

# LONG-ACTING BETA-AGONISTS

## LONG-TERM CONTROL ASTHMA MEDICINE

Asthma is a chronic disease that affects the airways, which carry air in and out of the lungs. When a person has asthma, the airways are inflamed (swollen) making them very sensitive, and making them react to certain irritants and allergens. When the airways react, they become more swollen, clogged with mucus, and muscles in and around the airways tighten. This causes symptoms like wheezing (a whistling sound when you breathe), coughing, chest tightness, and trouble breathing.

For people who have daytime asthma symptoms more than twice weekly, or nighttime asthma symptoms more than twice monthly, the best way to prevent symptoms is to use a medicine called an inhaled corticosteroid every day to reduce the inflammation of the airways.

When inhaled corticosteroids do not fully control asthma symptoms, your doctor may add a long-acting beta-agonist to your daily medications. **Long-acting beta-agonists are not intended to be used alone for the treatment of asthma. They are always used along with an inhaled corticosteroid.**

These medicines relax the tightened muscles in the airways for a long time, up to 12 hours, and can help control symptoms at night or when you exercise.

Long-acting beta-agonists do not provide quick relief of symptoms or stop an asthma episode once it has started.

### How are long-acting beta-agonists taken?

Long-acting beta-agonists are taken together with inhaled corticosteroid medicine. One brand is available that contains an inhaled corticosteroid and long-acting beta-agonists in the same inhaler. If you are given the inhaled corticosteroid and long-acting beta-agonists in two separate inhalers, make sure you use them both. Like any kind of medicine, long-acting beta-agonists should be used only as directed by your doctor.

Long-acting beta-agonists are taken using a metered-dose inhaler or a dry powder inhaler. Those used with a metered-dose inhaler should be used with a spacer. A spacer is a plastic tube or bag you attach to your pump to help get the medicine to your airways.

Inhaled medicines go right to the lungs and cause fewer side effects than medicine taken by mouth, like pills or liquid.

### Side Effects:

Long-acting beta-agonists may cause tremor, rapid heartbeat, palpitations, low potassium, elevated blood pressure, headache and dizziness or nervousness. Throat and upper airway irritation can also occur.

Elderly patients and those with heart disease should discuss their condition with their regular doctor prior to using these medications.

#### SOME LONG-ACTING BETA-AGONISTS AND THEIR BRAND NAMES

**Salmeterol xinafoate**  
(also sold as Serevent)

**Formoterol fumarate**  
(also sold as Foradil)

#### COMBINATION MEDICATIONS

**Fluticasone propionate and salmeterol xinafoate**  
(Sold as Advair Diskus)\*

\* *Approved for children 4 and over.*

Advair contains two active components. In addition to the long-acting beta-agonists, salmeterol xinafoate, it also contains an inhaled corticosteroid, fluticasone propionate.

Adapted from:  
NHLBI

[http://www.nlm.nih.gov/health/dci/Diseases/Asthma/Asthma\\_Treatments.html](http://www.nlm.nih.gov/health/dci/Diseases/Asthma/Asthma_Treatments.html)

The Asthma Society of Canada website

<http://www.asthma.ca/adults/treatment/bronchodilators.php>

And  
National Jewish Medical Center and Research Center website

<http://asthma.nationaljewish.org/treatments/longterm/serevent.php>