

## Montelukast (Singulair)

Montelukast (Singulair) is a leukotriene modifier that works by blocking the action of leukotriene receptors in the lungs and bronchial tubes, thereby reducing inflammation and bronchoconstriction in patients with asthma. Montelukast is indicated in the treatment of allergic rhinitis, and exercise induced bronchospasm, and can be used for prevention or maintenance therapy of asthma. Keep in mind, this medication should not be used to treat asthma attacks, as it is not fast-acting. Side effects of montelukast (Singulair) include fatigue, headache, suicidal thoughts, and changes in mood. Patients taking montelukast (Singulair) are also at an increased risk of developing Churg-Strauss syndrome (eosinophilic granulomatosis with polyangiitis).



PLAY PICMONIC

### Mechanism

#### Leukotriene Receptor Blocker

[Luke-shrine with Blocked Receptor](#)

Leukotrienes are inflammatory mediators, responsible for producing bronchoconstriction, inflammation, and airway edema in patients with asthma. Montelukast (Singulair) blocks the action of leukotriene receptors in the lungs and bronchial tubes, thereby reducing inflammation and bronchoconstriction.

### Indications

#### Allergic Rhinitis

[Allergy-alligator with Runny-nose](#)

This medication can be used to relieve nasal congestion in patients with seasonal allergies. Singulair is typically used as second- or third-line therapy for patients who do not respond to intranasal glucocorticoid or antihistamine therapy.

#### Asthma Prophylaxis

[Asthma-inhaler with Purple-axes](#)

Montelukast (Singulair) can be used for prevention or maintenance therapy of asthma. This medication should not be used to treat asthma attacks, as it is not fast-acting.

#### Exercise Induced Bronchospasm

[Treadmill with Broccoli-spaceship](#)

Montelukast (Singulair) can be used to treat exercise induced bronchospasm; however, it is recommended that patients use a short-acting, beta-2 agonist medication instead.

### Side Effects

#### Fatigue

[Sleepy-guy](#)

Patients may experience a lack of energy or fatigue while taking montelukast (Singulair).

#### Headache

[Head-egg lump](#)

Headaches may occur in patients taking montelukast (Singulair); however, side effects are generally limited.

#### Mood Changes

[Moody-mask Changing](#)

Changes in mood, such as depression, can occur when using this medication. Patients should be encouraged to report any changes in mood or behavior immediately.

### **Suicidal Thoughts**

#### [Suicidal-jumper Thought-bubble](#)

Although rare, patients taking montelukast (Singulair) may experience suicidal thoughts or actions. Patients should be encouraged to report any changes in mood or behavior immediately.

### **Considerations**

#### **Increased Risk of Churg Strauss**

##### [Up-arrow Risk at Church of Straws](#)

Patients taking montelukast (Singulair) are at an increased risk of developing Churg-Strauss syndrome (eosinophilic granulomatosis with polyangiitis). Churg-Strauss syndrome is a potentially life-threatening autoimmune disorder that causes inflammation of the blood vessels. Excessive inflammation may lead to tissue death and destruction in the lungs. One of the common signs associated with the syndrome is asthma.