

## Inhaled Bronchodilators

### SHORT-ACTING Beta<sub>2</sub>-Agonist

#### What are other names for these medications?

**Generic:** Albuterol, Pirbuterol, Levalbuterol

**Trade names:** Proventil®, Proventil HFA®, Ventolin®, Ventolin Rotocaps®, Maxair®, Maxair Autohaler®, Xopenex™

#### What do these drugs do?

These medications are quick-relief medications. They work rapidly to relax the smooth muscles around the airways. **These are the medications that should be used in the treatment of acute asthma attacks.** They can also prevent and relieve the tightening of the muscles around the airways (bronchospasm). The bronchospasm can result from exposure to asthma triggers such as viral infections, cigarette smoke, pollens, exercise, animal danders, cold air, and environmental pollutants.

#### How is it taken?

Short-acting beta<sub>2</sub>-agonist bronchodilators can be inhaled as a fine mist from a nebulizer or from a metered-dose inhaler (MDI). Maxair® comes as a breath-actuated MDI (Maxair Autohaler®). It is activated by the patient breathing through the mouthpiece. Dry powder devices are also available for the delivery of inhaled short-acting beta<sub>2</sub>-agonist bronchodilators (Ventolin Rotocaps®).

#### What is the usual dose?

The most common dose of albuterol administered by nebulization is 1.25 to 2.5 mg (0.25-0.5 ml) of albuterol mixed with 2 ml of sterile normal saline (Broncho Saline or salt water). Albuterol can also be mixed in 2 ml of cromolyn solution instead of saline for nebulization. Levalbuterol (Xopenex™) comes in premixed vials. The recommended dose for levalbuterol nebulization is either 0.63 or 1.25 mg (3 ml unit dose).

The most common dose of a short-acting beta<sub>2</sub>-agonist bronchodilator by MDI is two puffs. This dose should not be repeated more often than once every 4 hours without approval of your child's doctor. Notify your doctor if your child needs a dose of short-acting beta<sub>2</sub>-agonist bronchodilator more than every 4 hours. When taking these medications by MDI the use of a spacer or holding chamber is recommended. This helps to get more medication into the lungs and less onto the back of the throat.

#### What are the side effects of this drug?

The most common side effects include jitteriness and an increased heart rate.

**What special instructions should be followed?**

Do not increase the number of treatments to more than \_\_\_\_\_ in a 24-hour period without checking with your doctor. A need for an increase in the number of treatments or continuing symptoms that are not relieved by treatment indicate worsening of acute asthma. If this happens, call your child's doctor.

Xopenex should not be used if the solution is no longer colorless. Unused vials should be stored in the protective foil pouch provided.

Your prescribed dose of inhaled \_\_\_\_\_ is \_\_\_\_\_ ml mixed with \_\_\_\_\_ (or 1 premixed vial of \_\_\_\_\_) and given by nebulization \_\_\_\_\_ times a day (about every \_\_\_\_\_ hours) for \_\_\_\_\_ days or as needed.

**--OR--**

Your dose of inhaled \_\_\_\_\_ is \_\_\_\_\_ puffs inhaled from an MDI \_\_\_\_\_ times a day (about every \_\_\_\_\_ hours) or as needed.