1.3.1.1 Approved Package Insert

SCHEDULING STATUS

S2

PROPRIETARY NAME AND DOSAGE FORM

DURO-TUSS LINCTUS (Liquid)

COMPOSTION

Each 5 mℓ liquid contains: Salbutamol sulphate 2,41 mg

Bromhexine hydrochloride 4 mg

Preservative: Sodium Benzoate 0,2 % *m/v*

The other inactive ingredients are citric acid anhydrous, hydroxyethylcellulose, menthol, orange flavour, propylene glycol, purified water and sucralose.

Contains no sugar or alcohol.

PHARMACOLOGICAL CLASSIFICATION

A.10.1 Antitussives and expectorants.

PHARMACOLOGICAL ACTION

Salbutamol sulphate

Pharmacodynamic properties

Salbutamol is a β_2-selective adrenergic bronchodilator. It acts by stimulating β_2-adrenergic receptors in the lungs to relax bronchial smooth muscle.

The onset of action is within 30 minutes, with a peak effect between 2 to 3 hours after the dose, and a duration of action of up to 6 hours.

Pharmacokinetic properties

Salbutamol is readily absorbed from the gastrointestinal tract. It is subject to first pass metabolism in the liver and possibly in the gut wall. The main metabolite is an inactive sulfate conjugate. It is excreted in the urine as metabolites and unchanged salbutamol, and some is excreted in the faeces. The plasma half-life of Salbutamol has been estimated to range from 4 to 6 hours.

Bromhexine hydrochloride

Pharmacodynamic properties

Bromhexine hydrochloride reduces the viscosity of non-infected secretions from mucous cells in the respiratory tract, in vitro.

Pharmacokinetic properties

Bromhexine hydrochloride is well absorbed from the gastrointestinal tract with peak plasma concentrations after about 1 hour. Bromhexine undergoes extensive first-pass metabolism in the liver, with a bioavailability of about 20%. It is widely distributed to body tissues. About 85 % to 90 % of a dose is excreted in the urine mainly as metabolites, including ambroxol. Bromhexine is highly bound to plasma proteins. It has a terminal elimination half-life of 13 to 40 hours. Bromhexine crosses the blood-brain barrier and small amounts cross the placenta.

INDICATIONS

DURO-TUSS LINCTUS is indicated for the relief of cough associated with bronchospasm (wheezing).

CONTRAINDICATIONS

DURO-TUSS LINCTUS is contra-indicated in:

- Patients with known hypersensitivity to salbutamol, bromhexine or to any other ingredients in **DURO-TUSS LINCTUS**.
- Patients with cardiac dysrhythmias or tachycardia.
- Patients receiving monoamine oxidase inhibitors (MAOI's) or within 14 days of MAOI's termination.

WARNINGS AND SPECIAL PRECAUTIONS

Salbutamol Sulphate

Use with caution in hyperthyroidism, myocardial insufficiency, susceptibility to QT-interval prolongation, hypertension, diabetes mellitus, and in severe asthma.

Plasma-potassium concentrations should be monitored in severe asthma as hypokalaemia may occur. The risk can be potentiated by hypoxia and acidosis, or the concomitant use with other medicines that cause hypokalaemia or cardiac dysrhythmias. (see **INTERACTIONS** and **SIDE EFFECTS**)

High doses may increase the risk of serious side effects, including cardiac dysrhythmias, the maximum dose should not be exceeded.

Bromhexine hydrochloride

Use with care in patients with a history of peptic ulceration.

Care is also advisable in asthmatic patients.

Clearance of bromhexine or its metabolites may be reduced in patients with severe hepatic or renal impairment.

INTERACTIONS

Salbutamol Sulphate

Concomitant administration of **DURO-TUSS LINCTUS** with sympathomimetics, diuretics, corticosteroids or xanthines e.g. theophylline, increases the risk of hypokalaemia. (see **WARNINGS AND SPECIAL PRECAUTIONS**)

PREGNANCY AND LACTATION

The safety of **DURO-TUSS LINCTUS** in pregnancy and lactating women has not been established.

DURO-TUSS LINCTUS may delay onset of labour.

Small amounts of bromhexine cross the placenta.

DOSAGE AND DIRECTIONS FOR USE

Adults: 10 mℓ three to four times a day

Children 6 – 12 years: 5 mℓ three to four times a day

Children 2 – 6 years: 2,5 mℓ – 5 mℓ three to four times a day

Do not exceed the recommended dose.

Suitable for children, elderly and diabetics.

SIDE EFFECTS

The following side effects have been reported:

Salbutamol Sulphate

Immune system disorders

Frequency unknown: Hypersensitivity reactions, including paradoxical bronchospasm, angioedema, urticaria, hypotension, and collapse.

Metabolism and nutrition disorders

Frequency unknown: Hyperglycaemia. Hypokalaemia that may be potentiated by concomitant therapy with corticosteroids, diuretics, or xanthines and by hypoxia and acidosis. (see **WARNINGS AND SPECIAL PRECAUTIONS**)

Nervous system disorders

Frequency unknown: Hallucinations in children, hyperactivity and restlessness.

Cardiac disorders

Frequency unknown: Tachycardia due to increased sympathetic effects on the cardiovascular system, palpitations. Myocardial ischaemia.

Vascular disorders

Frequency unknown: Peripheral vasodilation with flushing, hypotension.

Musculoskeletal, connective tissue and bone disorders

Frequency unknown: Fine tremor of skeletal muscle particularly the hands.

Less frequent: Cramps.

General disorders and administrative site conditions

Frequency unknown: Headache and nervous tension.

Bromhexine Hydrochloride

Gastrointestinal disorders

Less frequent: Gastrointestinal side effects.

Hepato-biliary disorders

Frequency unknown: Transient rise in serum aminotransferase values.

Skin and subcutaneous tissue disorders

Frequency unknown: Skin rashes.

General disorders and administrative site conditions

Frequency unknown: Headache, dizziness, sweating.

KNOWN SYMPTOMS OF OVERDOSAGE AND PARTICULARS OF ITS TREATMENT

See **SIDE EFFECTS**. Salbutamol overdosage may result in tachycardia, central nervous system stimulation, tremor, hypokalaemia and hyperglycaemia. Treatment is symptomatic and supportive.

Activated charcoal may be considered in patients who present within 1 hour of overdosage.

IDENTIFICATION

A clear, colourless, slightly viscous liquid with an odour of orange.

PRESENTATION

Amber plastic (PET) bottles containing 100 mℓ and 200 mℓ. The bottles are packed in a printed unit carton.

STORAGE INSTRUCTIONS

Store at or below 30 °C. Protect from light.

KEEP OUT OF REACH OF CHILDREN.

REGISTRATION NUMBER

A39/10.1/0390

NAME AND BUSINESS ADDRESS OF THE HOLDER OF THE CERTIFICATE OF REGISTRATION

iNova Pharmaceuticals (Pty) Ltd

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