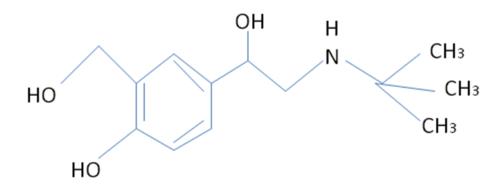
Levospa Respules Levosalbutamol 0.63 & 0.31 mg

Description

Levospa Respules is a bronchodilator medicine that relaxes the muscles in the airways leading to the lung and improves the amount of air flow to and from the lungs..Levosalbutamol, or levalbuterol, is a short-acting β2 adrenergic receptor agonist used in the treatment of asthma and chronic obstructive pulmonary disease (COPD). Salbutamol has been marketed as a racemic mixture, although beta2-agonist activity resides almost exclusively in the (R)-enantiomer. The enantioselective disposition of salbutamol and the possibility that (S)-salbutamol has adverse effects have led to the development of an enantiomerically pure (R)-salbutamol formulation known as levosalbutamol (levalbuterol).

Structure



Pharmacology

Pharmacodynamics

Levospa Respules acts by relaxing smooth muscle in the bronchial tubes to increase air flow and relieve acute shortness of breath.

Mechanism of action

β2 adrenergic receptors on airway smooth muscle are Gs coupled and their activation by levosalbutamol leads to activation of adenylate cyclase and to an increase in the intracellular concentration of 3',5'-cyclic adenosine monophosphate (cyclic AMP). Increased cyclic AMP activates protein kinase A which itself inhibits the phosphorylation of myosin produces lower intracellular ionic calcium concentrations, inducing muscle relaxation. Increased cyclic AMP concentrations are also associated with the inhibition of the release of mediators from mast cells in the airways, potentially contributing to its benefit in asthma attacks.

Pharmacokinetics

Absorption-

Inhalation delivers the medication directly into the airways and lungs, thereby minimizing side effects because of reduced systemic absorption of the inhaled medications.

Distribution-

Not Available

Protein Binding-

Plasma protein binding is relatively low.

Metabolism-

Pure (R)-salbutamol formulation known as levosalbutamol is metabolised up to 12 times faster than (S)-salbutamol by intestine.

Route of Elimination-

Excreted into the urine.

Half Life 3.3 to 4 Hours

Clearance

Not available

Toxicity

Not Available

Side effects

Major & minor side effects for Levospa 0.63 mg Respules

- Headache
- Viral infections
- Blocked or runny nose
- Sore throat and hoarseness
- Shaking and trembling of arms and feet
- Decreased appetite
- Muscle pain and cramps
- Anxiety and nervousness
- Swelling of eyelids, face, lips, tongue
- Nausea
- Skin rash and spotting
- Chest pain and discomfort
- Sleep disturbances
- Increased heartbeat
- Difficulty in swallowing
- Difficulty in speaking (dysphonia)

Indication

-Asthma

This medicine is used to prevent or treat acute attacks of asthma characterized by a sudden and severe difficulty in breathing.

-Chronic obstructive pulmonary disease

This medicine is used to prevent and treat the symptoms associated with a group of lung diseases that block airflow and make it very difficult to breathe.

Common asked questions

What is on set of action of drug?

The effect of this medicine can be observed within 5-10 minutes of administration.

How long do the effects of this medicine last?

The effect of medicine lasts for an average duration of 3-6 hours.

Is it safe to consume alcohol while taking this medicine?

Interaction with alcohol is unknown. It is advisable to consult your doctor before consumption.

Is this a habit forming medicine?

No habit forming tendencies were reported.

Can this medicine be taken during pregnancy?

This medicine is not recommended for use in pregnant women unless absolutely necessary. Consult your doctor before using this medicine.

Can this medicine be taken while breast-feeding?

This medicine is not recommended for use in breastfeeding women as the effect on the nursing infant is not clinically established. Your doctor may ask you to discontinue breastfeeding if the use of this medicine is necessary.

General warnings

Other medicines

Report the use of all medications including herbs and supplements to the doctor before receiving levosalbutamol.

Other diseases

Report the past/present incidence of all diseases including heart and blood vessels disorder, electrolyte imbalance, any disease associated with thyroid and other glands etc to the doctor. All the other conditions should be considered before therapy with this medicine is initiated.

Hypokalemia

Use of this medicine can cause a decrease in blood potassium levels and hence should be administered with caution in patients suffering from Hypokalemia.

Paradoxical bronchospasm

Use of this medicine has been associated with worsening of asthma symptoms in some instances. Contact your doctor immediately if breathing becomes more difficult after using this medicine. The use of Levosalbutamol should be stopped immediately in such cases.

Excessive use

It is recommended to use this medicine in prescribed quantities only as excessive use may cause some severe adverse effects and may prove fatal in some cases.

Use in elderly

This medicine should be used with caution in the elderly as the risk of adverse effects are significantly high.

Use in children

This medicine should be used with caution in children. Safety and efficacy are established based on the form of the medicine and age of the patient. All the recommendations should be

followed while prescribing this medicine in children. An adult should supervise the use of this medicine in children.

Dosage

Missed Dose

Take the missed dose as soon as you remember. If it is almost time for the next scheduled dose, then the missed dose can be skipped.

Overdose

Contact your doctor immediately if an overdose with this medicine is suspected. Symptoms of an overdose may include dry mouth, shaking, chest pain, increased heart rate, convulsions, and fainting.

Interactions

All drugs interact differently for person to person. You should check all the possible interactions with your doctor before starting any medicine.

Interaction with Alcohol

Interaction with alcohol is unknown.

Drug Interaction

Amitriptyline Atenolol Ketoconazole Propranolol Xylometazoline Furosemide Hydrochlorothiazide Formoterol Pseudoephedrine

Disease interactions

Heart Disease

Use of this medicine has been associated with an increase in heart rate and changes in blood pressure. It should be used with caution in patients with an active or historic case of heart disease. Patients should also be screened for the risk factors of heart disease before starting the treatment course.

Diabetes

Use of this medicine has been associated with a mild to moderate rise in blood sugar levels in most patients. Hence, caution should be exercised if the patient is diabetic.

Hypokalemia

Use of this medicine has been associated with a decrease in blood potassium levels. It should be used with caution in patients having a disorder where potassium levels in the body are imbalanced.

Seizure disorders

This medicine should be administered with caution in patients with seizure disorders as the risk of increased frequency and severity of convulsions are significantly high.

Kidney Disease

This medicine should be used with caution in patients having an impairment of normal kidney function. The dose should be selected very carefully and the kidney function should be monitored on a regular basis.

Food interactions

Information not available.

Lab interactions

Information not available.

This is not an exhaustive list of possible drug interactions. You should consult your doctor about all the possible interactions of the drugs you're taking.

PACKING INFORMATION

Levospa RESPULES 0.63 mg......Pack of 5 Resputes in light protected pouch with 2.5ml solution in each unit and a box contains 25 pieces.

Levospa RESPULES 0.31 mg......Pack of 5 Resputes in light protected pouch with 2.5ml solution in each unit and a box contains 25 pieces.

General References

1. Boulton DW, Fawcett JP: The pharmacokinetics of levosalbutamol: what are the clinical implications? Clin Pharmacokinet. 2001 Jan;40(1):23-40. [PubMed:11236808]

Levalbuterol | C13H21NO3 - PubChem [Internet]. Pubchem.ncbi.nlm.nih.gov. 2017 [cited 7 June 2017]. Available from:

https://pubchem.ncbi.nlm.nih.gov/compound/123600

Levalbuterol Oral Inhalation: MedlinePlus Drug Information [Internet]. Medlineplus.gov. 2017 [cited 7 June 2017]. Available from: https://medlineplus.gov/druginfo/meds/a603025.html

Levosalbutamol - DrugBank [Internet]. Drugbank.ca. 2017 [cited 7 June 2017]. Available from:

https://www.drugbank.ca/drugs/DB13139

[Internet]. Xopenexhfa.com. 2018 [cited 8 January 2018]. Available from: https://www.xopenexhfa.com/XOPENEX-HFA-Prescribing-Information.pdf