

## Albuterol & Atrovent (DuoNeb®) – 20.041

**CLASS: A**

**PROTOCOLS USED IN:** Respiratory Distress

**PHARMACOLOGY AND ACTIONS:**

Ipratropium is an atropine derivative used for inhalation therapy. For severe asthma, Ipratropium taken in addition to a short acting beta agonist (such as Albuterol) can provide greater bronchodilation and clinical benefit than the beta agonist alone. It has no anti-inflammatory effects and does not decrease bronchial hyper-responsiveness.

**INDICATIONS:**

Bronchial Asthma and reversible bronchial spasm that occur with chronic pulmonary disease.

**CONTRAINDICATIONS:**

Stop treatment if pulse increases by 20 bpm, frequent PVCs develop, any tachyarrhythmias other than sinus tachycardia appear, chest pain, apnea, nausea or vomiting or increased shortness of breath occur.

**PRECAUTIONS:**

Ipratropium in the meter dose inhaler and auto-inhaler formulations should not be administered to individuals allergic to soy lecithin or related food products (e.g. soy beans, peanuts). The nebulized formulation may be administered to these patients.

**SIDE EFFECTS AND NOTES:**

- A. Patients with COPD should be monitored carefully for CO<sub>2</sub> retention and decreased levels of consciousness.
- B. Paradoxical bronchospasm may occur with excessive administration.
- C. Skeletal muscle tremors.
- D. Albuterol should be used with caution in pregnancy.
- E. Continually assess patient's respiratory rate, effort and lung sounds.

**ADULT DOSING:**

**Nebulizer:**

**2.5mg Albuterol/0.5mg Atrovent mixed in 3ml** of normal saline for a concentration of 0.83mg/ml with at least 6 lpm of oxygen flow. Coach patient to inhale slowly and exhale passively through nose.

**Metered Dose Inhaler (MDI)**

**90mcg per puff**

Assemble one BVM, one AeroChamber, oxygen tubing and Albuterol inhaler. Begin with two Albuterol puffs into chamber and assist patient's ventilations using the BVM and high flow oxygen.

After one minute, repeat with two puffs. Repeat every two minutes if improvement is not noted. **DO NOT EXCEED 20 PUFFS.**

**PEDIATRIC DOSING:**

≤ 1 year of age: Nebulized dosage of 0.03ml/kg with a max dose of 1ml.