

ALBUTEROL
(al-BYOU-ter-ohl)
Proventil, Ventolin

PHARMACOLOGICAL CLASSIFICATION:

-adrenergic

THERAPEUTIC CLASSIFICATION:

-bronchodilator

ONSET OF ACTION:

-inhalation: 5-15 minutes

DURATION OF ACTION:

-inhalation: 3-6 hours

MECHANISM OF ACTION:

- selectively stimulates beta-2 adrenergic receptors of the lungs, uterus, and vascular smooth muscle
- bronchodilation results from relaxation of bronchial smooth muscles, which relieves bronchospasm and reduces airway resistance

INDICATIONS:

- bronchial asthma
- bronchospasm due to bronchitis or emphysema
- acute bronchospasm in patients 2 years or older

CONTRAINDICATIONS:

- use cautiously in patients with cardiovascular disease, HTN, or diabetes
- hypersensitivity

SIDE EFFECTS:

- CNS: tremor, nervousness, dizziness, headache, hyperactivity
- CV: tachycardia, palpitations, hypertension
- RESP: bronchospasm, cough, increased sputum
- GI: dry mouth, epigastric pain, diarrhea

INTERACTIONS:

- use of inhaled albuterol and epinephrine and other inhaled sympathomimetic amines may increase sympathomimetic effects and risk of toxicity
- use with MOI inhibitors (used to treat depression) and tricyclic antidepressants can cause severe cardiovascular effects
- propranolol and other beta-adrenergic blockers may antagonize the effects of albuterol

DOSE:

- 2.5 mg by nebulization (0.5 mL of the 0.5% solution diluted in 2.5 mL saline) over 5-15 minutes
- repeat dosage after 15 minutes if symptoms persist

DRUG ROUTE:

- hand held nebulizer