Summary of Product Characteristics for Pharmaceutical Products

1. Name of the medicinal product:
Vithiol Syrup

2. Qualitative and quantitative composition
Each 5 ml contains: Carbocisteine 100mg and
Promethazine hydrochloride 2.5mg.

For the full list of excipients, see section 6.1.

3. Pharmaceutical form
A clear, syrupy liquid, free from any visible impurities with vanilla flavour.

4. Clinical particulars

4.1 Therapeutic indications
Symptomatic treatment of troublesome, non-productive cough, particularly occurring at night.

4.2 Posology and method of administration

Dosage
To be taken orally.
Adults: 3 to 4 spoons (15 ml to 20 ml) three times a day.
Children: 2-5 years of age (2.5 ml to 5 ml) four times a day.
6-12 years of age 1½ to 2½ spoons (7.5 ml to 12.5 ml) three times a day.
12 -15 years of age 2½ to 3 spoons (12.5 ml to 15 ml) three times a day.

4.3 Contraindications
Hypersensitivity to the active substances or to any of the excipients
History of agranulocytosis
Risk of urinary retention related to urethro- prostatic disorders
Risk of angle-closure glaucoma
Children <2 years (due to the potential for fatal respiratory. depression).
Should NOT BE USED during pregnancy
Carbocisteine with Promethazine must generally not be used, unless otherwise indicated by the doctor, in combination with Sultopride.

4.4 Special warnings and precautions for use
This product contains promethazine hydrochloride. It should not be used in pediatric patients less than 2 years of age because of the potential for fatal respiratory depression.
To be used with caution and on physician advice in children 2 to 6 years of age.
Caution is recommended in the elderly, in patients with a history of gastroduodenal ulcers, and in those taking concomitant medications which may cause gastrointestinal bleeding.
If gastrointestinal bleeding occurs, patients should discontinue medication.
Monitoring (clinical and ECG where appropriate) should be increased in

patients with epilepsy due to the possible lowering of the seizure threshold.
Should be used with caution in elderly subjects with:
• greater sensitivity to postural hypotension, dizziness and sedation
• chronic constipation (risk of paralytic
Should be used with caution in patients with certain cardiovascular diseases, due to the tachycardia- inducing and hypotensive effects of phenothiazines
Should be used with caution in patients with severe liver and/or kidney failure (due to the risk of accumulation)
Should be used with caution in case of concomitant use of CNS depressants (due to a risk of respiratory depression).
Concomitant use of promethazine and sodium oxybate is not recommended
In view of its H1-antihistamine sedating properties, promethazine should be used with caution due to its risk of sedation.
Combination with other sedative medicinal products should be discouraged
Due to the anticholinergic properties of promethazine, the risk of severe constipation or even enterocolitis is increased when combined with other anticholinergic or neuroleptic medicinal products
This medicinal product contains 3 g of sucrose per measuring spoon and 9 g per tablespoon, which must be taken into account in the daily ration in case of a low sugar diet or diabetes mellitus.
In the event of long-standing disease of the liver or kidneys, consult the doctor for dosage adjustment. Refrain from alcoholic beverages or drugs containing alcohol throughout the duration of treatment.
Preferably avoid exposure to sunlight during the treatment.

4.5 Interaction with other medicinal products and other forms of interaction

Atropine-like medicinal products

It should be taken into account that atropine-like substances can have additive adverse effects and more easily lead to urinary retention, acute attacks of glaucoma, constipation, dry mouth, etc.
The various atropine-like medicinal products include imipramine antidepressants, most atropine-like H1- antihistamines, anticholinergic antiparkinsonians, atropine-like antispasmodics, disopyramide, phenothiazine neuroleptics and clozapine.

Medications that lower the seizure threshold

The concomitant use of a pro-convulsant or medicinal products that lower the convulsive threshold should be carefully weighed because of the severity of the risk involved. These medicinal products include most antidepressants (imipramine agents, selective serotonin reuptake inhibitors), neuroleptics (phenothiazines and butyrophenones), mefloquine, chloroquine, bupropion and tramadol.

Sedative medicinal products
It should be taken into account that many medicinal products or substances can have additive depressant effects on the central nervous system and contribute to a decrease in alertness. These medicinal products include morphine derivatives (analgesics, antitussives and replacement therapies), neuroleptics, barbiturates, benzodiazepines, non-benzodiazepine anxiolytics (such as meprobamate), hypnotics, sedative antidepressants (amitriptyline, doxepin, mianserin, mirtazapine, trimipramine), sedative H1- antihistamines, centrally-acting antihypertensives, baclofen and thalidomide.

Alcohol (beverage or excipients)
The sedative effect of promethazine is increased by alcohol.
Impaired alertness may make driving vehicles and using machines dangerous.
The consumption of alcoholic beverages or medicinal products containing alcohol should be avoided.

Sodium oxybate
Increased CNS depression. Impaired alertness may make driving vehicles and using machines dangerous.

Combinations requiring precautions for use
With Topical agents for gastrointestinal use, antacids and adsorbents
(charcoal):
Decreased gastrointestinal absorption of the active ingredients. Allow an interval (2 hours, if possible) between administration of topical gastrointestinal agents or antacids and phenothiazine neuroleptics.

With Lithium:
Risk of occurrence of neuropsychiatric signs suggestive of neuroleptic malignant syndrome or lithium intoxication. Regular clinical and laboratory monitoring is required, especially at the start of coadministration.

Combinations to be taken into consideration
With **Anticholinesterases:**
Risk of reduced efficacy of anticholinesterases via acetylcholine receptor antagonism due to the atropine.

With Other central nervous system depressants (sedative antidepressants, barbiturates, clonidine and related, hypnotics, morphine derivatives (analgesics and antitussives), methadone, neuroleptics, anxiolytics). Will lead to Increased CNS depression, change in alertness can make driving and using machines dangerous.

Other medicinal products that lower the convulsive threshold
Increased risk of convulsions.

Atropine-like medicinal products
(imipramine antidepressants, anticholinergic addition, atropine antispasmodics, disopyramide, phenothiazine neuroleptics)
Addition of atropine undesirable effects, such as urinary retention, constipation, dry mouth.

Other hypnotic agents
Increased CNS depression.

Other sedative medicinal products
Increased CNS depression. Change in alertness can make driving and using machines dangerous.

Other Orthostatic Hypotension-inducing medicinal products
Risk of increased adverse effects, particularly dizziness or syncope.

Beta-blockers in heart failure
Vasodilator effect and risk of hypotension, particularly postural (additive effect).

Dapoxetine
Risk of increased adverse effects, particularly dizziness or syncope.

Blood pressure-lowering medicinal products
Risk of increased hypotension, especially orthostatic hypotension.

Opioids
Significant risk of colonic akinesia, with severe constipation.

Orlistat
Risk of treatment failure if administered concomitantly with orlistat.

4.6 Pregnancy and Lactation

Pregnancy: If the patient becomes pregnant during treatment, consult the doctor. The doctor will decide whether it is necessary to maintain treatment through the pregnancy. Towards the end of pregnancy, misuse of Vithiol have adverse effects on the newborn. In consequence, always ask the doctor's or pharmacist's advice before using this drug and never exceed the prescribed dose and treatment duration.
Lactation: Vithiol is excreted in breast milk. Do not take this drug if breastfeeding.
Use in children: Vithiol should be used with caution in children ≥2 years.

4.7 Effects on ability to drive and use machines

Attention, particularly which of drivers and machine users, is drawn to the possibility of drowsiness associated with the use of Vithiol. Patients

should be advised that if they feel drowsy, they should not drive or operate heavy machinery.

4.8 Undesirable effects

Like all active products, Vithiol may induce more or less unpleasant effects. Some of these effects require immediate discontinuation of treatment and consultation with a doctor. Allergic Reactions: Skin rash type (erythema, eczema, purpura, urticaria); asthma attacks; Quincke's edema; anaphylactic shock; phenomena of sensitization of the skin under the action of sunlight; marked reduction in the white blood cells which give rise to development or recurrence of fever whether or not accompanied by signs of infection; abnormal decrease in the platelets in the blood which may give rise to bleeding from the nose or gums. Other adverse effects are more frequent: Drowsiness, reduced alertness more marked at the start of treatment; memory or concentration disorders, dizziness (more frequent in elderly subjects): Motor incoordination, tremor; confusion, hallucinations, dry mouth, visual disorders, urinary retention, constipation, palpitations, fall in blood pressure. Possibility of gastrointestinal intolerance phenomena (stomach pains, nausea, diarrhea). If these occur, a reduction of dosage is recommended. More rarely, but particularly in infants, abnormal excited behaviour is observed including agitation, nervousness, insomnia.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after Authorization of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal products. Healthcare professionals are asked to report any suspected adverse reactions via Pharmacy and Poisons Board Pharmacovigilance Electronic Reporting System (PvERS); https://pv.pharmacyboardkenya.org

4.9 Overdose

Gastrointestinal disturbance (gastralgias, nausea and vomiting) are the most likely symptoms of Carbocisteine overdosage.

Signs of promethazine overdose: seizures (especially in children), consciousness disorders, coma.

5. Pharmacological properties

5.1 Pharmacodynamic properties

Antihistamine for systemic use (Respiratory system, ATC code: R06AD02) Promethazine.

Carbocisteine is a mucolytic agent which decreases the viscosity of the mucus, fluidizes it and facilitates its evacuation, thus promoting recovery. As a muco-regulatory agent, it helps regenerate the impaire bronchial mucosa. Promethazine, a phenothiazine derivative, is a sedating antihistamine with antimuscarinic, significant sedative, and some serotonin-antagonist properties.

Promethazine hydrochloride is used for the symptomatic relief of allergic conditions including urticaria and angioedema, rhinitis and

conjunctivitis, and in pruritic skin disorders.

5.2 Pharmacokinetic properties

Carbocisteine:

Orally administered carbocisteine is rapidly absorbed. Peak plasma concentrations are reached in two hours. Bioavailability is low (less than 10% of the administered dose), probably as a result of intraluminal metabolism and a marked liver first-pass effect. Elimination half-life is approximately two hours.

Carbocisteine and its metabolites are eliminated primarily in the kidneys.

Promethazine:

The bioavailability of promethazine is between 13 and 40%. Peak plasma concentrations are reached within 1.5 to 3 hours.

The volume of distribution is high due to the lipophilicity of the compound, approximately 15 L/kg. The drug is 75-80% plasma protein bound.

The half-life is between 10 and 15 hours.

Metabolism consists of sulfoxidation followed by demethylation.

Renal clearance represents less than 1% of total clearance and approximately 1% of administered promethazine is detected unchanged in the urine.

The metabolites found in the urine, particularly in sulfoxide form, represents approximately 20% of the dose.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential, toxicity to reproduction and development.

6. Pharmaceutical Particulars

6.1 List of Excipients

Sodium Hydroxide
Sorbitol 70% liquid
Sodium Methyl Paraben
Sodium propyl Paraben
Sodium saccharin
Sodium citrate
anhydrous Citric acid
Honey flavour
Sunset yellow colour
Purified Water

6.2 Incompatibilities

Not applicable

6.3 Shelf-Life

24 Months

6.4 Special Precautions for storage

Store in a dry place, below 30°C.Protected from direct sunlight Keep all medicines out of reach of children.

6.5 Nature and Content of container

125 mL syrup packed in glass amber bottle affixed with coded label which has batch number, manufacturing date and expiry dates packed in unit box with an insert and 10ml measuring cap.

6.6 Special precautions for disposal and other handling

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7. Marketing Authorization Holder

Name: EASTLEIGH PHARMACEUTICALS CO. LTD.
Company name: EASTLEIGH PHARMACEUTICALS CO. LTD.
Address: P.O. BOX 167-00610 NAIROBI KENYA
Country: KENYA
E-Mail: -- info@eastleighpharmaceuticals.com

8. Marketing Authorization Number

CTD9357

9. Date of first authorization/renewal of the authorization

31/03/2023

10. Date of revision of the text

11/05/2025