Loratin® Fast

Loratadine

COMPOSITION

Loratin® Fast Tablet : Each orodispersible tablet contains Loratadine USP 10 mg.

PHARMACOLOGY

Loratadine is a long-acting tricyclic antihistamine with selective peripheral histamine H_1 -receptor antagonistic activity. Human histamine skin wheal studies following single and repeated 10 mg oral doses of Loratadine have shown that the drug exhibits an antihistaminic effect beginning within 1 to 3 hours, reaching a maximum at 8 to 12 hours, and lasting in excess of 24 hours. There was no evidence of tolerance to this effect after 28 days of dosing with Loratadine.

Whole body autoradiographic studies in rats and monkeys, radiolabeled tissue distribution studies in mice and rats, and in vivo radioligand studies in mice have shown that neither loratadine nor its metabolites readily cross the blood-brain barrier. Radioligand binding studies with guinea pig pulmonary and brain H_1 -receptors indicate that there was preferential binding to peripheral versus central nervous system H_1 -receptors. Repeated application of Loratadine (loratadine rapidly-disintegrating tablets) to the hamster cheek pouch did not cause local irritation.

PHARMACOKINETICS

***Absorption and Distribution*:** Loratadine was rapidly absorbed following oral administration of 10 mg tablets, once daily for 10 days to healthy adult volunteers with times to maximum concentration (Tmax) of 1.3 hours for loratadine and 2.5 hours for its major active metabolite, descarboethoxyloratadine. Based on a cross-study comparison of single doses of loratadine syrup and tablets given to healthy adult volunteers, the plasma concentration profile of descarboethoxyloratadine for the two formulations is comparable. The pharmacokinetics of loratadine and descarboethoxyloratadine are independent of dose over the dose range of 10 mg to 40 mg and are not altered by the duration of treatment. In a single-dose study, food increased the systemic bioavailability (AUC) of loratadine and descarboethoxyloratadine by approximately 40% and 15%, respectively. The time to peak plasma concentration (Tmax) of loratadine and descarboethoxyloratadine was delayed by 1 hour. Peak plasma concentrations (Cmax) were not affected by food.

Following administration of 10 mg loratadine once daily for 10 days with each dosage form in a randomized crossover comparison in 24 normal adult subjects, similar mean exposures (AUC) and peak plasma concentrations (Cmax) of loratadine were observed. Loratadine rapidly-disintegrating tablets mean AUC and Cmax were 11% and 6% greater than that of the Loratadine Tablet values, respectively. Descarboethoxyloratadine bioequivalence was demonstrated between the two formulations. After 10 days of dosing, mean peak plasma concentrations were attained at 1.3 hours and 2.3 hours (Tmax) for parent and metabolite, respectively. In a single-dose study with Loratadine rapidly-disintegrating orally dispersible tablets, food increased the AUC of loratadine by approximately 48% and did not appreciably affect the AUC of descarboethoxyloratadine. The times to peak plasma concentration (Tmax) of loratadine and descarboethoxyloratadine were delayed by approximately 2.4 and 3.7 hours, respectively, when food was consumed prior to Loratadine
rapidly-disintegrating tablets administration. Parent and metabolite peak concentrations (Cmax) were not affected by food.In a single-dose study with Loratadine rapidly-disintegrating tablets in 24 subjects, the AUC of loratadine was increased by 26% when administered without water compared to administration with water, while C max was not substantially affected. The bioavailability of descarboethoxyloratadine was not different when administered without water.

***Metabolism*:** In vitro studies with human liver microsomes indicate that loratadine is metabolized to descarboethoxyloratadine predominantly by cytochrome P450 3A4 (CYP3A4) and, to a lesser extent, by cytochrome P450 2D6 (CYP2D6).

Concurrent administration of loratadine with either ketoconazole, erythromycin (both CYP3A4 inhibitors), or cimetidine (CYP2D6 and CYP3A4 inhibitor) to healthy volunteers was associated with substantially increased plasma concentrations of loratadine.

***Elimination*:** Approximately 80% of the total loratadine dose administered can be found equally distributed between urine and feces in the form of metabolic products within 10 days. In nearly all patients, exposure (AUC) to the metabolite is greater than to the parent loratadine. The mean elimination half-lives in normal adult subjects (n = 54) were 8.4 hours (range = 3 to 20 hours) for loratadine and 28 hours (range = 8.8 to 92 hours) for descarboethoxyloratadine. Loratadine and descarboethoxyloratadine reached steady-state in most patients by approximately the fifth dosing day. There was considerable variability in the pharmacokinetic data in all studies of Loratadine Tablets and Suspension, probably due to the extensive first-pass metabolism.

INDICATION

- Seasonal allergic rhinitis.
- Perennial allergic rhinitis.
- Skin allergies including chronic urticaria.

DOSAGE AND ADMINISTRATION

Adult and child over 6 years: One **Loratin®** Fast 10 mg tablet daily.
Children aged 2-5 years: $^1/_2$ **Loratin®** Fast tablet (5 mg) once daily.
Loratadine is not recommended for children under 2 years of age. Upon several weeks administration, Loratadine does not show any decreased activity.

CONTRAINDICATION

Loratadine is contraindicated in patients who have shown hypersensitivity to its ingredients or idiosyncrasy.

SIDE EFFECT

The incidence of adverse effects, including sedation and anticholinergic effects, observed with Loratadine was comparable to that observed with placebo. Other events like fatigue, nausea, and headache were reported rarely. Tachycardia and syncope have been reported rarely.

DRUG INTERACTION

When administered concurrently with alcohol, Loratadine has no potentiating effects as measured by psychomotor performance studies.

USE IN PREGNANCY AND LACTATION

Loratadine should not be administered during pregnancy. There is no experience of the use of Loratadine in human pregnancy. In animal studies Loratadine was not teratogenic; at high doses some embryotoxic effects were observed. Since Loratadine is excreted in breast milk, it should not be administered to lactating women.

STORAGE CONDITION

Store below 30°C. Protect from light and moisture. Keep out of children's reach.

HOW SUPPLIED

Loratin® Fast Tablet : Box containing 3 x 10 / 5 x 10 / 10 x 10 tablets in blister pack.

SQUARE