

## **PIL OF SALBUT-4 TABLETS**

### **1. NAME OF THE FINISHED PHARMACEUTICAL PRODUCT**

Salbut 4 Tablets

#### **1.1 Strength**

Each tablet contains Salbutamol Sulphate equivalent to Salbutamol 4mg

#### **1.2 Pharmaceutical form**

**Uncoated Tablet**

**Pink, circular, flat bevelled-edge tablet embossed SL4 on one side with a breakline on the other side.**

### **2. CLINICAL PARTICULARS**

#### **2.1 Therapeutic indications**

1. For the relief of bronchospasm in bronchial asthmas of all types.
2. Chronic bronchitis.
3. Emphysema

#### **2.2 Posology and method of administration**

##### **Adults:**

The usual effective dose is 4mg three or four times per day. If adequate bronchodilation is not obtained each single dose may be gradually increased to as much as 8mg. However, it has been established that some patients obtain adequate relief with 2mg three or four times daily. In elderly patients or in those known to be unusually sensitive to beta-adrenergic stimulant drugs, it is advisable to initiate treatment with 2mg three or four times per day.

##### **Children:**

The following doses should be administered three or four times daily.

2-6 years: 1-2mg

6-12 years: 2mg

Over 12 years: 2-4mg 2

The product is not recommended for children under 2 years of age. The drug is well tolerated by children so that, if necessary, these doses may be cautiously increased.

### **3 Method of administration**

To be taken orally.

### **4 Contraindications**

1. Salbutamol should not be used for threatened abortion during the first or second trimester of pregnancy.
2. Salbutamol and beta-blocking drugs such as propranolol should not usually be prescribed together.
3. Salbutamol tablets are contraindicated in patients with a history of hypersensitivity to any of their components.

### ***5 Special warnings and precautions for use***

Patients with rare hereditary problems of galactose intolerance, the lapp lactase deficiency or glucose – galactose malabsorption should not take this medicine.

Bronchodilators should not be the only or main treatment in patients with severe or unstable asthma.

Increasing use of bronchodilators in particular short-acting inhaled beta<sub>2</sub>- agonists to relieve symptoms indicates deterioration of asthma control. If patients find that short acting relief bronchodilator treatment becomes less effective or they need more inhalations than usual, medical attention must be sought. Salbutamol causes peripheral vasodilation which may result in reflex tachycardia and increased cardiac output.

#### ***Hyperthyroidism***

Salbutamol should only be administered cautiously to patients suffering from thyrotoxicosis after careful evaluation of the benefits and risks of treatment

Constant monitoring of potassium levels in patients with severe asthma is essential, potentially serious hypokalaemia may result from beta-2 agonist therapy.

In common with other β-adrenoceptor agonists, salbutamol can induce reversible metabolic changes such as increased blood glucose levels.

#### ***Diabetes***

Administration of beta agonists is associated with a rise of blood glucose. Therefore blood glucose and lactate levels should be monitored in diabetics and diabetic treatment adjusted accordingly to meet the needs of the diabetic during tocolysis. Diabetic patients may be unable to compensate for the increase in blood glucose and the development of ketoacidosis has been reported.

Concurrent administration of corticosteroids can exaggerate this effect.

Cardiovascular effects may be seen with sympathomimetic drugs, including salbutamol. There is some evidence from post-marketing data and published literature of myocardial ischaemia associated with beta agonists.

#### ***Respiratory indications***

Patients with underlying severe heart disease (e.g. ischaemic heart disease, arrhythmia or severe heart failure) who are receiving salbutamol should be warned to seek medical advice if they experience chest pain or other symptoms of worsening heart disease. Attention should be paid to assessment of symptoms such as dyspnoea and chest pain, as they may be of either respiratory or cardiac origin.

### ***6 Paediatric population***

NA

### ***7 Interaction with other medicinal products and other forms of interaction***

The effects of salbutamol may be altered by guanethidine, reserpine, methyl dopa, tricyclic antidepressants and monoamine oxidase inhibitors.

There is an increased risk of hypokalaemia if high doses of theophylline or high doses of corticosteroids are given with higher doses of salbutamol

#### ***Halogenated anaesthetics***

Owing to the additional antihypertensive effect, there is increased uterine inertia with risk of haemorrhage; in addition, serious ventricular rhythm disorders due to increased cardiac reactivity, have been reported on interaction with halogenated anaesthetics. Treatment should be discontinued, whenever possible, at least 6 hours before any scheduled anaesthesia with halogenated anaesthetics.

### ***Anti-diabetics***

The administration of beta-agonists is associated with a rise of blood glucose, which can be interpreted as an attenuation of anti-diabetic therapy; therefore individual anti-diabetic therapy may need to be adjusted.

### ***Potassium depleting agents***

Owing to the hypokalaemic effect of beta-agonists, concurrent administration of serum potassium depleting agents known to exacerbate the risk of hypokalaemia, such as diuretics, digoxin, methyl xanthines and corticosteroids, should be administered cautiously after careful evaluation of the benefits and risks with special regard to the increased risk of cardiac arrhythmias arising as a result of hypokalaemia.

### ***8 Additional information on special populations***

Not Applicable

### ***9 Paediatric population***

Not Applicable

### ***10 Fertility, pregnancy and lactation***

Salbutamol should only be used during pregnancy if it is considered essential by the physician. As salbutamol is probably secreted in breast milk its use in nursing mothers requires careful consideration. It is not known whether salbutamol has a harmful effect on the neonate, and so its use should be restricted to situations where it is felt that the expected benefit to the mother is likely to outweigh any potential risk to the neonate

### ***11 Effects on ability to drive and use machines***

Not known.

### ***12 Undesirable effects***

The only side effect of significance is a fine tremor of skeletal muscle, which occurs in some patients, usually the hands and the effects are dose related. A few patients feel tense; this is also due to the effects on skeletal muscle and not to direct CNS stimulation. With doses of salbutamol higher than those recommended or in patients who are unusually sensitive to beta-adrenergic stimulants, peripheral vasodilation and a compensatory increase in heart rate may occur.

Occasionally headaches have been reported. Lactic acidosis, myoclonus, pulmonary oedema, hypokalaemia, cardiac arrhythmias may also occur and very rarely hypersensitivity reactions including angioedema, urticaria, bronchospasm, hypotension and collapse.

### ***13 Overdose***

The preferred antidote for overdosage with salbutamol is a cardioselective beta blocking agent, but beta blocking drugs should be used with caution in patients with a history of bronchospasm. Hypokalaemia may occur following overdose with salbutamol. Serum potassium levels should be monitored

## **14. PHARMACOLOGICAL PROPERTIES**

### ***14.1 Pharmacodynamic properties***

Salbutamol is a selective beta-2-adrenergic agonist administered for the symptomatic relief of bronchospasm associated with chronic or acute asthma, bronchitis or other obstructive pulmonary diseases. Because of its relative specificity for  $\beta_2$  receptors, salbutamol relaxes smooth muscle of the bronchi, uterus and vascular supply to the skeletal muscle, but generally has much less stimulant action on the heart than does isoproterenol which has powerful action on all beta receptors.

### **14.2 Pharmacokinetic properties**

Salbutamol is readily absorbed from the gastrointestinal tract. Its effects occur within 15 minutes and last for about 14 hours. The drug is excreted in urine in about 24 hours, 50% of the drug being excreted within 4 hours. The peak plasma concentration of salbutamol and its metabolites is 5.1-11.7µg% at 2.5-3 hours after an oral dose of 4mg. Salbutamol does not cross the blood brain barrier to a significant extent, but it crosses the placental barrier.

### **14.3 Preclinical safety data**

None stated

## **15. PHARMACEUTICAL PARTICULARS**

### **15.1 Shelf life**

3 Years

### **15.2 Special precautions for storage**

Store in a dry place below 25°C. Protect from light.

Keep all medicines out of the reach of children.

### **15.2 Nature and contents of container**

PVC / Aluminium blister packing

### **15.3 Special precautions for disposal and other handling**

No special requirements.

## **16. MARKETING AUTHORISATION HOLDER AND MANUFACTURING SITE ADDRESSES**

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