PROFESSIONAL INFORMATION

SCHEDULING STATUS: S2

1. NAME OF THE MEDICINE

ADCO-LINCTOPENT SYRUP

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 5 ml contains:	
Bromhexine hydrochloride	4 mg
Orciprenaline sulphate	5 mg

Contains Preservatives: Methyl parahydroxybenzoate 0,05 % $^{m}/_{v}$ and Propyl parahydroxybenzoate 0,01 % $^{m}/_{v}$

Alcohol free

Sugar free

Contains sweetener: Sorbitol 70 % solution (non-crystallising) 2 500 mg

For full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Syrup.

A clear, colourless to pale yellow, strawberry flavoured syrup

4. CLINICAL PARTICULARS:

4.1 Therapeutic Indications

ADCO-LINCTOPENT SYRUP is indicated for cough associated with wheeziness (bronchospasm) and tenacious phlegm (sputum).

4.2 Posology and method of administration

Posology

Adults and children over 12 years: 10 to 20 ml three times daily.

Children 3 to 12 years: 5 to 10 ml three times daily.

Children 1 to 3 years: 2,5 to 5 ml three times daily.

Infants: 2,5 ml three times daily.

DO NOT EXCEED THE RECOMMENDED DOSE.

Method of administration

For oral use only.

Shake the bottle before use

4.3. Contraindications

- Hypersensitivity to bromhexine hydrochloride, orciprenaline citrate or any of the other ingredients (see section 6.1)
- Thyrotoxicosis.
- Hypertrophic obstructive cardiomyopathy, and tachyarrhythmia.
- If the patient receives a monoamine oxidase inhibitor (MAOI) or within 14 days of MAOI treatment termination since sympathomimetics, such as orciprenaline sulphate, may interact with MAOIs.
- Pregnancy or breastfeeding.

4.4 Special warnings and precautions for use

Bromhexine hydrochloride:

- Caution should be observed in patients with gastric ulcers due to the mucolytic action of bromhexine hydrochloride.
- Care should be taken in asthmatic patients.
- Clearance of bromhexine or its metabolites may be reduced in patients with severe hepatic or renal impairment.

Orciprenaline sulphate:

- Other sympathomimetic bronchodilators should only be used with ADCO- LINCTOPENT SYRUP under strict medical supervision. However, anticholinergic bronchodilators may be inhaled at the same time.
- Careful consideration should be given before administering ADCO- LINCTOPENT SYRUP to the elderly.
- Hypokalaemia may be induced by higher than recommended doses of beta- agonists, especially in patients receiving digitalis glycosides or diuretics or are prone to cardiac dysrhythmias.
- Caution should be exercised in patients suffering from hyperthyroidism due to sympathomimetic effects of orciprenaline sulphate.
- In addition, care should be observed in patients suffering from cardiovascular diseases i.e., ischaemic heart disease, arrhythmias, or tachycardia, occlusive vascular disorders including arteriosclerosis, hypertension, aneurysms, pheochromocytoma, prostatism, and in patients who are unusually responsive to sympathomimetic amines.
- Anginal pain may be precipitated in patients suffering from angina pectoris.
- Care is also required when ADCO-LINCTOPENT SYRUP is given to patients with diabetes mellitus or closed angle glaucoma.
- Caution is also needed in patients with convulsive disorders.
- This medicine contains 1750 mg sorbitol in each 5 ml which is equivalent to 0,35 g/ml.
- ADCO-LINCTOPENT SYRUP contains parahydroxybenzoates which may cause allergic reactions (possibly delayed).
- ADCO-LINCTOPENT SYRUP contains 250 mg propylene glycol in each 5 ml dose which is equivalent to 50 mg per ml. If your baby is less than 4 weeks old, talk to your doctor or pharmacist before giving them ADCO-LINCTOPENT SYRUP, in particular if the baby is given other medicines that contain propylene glycol or alcohol. If your child than 5 years old, talk to your doctor or pharmacist before giving them ADCO-LINCTOPENT SYRUP, in particular if they use other medicines
  that contain propylene glycol or alcohol.

4.5. Interaction with other medicines and other forms of interaction

- The concomitant use of other *sympathomimetic medicines, anticholinergics*, and *xanthine derivatives (such as theophylline*) should be carefully controlled to avoid potentiation of effects.

- A potentially serious reduction in bronchodilation may occur during concomitant administration of *beta-blockers.* ADCO-LINCTOPENT SYRUP should not be administered concomitantly with *beta-blocking medicines*, due to orciprenaline sulphate's reversal of antihypertensive action.
- A reduction in dose of *cardiac glycosides (e.g., digitalis), and quinidine* might become necessary in patients suffering from congestive cardiac failure because of the positive inotropic effect of orciprenaline sulphate.
- An increased risk of arrhythmias may also occur if given to patients receiving *cardiac glycosides, quinidine, or tricyclic antidepressants.*
- With the concomitant administration of *corticosteroids* and ADCO- LINCTOPENT SYRUP, the risks of hypokalaemia, hyperglycaemia, and pulmonary oedema are increased.
- ADCO-LINCTOPENT SYRUP should be avoided or used with caution in patients undergoing anaesthesia with cyclopropane, halothane, or other *halogenated anaesthetics*, as it may induce ventricular fibrillation.

4.6. Fertility, pregnancy and lactation

Safety in pregnancy and lactation has not been established. ADCO-LINCTOPENT SYRUP may inhibit uterine contractions in pregnancy. No fertility data available.

4.7. Effects on ability to drive and use machines

ADCO-LINCTOPENT SYRUP may lead to drowsiness and impaired concentration that may be aggravated by the simultaneous intake of alcohol or other central nervous system depressants. Patients should be advised, particularly at the initiation of therapy, against taking charge of vehicles or machinery or performing potentially hazardous tasks where loss of concentration could lead to accidents.

4.8 Undesirable effects

a. Summary of the safety profile

The undesirable effects listed are based on the MedDRA system organ classes (SOC) classification system. The frequency groupings listed conform to the following convention: Frequent (≥1/10); common;

Less frequent (≥1/1 000 to <1/100); rare (≥1/10 000 to <1/1 000); very rare (<1/10 000) and unknown (cannot be estimated from the available data).

b. ***Tabulated list of adverse reactions***

System organ class	***Frequency***	***Undesirable effect***
Immune system disorders	Frequent	Allergic reactions, especially in hypersensitive patients.
	Less frequent	Anaphylaxis
Metabolism and nutritional disorders	Frequent	Potentially serious hypokalaemia may occur.
	Unknown	Disturbances of glucose metabolism. Cases of lactic acidosis have been reported.
Endocrine disorders	Unknown	A transient rise in serum aminotransferase values has been reported
Psychiatric disorders	Frequent	Nervousness
	Less frequent	Psychological alterations including fear, anxiety, excitement, restlessness, insomnia, confusion, irritability, and psychotic states.
Nervous system disorders	Frequent	Fine tremor of skeletal muscles, headache, and dizziness.
	Less frequent	Weakness
Cardiac disorders	Frequent	Tachycardia, arrhythmia, palpitations.
	Less frequent	Decrease in diastolic blood pressure and an increase in systolic blood pressure, particularly after higher doses.
	Unknown	Hypertension, anginal pain, cardiac arrest, hypotension with dizziness, fainting and flushing.
Respiratory, thoracic and mediastinal disorders	Less frequent	Bronchospasm
	Unknown	Feeling of tightness in the chest, dyspnoea, or asthma exacerbation.
Gastrointestinal disorders	Frequent	Gastric irritation, nausea, vomiting.
	Less frequent	Diarrhoea
	Unknown	Reduced appetite, unpleasant taste, and hypersalivation
Skin and subcutaneous tissue disorders	Frequent	Skin reactions
	Less frequent	Skin rashes, angioedema, urticaria, sweating
Musculoskeletal, connective tissue and bone disorders	Frequent	Myalgia/muscle cramps or twitching.

Renal and urinary disorders	Unknown	Difficulty in micturition and urinary retention.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Health care providers are asked to report any suspected adverse reactions to SAHPRA via the Med Safety APP (X SAHPRA) found on SAHPRA website and eReporting platform (who-umc.org) found on SAHPRA website. Adverse Drug Reactions may also be reported to Adcock Ingram Limited using the following email:

Adcock.AEReports@adcock.com

4.9 Overdose

The expected symptoms with overdosage are those of excessive beta-adrenergic stimulation with the most prominent being tachycardia, central nervous system stimulation, palpitations, tremor, hypertension, hypokalaemia, hyperglycaemia, hypotension, widening of the pulse pressure, anginal pain, arrythmias and flushing.

Treatment should be symptomatic and supportive.

The administration of a cardio-selective beta-adrenergic blocking agent may be necessary to effectively antagonise the bronchodilator action of orciprenaline sulphate and for the management of cardiac arrhythmias. However, beta-blocker administration should be used with caution because it could induce severe bronchospasm or an asthma attack. In asthmatics the use of a cardio-selective beta-blocker such as atenolol or acebutolol is preferred.

5. PHARMACOLOGICAL PROPERTIES

A 10.1 Medicines acting on the respiratory system. Antitussives and expectorants.

ATC Code: R03CB53

5.1 Pharmacodynamic properties

ADCO-LINCTOPENT SYRUP has mucolytic (*bromhexine hydrochloride*) and bronchodilator *orciprenaline sulphate*) properties. *Orciprenaline sulphate* is a sympathomimetic agent predominantly acting on beta-

adrenergic receptors. Although relatively beta2-selective it also has beta1 activity producing positive inotropic and chronotropic effects on the heart.

5.2 Pharmacokinetic properties

Orciprenaline sulphate is well absorbed from the gastrointestinal tract but undergoes extensive first pass metabolism in the liver. Onset of action occurs within 15 minutes of oral administration achieving a peak within about an hour. As a result of resistance to catechol-O-methyl transferase (COMT) action, orciprenaline sulphate has a greater bioavailability compared to the catecholamines.

5.3 Preclinical safety data

No data available

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

- Kollidon 90/Kollidone 90F (Povidone)
- Glycerine CP (Glycerol) (E 422)
- Propylene Glycol (E 1520)
- Sorbitol 70 % solution (non-crystallising) (E 420)
- Strawberry flavour 216330
- Methyl parahydroxybenzoate (E218)
- Propyl parahydroxybenzoate (E216)

6.2 Incompatibilities

None known

6.3 Shelf life

24 months

6.4 Special precautions for storage

Store in an airtight container at or below 25 °C.

Protect from light

6.5 Nature and contents of container

Amber glass bottles of 100 ml and 200 ml with a white, plastic, pilfer proof, screw on cap with liner. Not all pack sizes may be marketed

6.6 Special precautions for disposal

This medicine requires no special precautions for disposal.

7. HOLDER OF CERTIFICATE OF REGISTRATION

Adcock Ingram Limited

1 New Road,

Erand Gardens,

Midrand, 1685

Customer Care: 0860 ADCOCK / 232625

8. REGISTRATION NUMBER

31/10.1/0011

9. DATE OF FIRST AUTHORISATION

22 April 1997

10. DATE OF REVISION OF THE TEXT

TBC

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Namibia: NS1 04/10.1/1559