

## 6.16 Ipratropium Bromide (Atrovent)

**Indications:** 2.1 SOB with History of Asthma/COPD, 2.3 Anaphylaxis/Anaphylactic Shock – Adult and Child.

**Contraindications:** Hypersensitivity to Ipratropium Bromide, atropine or other anticholinergics, or any other aerosol components.

**Precautions:** Should not be used for acute episodes of bronchospasm where rapid response is required since the drug has a slower onset of action than adrenergic agonist aerosols (e.g. Salbutamol).

**Adverse effects:** Chest pain/palpitations (3%), hypotension (< 1%), mydriasis (< 1%). Constipation, diarrhea, vomiting, headache, dizziness, dry mouth and throat.

**Pharmacology:** Onset of action = 5-15 min; time to peak effect = 1-2 hr;  $t_{1/2}$  (half-life) = 2 hr; duration of action  $\approx$  8 hr.

### Dosage and administration:

Nebulized Inhalation Solution:

- ◇ Adults: 0.5 mg (diluted in sterile water or NS to a total of 5 mL) q20 min x 3 doses then prn for urgent patients. For emergent/critical patients doses may be given back to back.
- ◇ Children (< 12 YOA): 0.125-0.250 mg q20 min x 3 doses then prn for urgent patients. For emergent/critical patients doses may be given back to back.

Metered Dose Inhaler (MDI):

Adults and children:

- ◇ Emergency – MDI 4-8 metered doses for each dose with doses given back to back until patient improves (alternating with primary treatment: back to back salbutamol)
- ◇ Urgency – MDI 4-8 metered doses q20 min
- ◇ Standard – 2-4 metered doses by MDI q4-6 hr