

table 25-4 ■ Action, Dosage, and Side Effects of Pulmonary Drugs

Agent	Usual Dose	Common Adverse Effects	Comments
<i>Albuterol</i> (Proventil, Ventolin)	<i>Aerosol</i> 1–2 inhalations every 4–6 h <i>Solution for inhalation</i> 2.5 mg tid–qid	Palpitations, tachycardia, anxiety, irritability, tremor, GI upset, cough, dry mouth, hoarseness, flushing, headache	Shake well before using; allow 1 full minute between inhalations.
<i>Metaproterenol</i> (Alupent, Metaprel)	<i>Inhaler</i> 2–3 inhalations every 3–4 h Maximum dose: 12 inhalations daily <i>Solution for inhalation</i> One treatment every 4–6 h	Palpitations, tachycardia, anxiety, irritability, tremor, GI upset, cough, dry mouth, hoarseness, flushing, headache	Shake well before using; allow 1 full minute between inhalations.
<i>Salmeterol</i> (Serevent)	<i>Asthmal/bronchospasm</i> 1–2 inhalations every 12 h Maximum dose: 4 inhalations daily	Palpitations, tachycardia, anxiety, irritability, tremor, GI upset, cough, dry mouth, hoarseness, flushing, headache	Shake well before using; allow 1 full minute between inhalations; should not be used for relief of acute asthmatic symptoms.
<i>Terbutaline</i> (Brethine, Bricanyl)	<i>Asthmal/bronchospasm</i> <i>Aerosol</i> 1–2 inhalations every 4–6 h	Palpitations, tachycardia, anxiety, irritability, tremor, GI upset, cough, dry mouth, hoarseness, flushing, headache	Shake well before using; allow 1 full minute between inhalations.
<i>Beclomethasone</i> (Beclivent, Vanceril)	2 inhalations tid–qid or 4 inhalations bid Maximum dose: 20 inhalations daily	Throat irritation, hoarseness, coughing, dry mouth, oral thrush; adrenal suppression with large doses over a prolonged period; rare cases of immediate and delayed hypersensitivity reactions	Use bronchodilator therapy several minutes before using inhaled steroid therapy to enhance penetration.
<i>Methylprednisolone</i> (Solu-Medrol)	125 mg IV every 6 h initially; dose tapered according to patient response; may switch to oral prednisone when tapering	Hyperglycemia, impaired immune response, hypertension, fluid retention, psychosis, steroid myopathy, fragile skin	Long-term use should be avoided due to adverse effects.
<i>Prednisone</i> (Deltasone)	40–60 mg qid initially then taper based on patient response	Hyperglycemia, impaired immune response, hypertension, fluid retention, osteoporosis, hyperkalemia	Long-term oral therapy should be avoided if possible; inhaled therapy is preferred for chronic use if necessary.
<i>Triamcinolone</i> (Azmacort)	2 inhalations tid–qid Maximum dose: 16 inhalations daily	Throat irritation, hoarseness, coughing, dry mouth, oral thrush; adrenal suppression with large doses over a prolonged period	Use bronchodilator therapy several minutes before using inhaled steroid therapy to enhance penetration.
<i>Ipratropium</i> (Atrovent)	Initial dose: 2 inhalations qid Maximum dose: 12 inhalations daily	<i>Aerosol/inhalation solution</i> Cough, dry mouth, nervousness, agitation, dizziness, headache, GI upset, palpitations, urinary retention, constipation, worsening narrow angle glaucoma	Must be used regularly to achieve benefit in patients with COPD.
<i>Cromolyn</i> (Intal, Gastrocrom, Nasalcrom)	20 mg inhaled capsule or nebulizer solution or 2 sprays of aerosol qid	Lacrimation, urinary frequency, dizziness, headache, rash, cough, wheezing, nasal irritation, sneezing, epistaxis, unpleasant taste	Must be used regularly to achieve benefit.
<i>Nedocromil</i> (Tilade)	2 inhalations qid	Cough, pharyngitis, rhinitis, bronchospasm, dry mouth, unpleasant taste, GI upset, dizziness, headache	Must be used regularly to achieve benefit.

(continued)