

PRODUCT INFORMATION

CLARITIN® brand of loratadine TABLETS, SYRUP, and RAPIDLY-DISINTEGRATING TABLETS

DESCRIPTION Loratadine is a white to off-white powder not soluble in water, but very soluble in acetone, alcohol, and chloroform. It has a molecular weight of 382.89, and empirical formula of $c_{2p}H_{22}$ ClN₂O₂; its chemical name is ethyl 4-(8-chloro-5,6-dihydro-11H/-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate and has the following structural formula:

FPO.

CLARITIN Tablets contain 10 mg micronized loratadine, an antihistamine, to be administered orally. It also contains the following inactive ingredients: corn starch, lactose, and magnesium stearate.

CLARITIN Syrup contains 1 mg/mL micronized loratadine, an antihistamine, to be administered orally. It also contains the following inactive ingredients: citric acid, edetate disodium, artificial flavor, glycerin, propylene glycol, sodium benzoate, sugar, and water. The pH is between 2.5 and 3.1.

CLARITIN REDITABS (loratadine rapidly-disintegrating tablets) contain 10 mg micronized loratadine, an antihistamine, to be administered orally. It disintegrates in the mouth within seconds after placement on the tongue, allowing its contents to be subsequently swallowed with or without water. CLARITIN REDITABS (loratadine rapidly-disintegrating tablets) also contain the following inactive ingredients: citric acid, gelatin, mannitol, and mint flavor.

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CLINICAL PHARMACOLOGY Loratadine is a long-acting tricyclic antihistamine with selective peripheral histamine H₁-receptor antagonistic activity.

Human histamine skin wheal studies following single and repeated 10 mg oral doses of CLARITIN have shown that the furg 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 folerance to this effect after 28 days of dosing with CLARITIN.

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 H₁-receptors indicate that there was preferential binding to peripheral versus central nervous system H₁-receptors.

Repeated application of CLARITIN REDITABS (loratadine rapidly-disintegrating tablets) to the hamster cheek pouch did not cause local irritation.

Pharmacokinetics: Absorption: 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 (r_{max}) of 1.3 hours for loratadine and cascarboethoxyloratadine expression of single doses of loratadine syrup and tablets given to healthy adult volunteers, the plasma concentration profile of descarboethoxyloratadine sort on the two formulations is comparable. The pharmacokinetics of loratadine and descarboethoxyloratadine by approximately 40% and 15%, respectively. The time to peak plasma concentration (r_{max}) of loratadine a

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ingredients.

PRECAUTIONS General: Patients with liver impairment or renal insufficiency (GFR < 30 mL/min) should be given a lower initial dose (10 mg every other day). (See CLINICAL PHARMACOLOGY: Special Populations.)

Drug Interactions: Loratadine (10 mg once daily) has been coadministered with therapeutic doses of erythromycin, cimeldine, and ketoconazole in controlled clinical pharmacology studies in adult volunteers. Although increased plasma concentrations (AUC 0-24 hrs) of loratadine and/or descarboethoxyloratadine were observed following coadministration of loratadine with each of these drugs in normal volunteers (n = 24 in each study), there were no clinically relevant changes in the safety profile of loratadine, as assessed by electrocardiographic parameters, clinical laboratory tests, vital signs, and adverse events. There were no significant effects on OT, intervals, and no reports of sedation or syncope. No effects on plasma concentrations of cimeltidine or ketoconazole were observed. Plasma concentrations (AUC 0-24 hrs) of erythromycin decreased 15% with coadministration of loratadine relative to that observed with erythromycin alone. The clinical relevance of this difference is unknown. These above findings are summarized in the following table.

Fifects on Plasma Concentrations (AUC 0-24 hrs) of Loratadine and Descarboethoxyloratadine.

Effects on Plasma Concentrations (AUC 0-24 hrs) of Loratadine and Descarboethoxyloratadine After 10 Days of Coadministration (Loratadine 10 mg) in Normal Volunteers Descarboethoxyloratadine Loratadine

Erythromycin (500 mg Q8h) Cimetidine (300 mg QID) Ketoconazole (200 mg Q12h) + 6% +73%

Carcinogenesis, Mutagenesis, and Impairment of Fertility: In an 18-month carcinogeneist, Study in rats, loratadine was administered in the diet at doses up to 40 mg/kg (mice) a55 mg/kg (rats). In the carcinogenicity study in rats, loratadine was administered in the diet at doses up to 40 mg/kg (mice) a55 mg/kg (rats). In the carcinogenicity study in rats, loratadine was administered in the diet at doses up to 40 mg/kg (mice) a55 mg/kg (rats). In the carcinogenicity study in rats, loratadine was administered in the diet at doses up to 40 mg/kg (mice) ad5 mg/kg (rats). In the carcinogenicity studies, pharmacokinetic assessments were carried out to determine animal exposure to the drug. AUC data demonstrated that the exposure of mice given 40 mg/kg of loratadine was 3.6 (loratadine) at 18 (descarboethoxyloratadine) times the exposure in adults and 50 (oratadine) and 20 (descarboethoxyloratadine) times the exposure in children given the maximum recommended daily oral dose. Male mice given 40 mg/kg had a significantly higher incidence of hepatocellular tumors (combined adenomas and carcinomas) than concurrent controls. In rats, a significantly higher incidence of hepatocellular tumors (combined adenomas and carcinomas) was observed in males given 10 mg/kg, and males and females given 25 mg/kg. Exposure of rats given 10 mg/kg, and males and females given 25 mg/kg. Exposure of rats given 10 mg/kg. In the maximum recommended daily oral dose. The clinical significance of these findings during long-term use of CLARITIN is not known. In mutagenicity studies, there was no evidence of mutagenic potential in reverse (Ames) or forward point mutation (CH0-HGPRT) assays, or in the assay for DNA damage (rat primary hepatocyte unscheduled DNA assay) or in two assays for chromosomal aberations (fuman peripheral blood lymphocyte clastogenesis assays and the mouse bone marrow erythrocyte micronucleus assay). In the mouse lymphoma assay, a positive finding occurred in the nonactivated but not the activated phase of the study.

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Pregnancy Category B: There was no evidence of animal teratogenicity in studies performed in rats and rabbits at oral doses up to 96 mg/kg (approximately 75 times and 150 times, respectively, the maximum recommended human daily oral dose on a mg/m² basis). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, CLARITIN should be used during pregnancy only if clearly needed.

Nursing Mothers: Loratadine and its metabolite, descarboethoxyloratadine, pass easily into breast milk and achieve concentrations that are equivalent to plasma levels with an AUC_{millo}AUC_{plasma} ratio of 1.17 and 0.85 for loratadine and descarboethoxyloratadine, respectively. Following a single oral dose of 40 mg, a small amount of loratadine and descarboethoxyloratadine was excreted into the breast milk (approximately 0.03% of 40 mg over 48 hours). A decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother. Caution should be exercised when CLARITIN is administered to a nursing woman.

Pediatric Use: The safety of CLARITIN Syrup at a daily dose of 10 mg has been demonstrated in 188 pediatric patients 6 to 12 years of age in placebo-controlled 2-week trials. The safety and tolerability of CLARITIN Syrup at a daily dose of 5 mg has been demonstrated efficacy. The effectiveness of CLARITIN for the treatment of seasonal allergic rhinitis and chronic idiopathic urticaria in children aged 2 to 12 years is based on an extrapolation of the demonstrated efficacy of CLARITIN in adults in these conditions and the likelihood that the disease course, pathophysiology, and the drug's effect are substantially similar to that of the adults. The recommended dose for the pediatric population is based on cross-study comparison of the pharmacokinetics of CLARITIN in adults and pediatric patients at doses equal to or higher than the recommended dose. The safety profile of

REPORTED ADVERSE EVENTS WITH AN INCIDENCE OF MORE THAN 2% IN PLACEBO-CONTROLLED ALLERGIC RHINITIS CLINICAL TRIALS IN PATIENTS 12 YEARS OF AGE AND OLDER

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	LORATADINE 10 mg QD n = 1926	PLACEBO n = 2545	CLEMASTINE 1 mg BID n = 536	TERFENADINE 60 mg BID n = 684
Headache	12	11	8	8
Somnolence	8	6	22	9
Fatigue	4	3	10	2
Dry Mouth	3	2	4	3
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Adverse events reported in placebo-controlled chronic idiopathic urticaria trials were similar to those reported in aller-gic rhinitis studies.

Adverse event rates did not appear to differ significantly based on age, sex, or race, although the number of nonwhite subjects was relatively small.

CLARITIN REDITABS (Ioratadine rapidly-disintegrating tablets): Approximately 500 patients received CLARITIN REDITABS (loratadine rapidly-disintegrating tablets) in controlled clinical trials of 2 weeks 'duration. In these studies, adverse events were similar in type and frequency to those seen with CLARITIN Tablets aplacebo. Administration of CLARITIN REDITABS (loratadine rapidly-disintegrating tablets) did not result in an increased report-

ing frequency of mouth or tongue irritation

CLARITIN Syrup: Approximately 300 pediatric patients 6 to 12 years of age received 10 mg loratadine once daily in controlled clinical trials for a period of 8 to 15 days. Among these, 188 children were treated with 10 mg loratadine syrup once daily in placebo-controlled trials. Adverse events in these pediatric patients were observed to occur with type and frequency similar to those seen in the adult population. The rate of premature discontinuance due to adverse events among pediatric patients receiving loratadine 10 mg daily was less than 1%.

ADVERSE EVENTS OCCURRING WITH A FREQUENCY OF ≥ 2% IN LORATADINE SYRUP-TREATED PATIENTS (6 TO 12 YEARS OLD) IN PLACEBO-CONTROLLED TRIALS, AND MORE FREQUENTLY THAN IN THE PLACEBO GROUP PERCENT OF PATIENTS REPORTING

	LORATADINE 10 mg QD	PLACEBO	CHLORPHENIRAMINE 2-4 mg BID/TID
	n = 188	n = 262	n = 170
Nervousness	4	2	2
Wheezing	4	2	5
Fatigue	3	2	5
Hyperkinesia	3	1	1
Abdominal Pain	2	0	0
Conjunctivitis	2	<1	1
Dysphonia	2	<1	0
Malaise	2	0	1
Upper Respiratory			
Tract Infection	2	<1	0
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Sixty pediatric patients 2 to 5 years of age received 5 mg loratadine once daily in a double-blind, placebo-controlled clinical trial for a period of 14 days. No unexpected adverse events were seen given the known safety profile of loratadine and likely adverse reactions for this patient population. The following adverse events occurred with a frequency of 2 to 3 percent in the loratadine syrup-treated patients (2 to 5 years old) during the placebo-controlled trial, and more frequently than in the placebo group: diarrhea, epistaxis, pharyngitis, influenza-like symptoms, fatigue, stomatitis, tooth disorder, earache, viral infection, and rash.

In addition to those adverse events reported above (≥ 2%), the following adverse events have been reported in at least one patient in CLARITIN clinical trials in adult and pediatric patients:

Autonomic Nervous System: altered lacrimation, altered salivation, flushing, hypoesthesia, impotence, increased sweating, thirst.

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cardia tuia. Central and Peripheral Nervous System: blepharospasm, dizziness, dysphonia, hypertonia, migraine, paresthesia,

Central and Peripheral Nervous System: blepharospasm, dizziness, dyspnonia, пуреполіа, підчалю, рагезільного, castrointestinal System: altered taste, anorexia, constipation, diarrhea, dyspepsia, flatulence, gastritis, hiccup, increased appetite, loose stools, nausea, vomiling. Musculoskeletal System: arthralgia, myalgia. Psychiatric: agitation, amnesia, anxiety, confusion, decreased libido, depression, impaired concentration, insomnia, irritability, paroniria. Reproductive System: breast pain, dysmenorrhea, menorrhagia, vaginitis. Respiratory System: bronchills, bronchospasm, coughing, dyspnea, hemoptysis, laryngitis, nasal dryness, sinusitis, spezina.

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DRUG ABUSE AND DEPENDENCE There is no information to indicate that abuse or dependency occurs with CLARITIN.

PRUG ABUSE AND DEPENDENCE There is no information to indicate that abuse or dependency occurs with CLARITIN.

OVERDOSAGE In adults, somnolence, tachycardia, and headache have been reported with overdoses greater than 10 mg with the Tablet formulation (40 mg-180 mg). Extrapyramidal signs and palpitations have been reported in children with overdoses of greater than 10 mg of CLARITIN Syrup. In the event of overdosage, general symptomatic and supportive measures should be instituted promptly and maintained for as long as necessary. Treatment of overdosage would reasonably consist of emesis (ipecae syrup), except in patients with impaired consciousness, followed by the administration of activated charcoal to absorb any remaining drug. If vomiting is unsuccessful, or contraindicated, gastric lavage should be performed with normal saline. Saline cathartics may also be of value for rapid dilution of bowel contents. Loratadine is not eliminated by hemodialysis. It is not known if loratadine is eliminated by peritoneal dialysis.

No deaths occurred at oral doses up to 5000 mg/kg in mice (approximately 1200 and 1400 times, respectively, the maximum recommended daily oral dose in adults and children on a mg/m² basis). No deaths occurred at oral doses up to 5000 mg/kg in matured rats (approximately 2400 and 2900 times, respectively, the maximum recommended daily oral dose in adults and children on a mg/m² basis). No deaths occurred at oral dose of 125 mg/kg (approximately 100 and 70 times, respectively, the maximum recommended daily oral dose in adults and children on a mg/m² basis). No deaths occurred at oral dose of 125 mg/kg (approximately) 100 and 70 times, respectively, the maximum recommended daily oral dose in adults and children on a mg/m² basis). No deaths occurred at oral dose of 125 mg/kg (approximately) 100 and 70 times, respectively, the maximum recommended daily oral dose in adults and children on a mg/m² basis). No deaths occurred at oral dose of 125 mg/kg (approximately) 2100 and 1500 times, respectively, t

Water.

HOW SUPPLIED CLARITIN Tablets: 10 mg, white to off-white compressed tablets; impressed with the product identification number "458" on one side and "CLARITIN 10" on the other; high-density polyethylene plastic bottles of 100 (NDC 0085-0458-03) and 500 (NDC 0085-0458-06). Also available, CLARITIN Unit-of-Use packages of 30 tablets (10 tablets per blister card) (NDC 0085-0458-04). Protect Unit-of-Use packaging and Unit Dose-Hospital Pack (NDC 0085-0458-04).

Protect Unit-of-Use packaging and Unit Dose-Hospital Pack from excessive moisture.

Store between 2" and 30"C (36" and 86"F).

Store between 2° and 30°C (36° and 86°F).

CLARITIN Syrup: Clear, colorless to light-yellow liquid, containing 1 mg loratadine per mL; amber glass bottles of 16 fluid ounces (NDC 0085-1223-01).

Store between 2° and 25°C (36° and 77°F).

CLARITIN REDITABS (loratadine rapidly-disintegrating tablets): CLARITIN REDITABS (loratadine rapidly-disintegrating tablets) and may be supplied with the letter "C" on one side; Unit-of-Use polyvinyl chloride blister packages of 30 tablets (three laminated foil pouches, each containing one blister card of 10 tablets) supplied with Patient's Instructions for Use (NDC 0085-1128-02).

Keep CLARITIN REDITABS (loratadine rapidly-disintegrating tablets) in a dry place.

Store between 2° and 25°C (36° and 77°F). Use within 6 months of opening laminated foil pouch, and immediately upon opening individual tablet blister.



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CLARITIN REDITABS (Ioratadine rapidly-disintegrating tablets) are manufactured for Schering Corporation by Scherer DDS, England.
U.S. Patent Nos. 4,282,233 and 4,371,516.
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