

**Class** — Pulmonary artery hypertension therapy, PDE-5 inhibitors; phosphodiesterase-5 enzyme inhibitor

**Pharmacologic Action** — Inhibits PDE-5, increasing cyclic guanosine monophosphate (cGMP) to allow smooth-muscle relaxation

**Indications** — As an adjunct to descent in the management of high-altitude pulmonary edema (HAPE)

**Contraindications** — Concomitant use of organic nitrates in any form (e.g., nitroglycerin, isosorbide, illicit “poppers”) either regularly or intermittently, increases risk of severe or potentially fatal hypotension, hypersensitivity

**WARNING:** Hypotension may occur due to vasodilation

### **Sodium Bicarbonate**

**Name** — Bicarb

**Class** — Antidote, other

**Pharmacologic Action** — Increases blood and urinary pH by releasing a bicarbonate ion, which in turn neutralizes hydrogen ion concentrations

**Indications** — For the management of cardiac arrest in cases in which either hyperkalemia or tricyclic antidepressant (TCA) overdose are suspected as contributory, QRS prolongation in known or suspected TCA overdose

**Contraindications** — Documented hypersensitivity, severe pulmonary edema, known alkalosis, hypernatremia, or hypocalcemia

### **Sodium Nitrite**

**Name** — Nithiodote®

**Class** — Cyanide antidote

**Pharmacologic Action** — Nitrites create methemoglobins to bind to cyanide

**Indications** — For the management of cyanide toxicity

**Contraindications** — Documented hypersensitivity, suspected or confirmed smoke inhalation and/or carbon monoxide poisoning

**WARNING:** There is a risk of worsening hypoxia due to methemoglobin formation. In addition, sodium nitrite can cause serious adverse reactions and death from hypotension and methemoglobin formation. Monitor to ensure adequate perfusion and oxygenation during treatment with sodium nitrite

### **Sodium Thiosulfate**

**Name** — Nithiodote®

**Class** — Cyanide antidote

**Pharmacologic Action** — Thiosulfate is sulfur donor utilized by rhodanese to convert cyanide to less toxic thiocyanate

**Indications** — For the management of cyanide toxicity

**Contraindications** — Documented hypersensitivity

### **Sorbitol**

**Name** — Sorbitol

**Class** — Laxatives, osmotic

**Pharmacologic Action** — Polyalcoholic sugar with hyperosmotic effects

**Indications** — Administered for the management of patients suffering from toxic ingestions

**Contraindications** — Acute abdominal pain, nausea, vomiting, or other symptoms of appendicitis or undiagnosed abdominal pain, documented hypersensitivity

**WARNING:** Sorbitol is no longer recommended to be given with activated charcoal