# picmonic

# Norepinephrine

Norepinephrine is a catecholamine and direct sympathomimetic drug that is indicated for hypotension, and has a side effect of decreased renal perfusion. It also has use in treatment of depression and attention disorders. It acts as an α agonist, affecting

both α<sub>l</sub>&nbsp;and&nbsp;&alpha;<sub>2</sub>&nbsp;receptor and is an agonist at β<sub>1</sub>&nbsp;receptor effects as well.



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# **Mechanism of Action**

# Alpha Agonist

#### Afro Dragonist

Norepinephrine is a direct agonist at α receptors, affecting both α<sub>1</sub> and &alpha;<sub>2</sub> receptors. It also has acts at &beta;<sub>1</sub> receptors, with little activity at &beta;<sub>2</sub> receptors.

# Beta1 Agonist

#### Beta-fish (1) Wand Dragonist

Norepinephrine is an agonist at β<sub>1</sub>&nbsp;adrenergic receptors. Activity at&nbsp;&beta;<sub>1</sub>&nbsp;receptors leads to increased heart rate, increased heart contractility, increased renin release and lipolysis. Norepinephrine has little activity at&nbsp;&beta;<sub>2</sub>&nbsp;adrenergic receptors.

#### Indications

# Hypotension

# Hippo-BP

This drug will raise diastolic blood pressure and total peripheral resistance, more so than epinephrine due to its vasoconstrictor activity and lack of effect on β<sub>2</sub> receptors in the skeletal muscle vascular bed. It is used in emergencies such as neurogenic or septic shock.<br/>br />It should be noted that norepinephrine also has use in treatment of attention disorders and in depression.

# Side Effect

# **Decreases Renal Blood Flow**

Down-arrow Kidney Blood

Decreased renal blood flow may be seen with norepinephrine administration, causing impaired kidney function.