Albuterol (Proventil)

Albuterol is a short-acting, beta-2 agonist that works by relaxing bronchial smooth muscle producing bronchodilation. This medication is indicated in the treatment of asthma attacks and bronchospasm, and has little effect on beta-1 receptors of the heart when taken in small doses. Side effects may include tachycardia, tachydysrhythmias, angina and tremors.

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Mechanism

Short-Acting Beta-2 Agonist

Short-ruler Beta-fish (2) Tutu Dragonist

Albuterol activates beta-2 adrenergic receptors in the lungs, causing relaxation of bronchial smooth muscle, and subsequent bronchodilation. Because this medication is a beta-2 selective agonist, albuterol has little effect on beta-1 cardiac receptors when taken in small doses. This medication can be administered using a metered dose inhaler, or a nebulizer.

Indications

Bronchospasm

Broccoli-spaceship

Relaxation of smooth muscles in the airway caused by beta-2 receptor activation can prevent or relieve bronchospasm.

Asthma

Asthma-inhaler

Albuterol is used to treat acute-onset episodes of asthma, also known as exacerbations or attacks. Albuterol is not used for long-term management of asthma.

Side Effects

Angina

Angel with Chest Pain-bolts

Severe chest pain associated with inadequate oxygen to the heart is called angina. In some patients, albuterol has been reported to cause or worsen angina. Patients should contact their primary healthcare provider, if they experience new or worsening chest pain.

Tachycardia

Tac-heart-card

Increased heart rate and tachydysrhythmias can occur in patients who exceed the recommended dosing guidelines for albuterol. Although this medication is a selective beta-2 agonist, when taken in large doses, it can activate beta-1 receptors in the heart.

Tremor

Trimmer

Patients may experience tremors while using albuterol. This side effect is more likely to occur with systemic beta-2 agonist use and typically goes away with continued use. If tremors persist, patients should notify their healthcare provider, as a lower dose may be indicated.