary hypertension

Third Line Vasopressor: Epinephrine

Mechanism	Dose	Clinical Pearls
α1 agonist (strong), β1 agonist (moderate)	0.01-1 mcg/kg Starting dose: 0.05 mcg/kg/min	- Preferred adjunct agent in patients with low ejection fraction - Low doses (0.01-0.05 mcg/kg/min) primarily yield improved contractility - Can cause increased lactate, arrhythmias

Alternative Vasopressors: Phenylephrine

Mechanism	Dose	Clinical Pearls
α1 agonist (weak)	50-300 mcg/min	- Safe for peripheral administration, consider in patients who cannot get central access - May be preferred in patients with atrial arrhythmias

Alternative Vasopressors: Dobutamine

Mechanism	Dose	Clinical Pearls
β1 agonist (moderate)	1-10 mcg/kg/min Starting dose: 2.5 mcg/kg/min	- Consider in patients with reduced ejection fraction

Alternative Vasopressors: Giapreza (Angiotensin II)

Mechanism	Dose	Clinical Pearls
ATII receptor agonist	1.25 -40 mcg/kg/min Starting dose: 20 mcg/kg/min	- Recommend to avoid in COVID patients at this time due to unclear effects of RAAS on COVID outcomes and VTE risk - Use in patients with refractory vasodilatory shock only

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Material Attribution

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Notes/Summary