Sinarest AF

Tablets

1. Generic name: Phenylephrine & Chlorpheniramine maleate tablets

2. Composition

Each uncoated tablet contains:

Chlorpheniramine maleate IP ..... 4 mg

Phenylephrine hydrochloride IP ..... 10 mg

3. Dosage form and strength

Sinarest AF available in tablet form (15 tablets in 1 strip)

4. Clinical particulars

4.1 Therapeutic indication Sinarest

AF is indicated for:

- Nasal congestion associated with allergic rhinitis.
- Afebrile common cold

4.2 Posology and method of administration

The usual recommended oral dose of Sinarest tablet is one tablet two or three times a day.

4.3 Contraindication

The use of Sinarest AF Tablet is contraindicated in patients with: •

Hypersensitivity to any of the ingredients of the formulation.

- Severe hypertension.

4.4 Special warnings and precautions for use

- **"The fixed dose combination shall not be used in children below four years of age"**
- In case a hypersensitivity reaction occurs which is rare, Sinarest AF tablet should be discontinued.

- Sinarest AF Tablet should be used with caution in patients with renal or hepatic dysfunction, diabetes mellitus, hyperthyroidism, cardiovascular problems, epilepsy, and closed angle glaucoma.

4.5 Drug interactions

Clinically significant drug interactions may occur on concomitant administration of Sinarest AF tablet with monoamine oxidase inhibitors, tricyclic antidepressants, beta- adrenergic agents, and methyldopa, reserpine and veratrum alkaloids.

4.6 Use in special population

- Geriatric: Elderly population may be at greater risk for the side-effects.
- Liver impairment: Use with caution.
- Renal failure: Use with caution.
- Pregnancy and lactation: US Food and Drug Administration (FDA) has specified Chlorphenamine maleate as a pregnancy category B drug which indicates that animal and human studies have failed to demonstrate a risk to the fetus in any trimester. Sinarest is recommended to be taken during pregnancy only under doctor's recommendation.

4.7 Effects on ability to drive and use machine.

Chlorpheniramine in Sinarest AF tablet may cause sedation.

It is advisable not to drive or operate machinery when on treatment with Sinarest AF tablet.

4.8 Undesirable effects

Sinarest AF Tablet is generally well tolerated and adverse events are rare. Hypersensitive individuals may display ephedrine-like reactions such as tachycardia, palpitations, headache, dizziness and nausea. Use of sympathomimetics has been associated with fear, anxiety, restlessness, tremor, weakness, dysuria, insomnia, hallucinations, and convulsions.

Chlorpheniramine in Sinarest AF Tablet may cause sedation.

4.9 Overdose

There is limited experience of overdose with Sinarest AF Tablet. Initiate general symptomatic and supportive measures in all cases of overdosages where necessary.

5. Pharmacological properties

5.1 Mechanism of action

Phenylephrine decreases nasal congestion by acting on α1-adrenergic receptors in the arterioles of the nasal mucosa to produce constriction; this leads to decreased edema, increased drainage of the sinus cavities and broaden the nasal passage which responsible for nasal decongestion. In allergic reactions an allergen interacts with and cross-links surface IgE antibodies on mast cells and basophils. Once the mast cell- antibody-antigen complex is formed, a complex series of events occurs that eventually leads to cell-degranulation and the release of histamine (and other chemical mediators) from the mast cell or basophil. Once released, histamine can react with local or widespread tissues through histamine receptors. Histamine, acting on H1receptors, produces pruritis, vasodilatation, hypotension, flushing, headache, tachycardia, and bronchoconstriction. Histamine also increases vascular permeability and potentiates pain. Chlorpheniramine maleate binds to the histamine H1 receptor. This blocks the action of endogenous histamine, which subsequently leads to temporary relief of the negative symptoms brought by histamine.

5.2 Pharmacodynamic properties

Phenylephrine is a powerful vasoconstrictor. It is used as a nasal decongestant and cardiotonic agent. Phenylephrine is a postsynaptic α1-receptor agonist with little effect on β-receptors of the heart. Parenteral administration of phenylephrine causes a rise in systolic and diastolic pressures, a slight decrease in cardiac output, and a considerable increase in peripheral resistance; most vascular beds are constricted, and renal, splanchnic, cutaneous, and limb blood flows are reduced while coronary blood flow is increased. Phenylephrine also causes pulmonary vessel constriction and subsequent increase in pulmonary arterial pressure. Vasoconstriction in the mucosa of the respiratory tract leads to decreased edema and increased drainage of sinus cavities. Chlorpheniramine maleate is a histamine H1 antagonist of the alkylamine class. It competes with histamine for the normal H1-receptor sites on effector cells of the gastrointestinal tract, blood vessels and respiratory tract. It provides effective, temporary relief of sneezing, watery and itchy eyes, and runny nose due to hay fever and other upper respiratory allergies.

5.3 Pharmacokinetic properties

Phenylephrine has low oral bioavailability owing to irregular absorption and first-pass metabolism by monoamine oxidase in the gut and liver. When injected subcutaneously or intramuscularly it takes 10 to 15 minutes to act; subcutaneous and intramuscular injections are effective for up to about 1 hour and up to about 2 hours, respectively. Intravenous injections are effective for about 20 minutes. Systemic absorption follows topical application. Chlorphenamine maleate is absorbed relatively slowly from the gastrointestinal tract, peak plasma concentrations occurring about 2.5 to 6 hours after oral doses. Bioavailability is low, values of 25 to 50% having been reported. Chlorphenamine appears to undergo considerable first-pass metabolism. About 70% of chlorphenamine in the circulation is bound to plasma proteins. There is wide inter individual variation in the pharmacokinetics of chlorphenamine; values ranging from 2 to 43 hours have been reported for the half-life. Chlorphenamine is widely distributed in the body and enters the CNS. Chlorphenamine maleate is extensively metabolised. Metabolites include desmethyl-n desmethyl chlorphenamine. Unchanged drug and metabolites are excreted primarily in the urine; excretion is dependent on urinary pH and flow rate. Only trace amounts have been found in the faeces. Duration of action of 4 to 6 hours has been reported this is shorter than may be predicted from pharmacokinetic parameters. More rapid and extensive absorption, faster clearance, and a shorter half-life have been reported in children.

6. Nonclinical properties

6.1 Animal Toxicology or Pharmacology

Not required.

7. Description

Already mentioned and covered in the above points.

8. Pharmaceutical particulars

8.1 Incompatibilities

There are no known incompatibilities.

8.2 Shelf-life

36 months

8.3 Packaging information

Strip available in pack of 15 tablets

8.4Storage and handling instructions

Do not store above 30°C.

Protect from sunlight and moisture, Keep out of reach of children

9. Patient Counselling Information

9.1 Adverse reactions

Refer part 4.8

9.2 Drug Interactions

Refer part 4.5

9.3 Dosage

Refer part 3

9.4 Storage

Refer part 8.4

9.5 Risk factors

Refer part 4.4

9.6 Self-monitoring information

NA

9.7 Information on when to contact a health care provider or seek emergency help

Patient is advised to be alert for the emergence or worsening of the adverse reactions and contact the prescribing physician.

9.8 Contraindications

Refer part 4.3

10. Details of manufacturer: Centaur Pharmaceuticals Pvt. Ltd.

11. License number date:

12. Date of revision: April 2025