

Pharmacologic Action — Class III antidysrhythmic agent, which inhibits adrenergic stimulation; affects sodium, potassium, and calcium channels; markedly prolongs action potential and repolarization; decreases AV conduction and sinus node function

Indications — Management of regular wide complex tachycardia in stable patients, irregular wide complex tachycardia in stable patients, and as antidysrhythmic for the management of ventricular fibrillation (VF) and pulseless ventricular tachycardia (VT)

Contraindications — Hypersensitivity, Severe sinus node dysfunction, second degree or third-degree heart block or bradycardia causing syncope (except with functioning artificial pacemaker), cardiogenic shock

WARNING: Avoid during breastfeeding

Amyl Nitrite

Name — component of the Cyanide Antidote Kit®

Class — Cyanide antidote

Pharmacologic Action — Reacts with hemoglobin to form methemoglobin, an oxidized form of hemoglobin incapable of oxygen transport but with high affinity for cyanide. Cyanide preferentially binds to methemoglobin over cytochrome a3, forming the nontoxic cyanomethemoglobin

Indications — Acute cyanide toxicity

Contraindications — None in the case of suspected pure cyanide toxicity noted, documented hypersensitivity, suspected or confirmed smoke inhalation and/or carbon monoxide poisoning

WARNING: There is a risk of worsening hypoxia due to methemoglobin formation

Aspirin

Name — Multiple over-the-counter medications, as well as scheduled drugs, include aspirin as an active ingredient. These include, but are not limited to, Bayer Buffered Aspirin®, Alka-Seltzer with Aspirin®, Ascriptin®, Bayer Women's Low Dose®, Ecotrin®

Class — Antiplatelet agent, non-steroidal anti-inflammatory drug (NSAID)

Pharmacologic Action — Inhibits synthesis of prostaglandin by cyclooxygenase; inhibits platelet aggregation; has antipyretic and analgesic activity

Indications — Antiplatelet agent for the care of patients suspected of suffering from an acute coronary syndrome

Contraindications — Hypersensitivity to aspirin or NSAIDs (aspirin-associated hypersensitivity reactions include aspirin-induced urticarial or aspirin-intolerant asthma), bleeding GI ulcers, hemolytic anemia from pyruvate kinase (PK) and glucose-6-phosphate dehydrogenase (G6PD) deficiency, hemophilia, hemorrhagic diathesis, hemorrhoids, lactating mother, nasal polyps associated with asthma, sarcoidosis, thrombocytopenia, ulcerative colitis

Atropine

Name — Atropen®, a component of Mark I® kits and DuoDote®

Class — Anticholinergic, toxicity antidotes

Pharmacologic Action — Competitively inhibits action of acetylcholinesterase on autonomic effectors innervated by postganglionic nerves

Indications — Management of nerve agent toxicity, symptomatic bradycardia (primary or related to toxin ingestion), organophosphate and carbamate insecticide toxicity

NOTE: Ineffective in hypothermic bradycardia

Contraindications — No absolute contraindications for ACLS, documented hypersensitivity in non-ACLS/nerve agent/organophosphate scenarios