

# Vasopressors

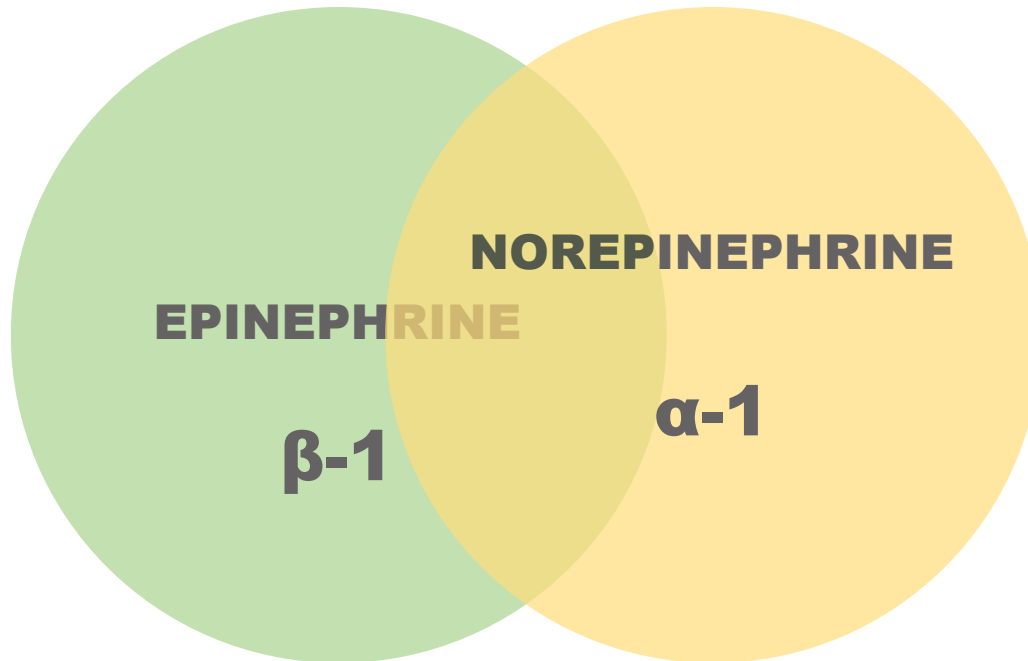
**Indication:** Patients who require vasoactive support due to hypotension (MAP < 65mmHg) **AND** have signs of end-organ dysfunction (e.g. altered mental status, anuria) **AND** are refractory to fluid bolus.

**General Considerations:**

- Please refer to [Mixing of Vasopressors](#) for instructions on preparing the drugs.
- All vasopressors have potential to cause **tissue necrosis if they extravasate**. Check all peripheral lines for patency before infusing a vasopressor through them and periodically assess the site during administration.
- The **use of medication pumps** for accurate dosing is recommended with continuous vasopressor infusions.

**EPINEPHRINE**  
 +++ Chronotropy  
 +++ Inotropy  
 ++ Vasoconstriction

Greater arrhythmogenicity than norepinephrine.



**NOREPINEPHRINE**  
 ++ Chronotropy  
 ++ Inotropy  
 +++ Vasoconstriction

Must be administered by continuous IV infusion.

*NOTE: Vasopressors lose their receptor selectivity at high dosages.*

## REFRACTORY TO VASOPRESSORS?

<b>1</b>	<b>FILL THE TANK</b>	<table border="0" style="width: 100%;"> <tr> <td style="width: 33%; text-align: center;"><b>CONSIDER CAUSES OF ACIDEMIA</b></td> <td style="width: 33%; text-align: center;"><b>HISTORY OF ADRENAL INSUFFICIENCY OR CHRONIC (DAILY) STEROID USE?</b></td> <td style="width: 33%; text-align: center;"><b>SUSPECTED CALCIUM CHANNEL BLOCKER OVERDOSE?</b></td> </tr> <tr> <td style="vertical-align: top;"> <p><i>NOTE: EtCO<sub>2</sub> &lt; 25mmHg associated with acidemia.</i></p> <p>Assess adequacy of respiratory compensation and assist if necessary.</p> <p>Consider MCEP consultation for sodium bicarbonate.</p> </td> <td style="vertical-align: top;"> <p>If family has access to stress-dose steroids (e.g. hydrocortisone [Solu-Cortef]), assist family in administering medication. If not, consider MCEP consultation for <a href="#">Dexamethasone</a>.</p> </td> <td style="vertical-align: top;"> <p>Consider <a href="#">Calcium Chloride</a>.</p> </td> </tr> </table>			<b>CONSIDER CAUSES OF ACIDEMIA</b>	<b>HISTORY OF ADRENAL INSUFFICIENCY OR CHRONIC (DAILY) STEROID USE?</b>	<b>SUSPECTED CALCIUM CHANNEL BLOCKER OVERDOSE?</b>	<p><i>NOTE: EtCO<sub>2</sub> &lt; 25mmHg associated with acidemia.</i></p> <p>Assess adequacy of respiratory compensation and assist if necessary.</p> <p>Consider MCEP consultation for sodium bicarbonate.</p>	<p>If family has access to stress-dose steroids (e.g. hydrocortisone [Solu-Cortef]), assist family in administering medication. If not, consider MCEP consultation for <a href="#">Dexamethasone</a>.</p>	<p>Consider <a href="#">Calcium Chloride</a>.</p>
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<p>Unless there are contraindications to fluid administration, it is recommended that a fluid bolus of <b>at least</b> 1000mL be rapidly infused prior to starting pressors.</p>										
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<p>Vasopressor infusions should be started at a low dose and increased to desired effect.</p> <p>Intravenous vasopressors have a rapid onset of action. It is reasonable to adjust dosing every 60 seconds.</p>										
<b>3</b>	<p><b>INCOMPLETE / SUBOPTIMAL RESPONSE TO MAXIMUM PRESSOR DOSAGE</b></p> <p>Consider additional fluid. Consider circumstances above.</p> <p>Consider MCEP consultation to increase maximum dose or add a second vasopressor.</p>									