

Table II. Cardiovascular Pharmacology of Vasoactive Agents in Septic Shock

AGENT	MECHANISM OF ACTION	TYPICAL DOSE	NOTES
Norepinephrine	$\alpha_1 > \beta_1$	1-60+ mcg/min	First line vasopressor /inotrope
Vasopressin	V ₁ receptors (vascular smooth muscle) V ₂ receptors (renal collecting system)	.03 U/min	Second line vasopressor
Epinephrine	$\alpha_1, \beta_1, \beta_2$	1-10+ mcg/min	Second line for vasopressor-refractory shock; potent inotrope
Dopamine	D, $\beta_1 > \alpha_1, \beta_2$	2.5 mcg/kg/min	Second line agent in place of norepinephrine; consider for first line if bradycardic
Phenylephrine	α_1	40-400+ mcg/min	Vasopressor only; consider in place of norepinephrine in the setting of SVT and/or if no cardiomyopathy present
Dobutamine	$\beta_1, \beta_2, (3:1 \text{ ratio}) \gg \alpha_1$	2.5-20 mcg/kg/min	First line agent for additional inotropic support in the setting of inadequate cardiac output despite fluids

α_1 denotes α_1 adrenergic receptor vasoconstriction; β_1 denotes β_1 adrenergic receptor inotropic activity; β_2 denotes β_2 receptor vasodilation; D denotes dopamine receptors.