

Direct intratracheal instill route

- By syringe: 1-2 mL of 10%-20% sol up to q1hr
- Decreased dose to geriatric patients; metabolism may be slowed
- Only if suction machine is available
- Only after patient clears airway by deep breathing, coughing
- Assistance with inhaled dose: bronchodilator if bronchospasm occurs; mechanical suction if cough insufficient to remove excess bronchial secretions

IV route

- **21-hr regimen:** loading dose: dilute 150 mg/kg in 200 mL D₅W; maintenance dose 1: dilute 50 mg/kg in 500 mL D₅W; maintenance dose 2: dilute 100 mg/kg in 1000 mL D₅W; give loading dose over 15 min; give maintenance dose 1 over 4 hr; give maintenance dose 2 over 16 hr, administer sequentially without time between doses
- Store in refrigerator; use within 96 hr of opening

SIDE EFFECTS**CNS:** *Dizziness, drowsiness*, fever, chills**CV:** Edema, flushing tachycardia**EENT:** *Rhinorrhea*, pharyngitis**GI:** *Nausea*, stomatitis, vomiting, anorexia**INTEG:** Urticaria, rash, clamminess, pruritus**RESP:** **Bronchospasm**, chest tightness, cough, dyspnea**MISC:** **Anaphylaxis, angioedema**, unpleasant odor**PHARMACOKINETICS****IV:** Excreted in urine, half-life 5.6 hr (adult), 11 hr (newborn), protein binding 83%, peak up to 60 min (PO), 5-10 min (INH)**Interactions**

- Do not use with activated charcoal

NURSING CONSIDERATIONS**Assess:**

- **Mucolytic use:** cough—type, frequency, character, including sputum; bronchospasm
- Rate, rhythm of respirations, increased dyspnea; sputum; discontinue if bronchospasm occurs

- VS, cardiac status including checking for dysrhythmias, increased rate, palpitations

- ABGs for increased CO₂ retention in asthma patients

- **Antidotal use:** use within 24 hr of acetaminophen toxicity, give within 10 hr of acetaminophen to minimize hepatotoxicity; monitor LFTs, PT, BUN, creatinine, glucose, electrolytes, acetaminophen levels; inform prescriber if dose is vomited or if vomiting is persistent; 150 mg/kg may be toxic, check acetaminophen level q4hr

- **Hypersensitivity:** anaphylaxis may occur with IV dose; if present, stop infusion, treat, restart; assess for dyspnea, swelling of face, lips, tongue; rash, itching

- **Nausea, vomiting, rash; notify prescriber if these occur**

- **Pregnancy/breastfeeding:** use only if clearly needed; cautious use in breastfeeding, excretion unknown

Evaluate:

- Therapeutic response: absence of purulent secretions when coughing, clear lung sounds (mucolytic use); absence of hepatic damage with acetaminophen toxicity

Teach patient/family:

- That foul odor and smell may be unpleasant
- To clear airway for inhalation
- To report vomiting because dose may need to be repeated
- **Acetaminophen toxicity:** Explain reason for product, expected result

RARELY USED**aclidinium (Rx)**

(a'kli-din'ee-um)

Tudorza Pressair

Func. class.: Anticholinergic, bronchodilator*Chem. class.:* Synthetic quaternary ammonium compound