

PRODUCT MONOGRAPH

**CLARITIN<sup>®</sup> ALLERGY**

**Loratadine Tablets USP 10 mg**

**CLARITIN<sup>®</sup> Rapid Dissolve<sup>™</sup>**

**Loratadine Orally Disintegrating Tablets USP 10 mg**

**Loratadine Orally Disintegrating Tablets USP 5 mg**

**CLARITIN KIDS<sup>®</sup>**

**Loratadine Oral Solution USP 1 mg/mL**

**Histamine H<sub>1</sub> receptor antagonist**

Bayer Inc.  
2920 Matheson Blvd. E  
Mississauga, ON  
L4W 5R6

Date of Revision:  
May 16<sup>th</sup>, 2019

Submission Control No: 225773, 225774, 225776

® TM see [www.bayer.ca/tm-mc](http://www.bayer.ca/tm-mc)

## **Table of Contents**

<b>PART I: HEALTH PROFESSIONAL INFORMATION.....</b>	<b>3</b>
SUMMARY PRODUCT INFORMATION .....	3
INDICATIONS AND CLINICAL USE.....	3
CONTRAINDICATIONS .....	4
WARNINGS AND PRECAUTIONS.....	4
ADVERSE REACTIONS.....	6
DRUG INTERACTIONS .....	9
DOSAGE AND ADMINISTRATION .....	10
OVERDOSAGE .....	11
ACTION AND CLINICAL PHARMACOLOGY .....	11
STORAGE AND STABILITY .....	15
SPECIAL HANDLING INSTRUCTIONS .....	16
DOSAGE FORMS, COMPOSITION AND PACKAGING .....	16
 <b>PART II: SCIENTIFIC INFORMATION .....</b>	 <b>18</b>
PHARMACEUTICAL INFORMATION.....	18
CLINICAL TRIALS.....	19
DETAILED PHARMACOLOGY .....	21
MICROBIOLOGY .....	25
TOXICOLOGY .....	25
REFERENCES .....	29
 <b>PART III: CONSUMER INFORMATION.....</b>	 <b>30</b>
CLARITIN ALLERGY .....	30
CLARITIN RAPID DISSOLVE (10 mg).....	33
CLARITIN RAPID DISSOLVE (5 mg).....	35
CLARITIN KIDS.....	38

**CLARITIN ALLERGY  
CLARITIN RAPID DISSOLVE  
CLARITIN KIDS**

**Loratadine**

**PART I: HEALTH PROFESSIONAL INFORMATION**

**SUMMARY PRODUCT INFORMATION**

<b>Route of Administration</b>	<b>Dosage Form / Strength</b>	<b>Clinically Relevant Non-medicinal Ingredients</b>
Oral	Tablet / 10 mg Orally Disintegrating Tablet / 10 mg Orally Disintegrating Tablet / 5 mg Oral Solution / 1 mg/mL	<i>For a complete listing see Dosage Forms, Composition and Packaging section.</i>

**INDICATIONS AND CLINICAL USE**

CLARITIN ALLERGY (Loratadine Tablets, USP, 10 mg), CLARITIN Rapid Dissolve (Loratadine Orally Disintegrating Tablets USP, 10 mg) and CLARITIN Rapid Dissolve (Loratadine Orally Disintegrating Tablets USP, 5 mg ) are indicated for:

- the relief of symptoms associated with seasonal and perennial allergic rhinitis, such as sneezing, nasal discharge and itching, and ocular itching and burning.
- the relief of symptoms and signs of chronic urticaria and other allergic dermatologic disorders.

Clinical studies to date support treatment for up to six months, thus medical recommendation is advised for longer-term use. CLARITIN Rapid Dissolve should be taken on an empty stomach.

CLARITIN KIDS (Loratadine Oral Solution USP, 1 mg/mL) is indicated for:

- the relief of symptoms associated with seasonal allergic rhinitis, such as sneezing, nasal discharge and itching, and ocular itching and burning.
- the relief of symptoms and signs of chronic urticaria and other allergic dermatologic disorders.

All dosage forms of CLARITIN ALLERGY, CLARITIN Rapid Dissolve and CLARITIN KIDS are not recommended for pregnant or lactating women.

**Geriatrics:**

The pharmacokinetic parameters of loratadine and its major metabolite are comparable in healthy adult volunteers and healthy geriatric volunteers. (See DETAILED PHARMACOLOGY / Pharmacokinetics and Metabolism).

**Pediatrics (2-12 years of age):**

In children, it is intended for short-term use only unless taken under medical supervision.

**CONTRAINDICATIONS**

- Patients who are hypersensitive to this drug, including its metabolite, Descarboethoxy-loratadine or to any ingredient in the formulation or component of the container. For a complete listing, see the Dosage Forms, Composition and Packaging section of the product monograph.

**WARNINGS AND PRECAUTIONS**

**Hepatic/Biliary/Pancreatic**

In patients with chronic alcoholic liver disease, the AUC and peak plasma levels (C<sub>max</sub>) of loratadine were double while the pharmacokinetic profile of the active metabolite was not significantly changed from that in patients with normal liver function. The elimination half-lives for loratadine and its active metabolite were 24 hours and 37 hours, respectively, and increased with increasing severity of liver disease. Dosing adjustment is therefore recommended in patients with severe liver disease. Patients with severe liver impairment should be administered a lower initial dose because they may have reduced clearance of loratadine. (See *DOSAGE AND ADMINISTRATION, Dosing Considerations*).

**Renal**

In patients with chronic renal impairment, both the AUC and peak plasma levels (C<sub>max</sub>) increased for loratadine and its metabolite as compared to the AUCs and peak plasma levels (C<sub>max</sub>) of patients with normal renal function. The mean elimination half-lives of loratadine and its metabolite were not significantly different from that observed in normal subjects. Haemodialysis does not have an effect on the pharmacokinetics of loratadine or its active metabolite in subjects with chronic renal impairment. Therefore, no dosage adjustments are required in patients with renal insufficiency. In the case of severe renal insufficiency, loratadine should be used with caution.

## **Special Populations**

**Pregnant Women:** The safe use of loratadine during pregnancy has not been established and is therefore not recommended.

**Nursing Women:** The safe use of loratadine during lactation has not been established and is therefore not recommended. (See DETAILED PHARMACOLOGY / Human Pharmacology for information on secretion into breast milk).

**Pediatrics (2-12 years of age):** The safety and efficacy of loratadine in children younger than 2 years of age have not been established. Long-term safety and efficacy of loratadine in children between the ages of 2 and 12 has not been demonstrated. Therefore, it is desirable that loratadine not be administered to children between the ages of 2 and 12 for longer than 14 days, unless recommended by a physician.

## ADVERSE REACTIONS

### Adverse Drug Reaction Overview

Adverse experiences reported with CLARITIN ALLERGY in adults during clinical trials were mild and consisted of fatigue, headache, dry mouth, sedation, gastrointestinal disorders such as nausea, gastritis, and also allergic symptoms like rash.

Nervousness and hyperkinesia were among the reported adverse experiences in pediatric patients. Gastrointestinal adverse reactions reported during pediatric trials may have been slightly more frequent in the younger patients (less than or equal to 30 kg).

During the marketing of loratadine, alopecia, anaphylaxis, abnormal hepatic function, dizziness, palpitations and tachycardia have been reported rarely.

### Clinical Trial Adverse Drug Reactions

*Because clinical trials are conducted under very specific conditions the adverse reaction rates observed in the clinical trials may not reflect the rates observed in practice and should not be compared to the rates in the clinical trials of another drug. Adverse drug reaction information from clinical trials is useful for identifying drug-related adverse events and for approximating rates.*

### CLARITIN ALLERGY Tablets

---

**Table 1: CLARITIN ALLERGY Tablets, 10 mg Once Daily vs. Placebo and Comparatives**

Number (%) of Adult Patients Reporting Frequently Occurring (>2% of loratadine treated patients) Adverse Experiences in Adults Possibly or Probably Related to Treatment: Patients Treated with CLARITIN® ALLERGY, Placebo and Comparatives

	Loratadine 10mg QD	Placebo	Clemastine 1mg BID	Terfenadine 60mg BID	Astemizole 10mg OD
	n = 1241	n = 1652	n = 687	n = 506	n = 342
Adverse Experience					
Fatigue	54(4)	62(4)	62(9)	17(3)	22(6)
Headache	97(8)	104(6)	32(5)	40(8)	26(7)
Dry Mouth	49(4)	32(2)	22(3)	15(3)	2(1)
Dryness in Nose	9(<1)	-	6(<1)	3(<1)	-
Sedation*	99(8)	101(6)	151(22)	41(8)	50(15)

---

\*Reported as somnolence, sleepiness, drowsiness, lethargy, slow or “drugged feeling”

---

Adverse experiences reported with CLARITIN ALLERGY conventional tablets in adults during the clinical trials were mild and consisted of fatigue, headache, dry mouth, sedation, gastrointestinal disorders such as nausea, gastritis, and also allergic symptoms like rash. The incidence of sedation was similar to that of the comparative agents terfenadine, astemizole and placebo, but statistically different ( $p < 0.01$ ) from clemastine.

## CLARITIN Rapid Dissolve

**Table 2: CLARITIN Rapid Dissolve (Loratadine Orally Disintegrating Tablet USP, 10 mg) vs. CLARITIN ALLERGY (Loratadine Tablet USP, 10 mg) vs. Placebo**

Number (%) of Patients Reporting Frequently Occurring ( $\geq 2\%$  of Loratadine Orally Disintegrating Tablet-treated patients) Adverse Experiences Possibly or Probably Related to Treatment in Seasonal Allergic Rhinitis Studies.

	Number (%) of Patients		
	Loratadine Orally Disintegrating Tablet USP, 10 mg n=495	Loratadine Tablet USP 10 mg n=328	Placebo n=497
<u>Adverse Experience</u>			
Dry Mouth	8(2)	8(2)	5(1)
Fatigue	13(3)	12(4)	16(3)
Headache	40(8)	23(7)	55(11)
Somnolence	22(4)	13(4)	13(3)

CLARITIN Rapid Dissolve were well tolerated and did not cause local irritation or taste abnormalities. The most frequently reported adverse experience was headache. Overall, the incidence of adverse reactions was comparable to that of CLARITIN ALLERGY conventional tablets and to that of placebo.

## CLARITIN KIDS - Pediatrics

**Table 3: CLARITIN KIDS, Loratadine Oral Solution USP, 1 mg/mL, 5-10 mg Once Daily**

Number (%) of Patients Reporting Frequently Occurring ( $\geq 2\%$  of loratadine-treated patients) Treatment-Related Adverse Experiences: Placebo-Controlled Clinical Trials in Pediatric Studies in Seasonal Allergic Rhinitis and Allergic Skin Disorders Studies

	<u>Loratadine</u>		<u>Chlorpheniramine</u>		<u>Placebo</u>
	5mg	10mg	2mg	4mg	
	n= 46	n=119	n=48	n=122	n=168
<u>Adverse Experiences</u>					
Nervousness	2(4)	5(4)	1(2)	2(2)	2(1)
Hyperkinesia	0(0)	4(3)	0(0)	1(1)	1(0.6)
Sedation	2(4)	6(5)	4(8)	13(11)	9(5)
Headache	3(6)	4(3)	4(8)	5(4)	13(8)

**Table 4: Number of Patients Reporting GI Adverse Experiences in Placebo-Controlled Clinical Trials Possibly or Probably Related to Study Medication, Grouped According to Treatment, Dose, Weight, in Pediatric Studies**

	5mg Dose Wt $\leq$ 30kg n=46	10mg Dose Wt >30kg n=119	Placebo Wt >30kg n=168
<u>Adverse Event</u>			
Diarrhea	1	0	0
Nausea	2	2	5
Dyspepsia	2	3	3
Vomiting	2	0	0
Abdominal Pain	0	2	0
Total	7(15%)	7(5.9%)	8(4.8%)



Adverse experiences reported in pediatric patients are shown in Table 3 and 4. Nervousness and hyperkinesia were among the reported adverse experiences. One case of hyperkinesia was graded as severe and was judged by the physician to be possibly related to loratadine treatment. Gastrointestinal adverse reactions reported during pediatric trials may have been slightly more frequent in the younger patients (less than or equal to 30 kg), but in older children (greater than 30 kg) are similar to placebo.

#### **Less Common Clinical Trial Adverse Drug Reactions (<1%)**

In addition to those listed in Table 1, the following were reported less frequently (less than 1%): appetite increased, coughing, dizziness and palpitations.

#### **Abnormal Hematologic and Clinical Chemistry Findings**

Not applicable

#### **Post-Market Adverse Drug Reactions**

During the marketing of loratadine, in addition to the adverse events reported during clinical trials, alopecia, anaphylaxis (including angioedema), abnormal hepatic function, dizziness, palpitations and tachycardia have been reported rarely. Convulsions and seizures have been reported very rarely.

### **DRUG INTERACTIONS**

#### **Serious Drug Interactions**

None to report

#### **Overview**

When administered concomitantly with alcohol, loratadine has no potentiating effects as measured by psychomotor performance studies (see DETAILED PHARMACOLOGY / Human Pharmacology).

#### **Drug-Drug Interactions**

Increases in plasma concentrations of loratadine have been reported after concomitant use with ketoconazole, erythromycin or cimetidine in controlled clinical trials, but without clinically significant changes (including electrocardiographic). Other drugs known to inhibit hepatic metabolism should be coadministered with caution until definitive interaction studies can be completed.

#### **Drug-Food Interactions**

See ACTION AND CLINICAL PHARMACOLOGY / Pharmacokinetics / Absorption.

### **Drug-Herb Interactions**

*Interactions with herbs have not been established.*

### **Drug-Laboratory Interactions**

Loratadine should be discontinued approximately 48 hours prior to skin testing procedures since antihistamines may prevent or diminish otherwise positive reactions to dermal reactivity indicators.

### **Drug-Lifestyle Interactions**

*Interactions with lifestyle have not been established.*

## **DOSAGE AND ADMINISTRATION**

### **Dosing Considerations**

Patients with severe liver impairment: an initial dose of 5mg (5 mL) once daily or 10mg (10 mL) every other day is recommended for adults and children weighing more than 30kg, and for children weighing 30 kg or less, 5 ml (5 mg) is recommended every other day.

No dosage adjustments are required in patients with renal insufficiency (See *WARNINGS AND PRECAUTIONS, Renal*).

### **Recommended Dose and Dosage Adjustment**

#### **CLARITIN ALLERGY**

Adults and Children 12 years of age and over: One CLARITIN ALLERGY tablet, 10 mg, once daily.

#### **CLARITIN Rapid Dissolve (10 mg)**

Adults and Children 12 years of age and over: One CLARITIN Rapid Dissolve placed in the mouth once daily.

Can be taken without water

Should be taken on an empty stomach.

#### **CLARITIN Rapid Dissolve (5 mg)**

Adults and Children 12 years of age and over: Two CLARITIN Rapid Dissolve, 5 mg, placed in the mouth once daily.

Can be taken without water

Should be taken on an empty stomach.

## CLARITIN KIDS

Adults, children 10 years of age and over (body weight greater than 30 kg): 10mL (two teaspoonfuls) of CLARITIN KIDS once daily.

Children 2 through 9 years of age (body weight less than or equal to 30 kg): 5mL (one teaspoonful) of CLARITIN KIDS once daily.

CLARITIN KIDS should not be administered to children between 2 and 12 years of age for longer than 14 days, unless recommended by a physician

## **OVERDOSAGE**

Somnolence, tachycardia and headache have been reported with overdoses of the conventional loratadine formulation. A single acute ingestion of 160 mg produced no adverse effects.

In the event of overdosage, treatment, which should be started immediately, is symptomatic and supportive.

Consider standard measures to remove any unabsorbed drug in the stomach, such as adsorption by activated charcoal administered as a slurry with water. The administration of gastric lavage should be considered. Physiologic saline solution is the lavage solution of choice, particularly in children. In adults, tap water can be used; however, as much as possible of the amount administered should be removed before the next instillation. Saline cathartics draw water into the bowel by osmosis, and therefore, may be valuable for their action in rapid dilution of bowel content.

Loratadine is not cleared by hemodialysis to any appreciable extent. It is not known if loratadine is removed by peritoneal dialysis.

For management of a suspected drug overdose, contact your regional Poison Control Centre.

## **ACTION AND CLINICAL PHARMACOLOGY**

### **Mechanism of Action**

Loratadine is a long-acting tricyclic antihistamine with selective peripheral H<sub>1</sub> receptor antagonistic activity. It exhibits a dose-related inhibition of the histamine-induced skin wheal and flare response in humans which is rapid in onset, is apparent at two hours and persists throughout the 24 hour observation period. Single oral doses up to 160 mg and repeat daily doses of 40 mg for up to 13 weeks were well tolerated with the incidence of sedation and dry mouth being no different from placebo.

Loratadine is well absorbed by all species studied and is almost totally metabolized (See DETAILED PHARMACOLOGY / Pharmacokinetics and Metabolism).

## **Pharmacodynamics**

Loratadine has a lower affinity for central receptors than for peripheral receptors, and it does not readily penetrate into the brain tissue. (See DETAILED PHARMACOLOGY / Animal Pharmacology).

*Wheal and Flare:* The antihistaminic activity and dose-response profile of loratadine were evaluated in three clinical pharmacologic studies using a histamine-induced skin wheal suppression model in healthy male volunteers. All doses were significantly more effective than placebo in suppressing the formation of histamine-induced skin wheals (See DETAILED PHARMACOLOGY / Human Pharmacology).

*Alcohol:* The ability of healthy male volunteers to concentrate was not impaired by loratadine in combination with alcohol. Loratadine did not potentiate the effects of alcohol on driving performance (See DETAILED PHARMACOLOGY / Human Pharmacology).

## **Pharmacokinetics**

**Absorption:** <sup>14</sup>C-loratadine is rapidly absorbed reaching C<sub>max</sub> values (4.7, 10.8 and 26.1 ng/mL) at 1.5, 1.0 and 1.3 hours for the 10, 20 and 40 mg dose, respectively. The loratadine elimination half-life (T-1/2) ranged from 7.8-11.0 hours. Descarboethoxyloratadine, the major active metabolite, reached C<sub>max</sub> values (4.0, 9.9 and 16.0 ng/mL) at 3.7, 1.5 and 2.0 hours after a dose of 10, 20 and 40 mg, respectively. Its T-1/2 ranged from 17 to 24 hours. The accumulation indices, calculated by C<sub>max</sub> and the area under the curve (AUC) ratios did not change after the 5th day, indicating little or no accumulation of either loratadine or its metabolite after a multiple once per day dosage regimen. The T-1/2 at steady state levels for loratadine and its metabolite were 14.4 and 18.7 hours, respectively, similar to that reported following a single oral dose.

The confidence intervals for C<sub>max</sub> and AUC(I)<sup>++</sup> are within the 80-125% range indicating that the CLARITIN Rapid Dissolve were bioequivalent with respect to the active metabolite Descarboethoxyloratadine.

<sup>++</sup>AUC(I) = The area under the plasma concentration-time curve from time zero extrapolated to infinity.

**Table 5: Mean (n=18) pharmacokinetic parameters for loratadine and descarboethoxyloratadine (CLARITIN Rapid Dissolve (Loratadine Orally Disintegrating Tablet USP, 10 mg) vs. CLARITIN ALLERGY (Loratadine Tablets, USP, 10 mg) (Conventional))**

Parameter	Mean (%CV)			
	CLARITIN Rapid Dissolve (Loratadine Orally Disintegrating Tablet USP, 10 mg)		CLARITIN ALLERGY (Loratadine Tablets, USP, 10 mg) (Conventional))	
	Loratadine	DCL*	Loratadine	DCL*
C <sub>max</sub> (ng/ml)	2.56 (83)	3.72 (53)	2.11 (90)	3.66 (45)
T <sub>max</sub> (hr)	1.14 (72)	1.97 (129)	1.00 (34)	1.97 (98)
AUC (I) (ng.hr/ml)	6.14 (100)	49.1 (50)	4.64 (106)	48.4 (44)

\* DCL: Descarboethoxyloratadine

**Table 6: Mean (n=18) pharmacokinetic parameters for loratadine and descarboethoxyloratadine (CLARITIN Rapid Dissolve (Loratadine Orally Disintegrating Tablet USP, 10 mg) vs. CLARITIN KIDS (Loratadine Oral Solution USP, 1mg/mL))**

Parameter	Mean (%CV)			
	CLARITIN Rapid Dissolve (Loratadine Orally Disintegrating Tablet USP, 10 mg)		CLARITIN KIDS (Loratadine Oral Solution USP, 1 mg/mL) (1mg/ ml)	
	Loratadine	DCL*	Loratadine	DCL*
C <sub>max</sub> (ng/ml)	2.65 (193)	3.46 (44)	3.62 (150)	3.65 (35)
T <sub>max</sub> (hr)	1.00 (30)	1.42 (39)	0.86 (44)	0.94 (17)
AUC (I) (ng.hr/ml)	6.33 (201)	40.8 (29)	10.1 (147)	38.8 (27)

\* DCL: Descarboethoxyloratadine

After administration of a single 10 mg dose of loratadine as either the Loratadine Orally Disintegrating Tablet, a conventional tablet, or the oral solution formulation (1mg/mL), peak plasma concentrations of loratadine and its metabolite were achieved at approximately 1 and 2 hours, respectively; mean elimination half-life of the active metabolite ranged between 19 and 21 hours.

Since loratadine is extensively metabolized there was a high inter-subject variability in the plasma drug concentrations. Hence, the percent CV of the pharmacokinetic parameters was large.

**Table 7: Loratadine, administered as either CLARITIN Rapid Dissolve (Loratadine Orally Disintegrating Tablet USP, 10 mg) or CLARITIN ALLERGY (Loratadine Tablet, USP, 10 mg) (Conventional Tablet) to healthy subjects (n=24) once daily for 10 days**

Parameter	Mean (%CV)					
	Loratadine			DCL*		
	Day 5	Day 7	Day 10	Day 5	Day 7	Day 10
CLARITIN Rapid Dissolve (Loratadine Orally Disintegrating Tablet USP, 10 mg)						
C <sub>max</sub> (ng/ml)	3.79 (83)	3.35 (73)	4.04 (80)	4.65 (58)	4.69 (68)	4.69 (73)
AUC(r) <sup>a</sup> (ng.hr/ml)	12.0 (76)	11.2 (75)	12.2 (71)	71.9 (88)	82.1 (93)	72.9 (103)
CLARITIN ALLERGY (Loratadine Tablet, USP, 10 mg) (Conventional tablet)						
C <sub>max</sub> (ng/ml)	3.12 (77)	3.43 (64)	3.81 (67)	4.56 (63)	5.12 (68)	4.60 (81)
AUC(r) <sup>a</sup> (ng.hr/ml)	10.6 (67)	11.6 (61)	11.3 (64)	75.4 (94)	85.0 (99)	73.5 (114)

\* DCL: Descarboethoxyloratadine

a: Area under the plasma concentration-time curve from time 0 to 24 hr (for day 10, using concentration time points matching those on day 5 and 7)

Following administration of 10 mg of loratadine once daily for 10 days as either an Orally Disintegrating Tablet or a conventional tablet, plasma concentrations of loratadine and its active metabolite were at steady state by day 5 with both formulations. Mean peak plasma concentrations (T<sub>max</sub>) of loratadine and its metabolite in both formulations were attained at 1.3 hours; peak to trough fluctuations observed for the Orally Disintegrating Tablet and the conventional Tablet were similar with respect to loratadine and its metabolite. Mean elimination half-life of the active metabolite was 20 hours for both formulations.

### *Effects of food*

In a single-dose, two-way crossover study with CLARITIN Rapid Dissolve, in 24 subjects, food increased the AUC of loratadine and descarboethoxyloratadine by 90% and 6% respectively. Food decreased the mean C<sub>max</sub> of loratadine and descarboethoxyloratadine by 9% and 15% respectively. The time to peak plasma concentration (T<sub>max</sub>) of loratadine and descarboethoxyloratadine were delayed by approximately 2.4 and 3.7 hours, respectively, when food was consumed prior to administration of CLARITIN Rapid Dissolve.

In a single-dose, randomized, open-label, two-way crossover study conducted in 24 healthy volunteers with 10 mg CLARITIN Rapid Dissolve administered without water and before a standard breakfast versus the 10 mg conventional tablet formulation administered with water under fasting conditions, the mean AUC(tf)<sup>+</sup> and C<sub>max</sub> values were increased by 84% and 30%, respectively, when CLARITIN Rapid Dissolve was administered without water compared to the administration of conventional tablet with water, demonstrating that bioavailability was not attenuated when CLARITIN Rapid Dissolve was dissolved on the tongue and subsequently swallowed without concomitant consumption of a liquid. The bioavailability of

descarboethoxyloratadine was not different when administered without water.

<sup>†</sup>AUC(tf) = The area under the plasma concentration-time curve from time zero to the final measurable sample.

In a single-dose, randomized, open-label, two-way crossover study conducted in 24 healthy volunteers under fasting conditions, with 1 x 10 mg CLARITIN Rapid Dissolve administered with water versus 1 x 10 mg CLARITIN Rapid Dissolve administered without water, the mean AUC and C<sub>max</sub> values were increased by 48% and 27%, respectively, when administered without water compared to administration with water, demonstrating that bioavailability was not attenuated when CLARITIN Rapid Dissolve was dissolved on the tongue and subsequently swallowed without concomitant consumption of a liquid. The bioavailability of descarboethoxyloratadine when administered under fasting conditions either without water or with water were bioequivalent.

**Excretion:** Approximately 82% of the <sup>14</sup>C-loratadine dose is excreted in the urine (40%) and faeces (42%) over a 10-day period. Approximately 27% of the dose, eliminated during the first 24 hours is present only in trace quantities in the urine. The active metabolite, descarboethoxyloratadine, represents only 0.4 to 0.6% of the administered loratadine dose.

### **Special Populations and Conditions**

**Geriatrics:** The pharmacokinetic parameters of loratadine and its major metabolite are comparable in healthy adult volunteers and healthy geriatric volunteers. (See DETAILED PHARMACOLOGY / Pharmacokinetics and Metabolism)

## **STORAGE AND STABILITY**

### **Temperature and Moisture**

**Tablets:** Store between 15° and 30°C. Protect from exposure to excessive moisture.

**Oral Solution:** Store between 15° and 30°C

**Orally Disintegrating Tablets, 10 mg and 5 mg:** Store between 20° and 25°C. Use immediately upon opening tablet blister.

### **Others**

Keep in a safe place out of reach of children.

## SPECIAL HANDLING INSTRUCTIONS

none

## DOSAGE FORMS, COMPOSITION AND PACKAGING

### CLARITIN ALLERGY:

Dosage Form: 10 mg loratadine (as base) tablets for oral use.

Description: white, oval, shallow tablet with deep score.

Composition: Each CLARITIN ALLERGY tablet contains 10 mg loratadine (as base).  
Non-medicinal ingredients: corn starch, lactose, and magnesium stearate.

Packaging: blister package available in 2, 10, 20, and 30 tablets  
bottle available in 50, 85 tablets.

### CLARITIN Rapid Dissolve (10 mg)

Dosage Form: 10 mg loratadine (as base) tablets for oral use.

Description: White round tablet-shaped units with a debossed “C10”.

Composition: Each CLARITIN Rapid Dissolve contains 10 mg micronized loratadine (as base).

Non-medicinal ingredients: gelatin, mannitol, citric acid, and mint flavour.

Packaging: blister package available in 10, 30 and 50 tablets.

### CLARITIN Rapid Dissolve (5 mg)

Dosage Form: 5 mg loratadine (as base) tablets for oral use.

Description: White round tablet-shaped units with a debossed “C5”.

Composition: Each CLARITIN Rapid Dissolve tablet contains 5 mg micronized loratadine (as base).

Non-medicinal ingredients: gelatin, mannitol, citric acid, and mint flavour.

Packaging: blister package available in 5 and 10 tablets.



## **CLARITIN KIDS:**

Dosage Form: 1 mg/mL loratadine oral solution (syrup) for oral use.

Description:

Grape flavour - clear, colorless to light yellow solution; free from foreign matter.

Composition: Each mL of CLARITIN KIDS contains 1 mg loratadine.

Non-medicinal ingredients:

Grape flavour - artificial grape flavour, edetate disodium, glycerin, maltitol, monobasic sodium phosphate dihydrate, phosphoric acid, propylene glycol, purified water, sodium benzoate, sorbitol, sucralose.

Packaging:

Grape - 120 mL and 60 mL of a white opaque polyethylene terephthalate (PETE) plastic bottle sealed with a polypropylene, 2-piece push and turn / tamper evident cap including a plastic laminated liner.

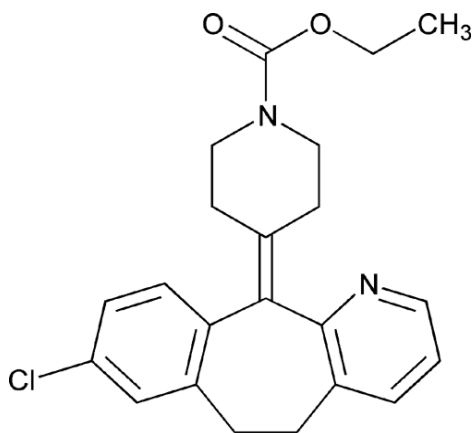
Each bottle is supplied with a dosing cup which is a clear polypropylene, round cup, printed and calibrated to measure 2.5 mL, 5 mL or 10 mL of product.

## PART II: SCIENTIFIC INFORMATION

### PHARMACEUTICAL INFORMATION

#### Drug Substance

Proper name:	loratadine (INN, USAN)
Chemical name:	1-Piperidinecarboxylic acid, 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2- <i>b</i> ]pyridin-11-ylidene)-,ethyl ester.
Molecular formula:	C <sub>22</sub> H <sub>23</sub> ClN <sub>2</sub> O <sub>2</sub>
Molecular mass:	382.88
Structural formula:	



Physicochemical properties: white to off-white powder, which melts between 132° and 137°C.

## **CLINICAL TRIALS**

### **Study demographics and trial design**

The safety and efficacy of CLARITIN Rapid Dissolve (Loratadine Orally Disintegrating Tablet USP, 10 mg) and the conventional CLARITIN ALLERGY tablets (Loratadine Tablets USP, 10 mg) vs. placebo were evaluated in two randomized, multicenter, double-blind, placebo-controlled, parallel group studies performed in patients with seasonal allergic rhinitis.

### **Study results**

CLARITIN Rapid Dissolve administered as 10 mg once daily for 15 days, was significantly more effective than placebo in reducing physician-evaluated and patient daily-assessed total combined, total nasal, and total non-nasal symptoms in patients with seasonal allergic rhinitis. CLARITIN Rapid Dissolve had a clinical effect comparable to or greater than the conventional CLARITIN tablet. Both of the drugs were safe and well tolerated in this patient population. From clinical studies conducted on healthy individuals with allergic rhinitis, no clinical consequences are anticipated in this population, whether or not CLARITIN Rapid Dissolve are administered with or without food.

### **Comparative Bioavailability Study**

A randomized, open-label, single-dose, two-way crossover, bioequivalence study of two formulations of loratadine (2 x 5 mg Claritin RediTabs Tablets (U.S.) and 1 x 10 mg Claritin RediTabs Tablet (U.S.) administered under fasting conditions with 240 mL of water was conducted. Forty-eight (48) healthy male and female adult subjects between the ages of 18 and 45 were enrolled in the study.

Subjects were randomly assigned to one of two treatment sequences during two study periods (2 x 5 mg Claritin RediTabs Tablets (U.S.) → 1 x 10 mg Claritin RediTabs Tablet (U.S.) or 1 x 10 mg Claritin RediTabs (U.S.) Tablet → 2 x 5 mg RediTabs Tablets (U.S.)). A 14-day washout period separated the two doses of study medication. Subjects were confined to the study site on the day prior to study drug administration and for 120 hours following study drug administration for collection of pharmacokinetic blood samples and safety monitoring.

## SUMMARY TABLES OF THE COMPARATIVE BIOAVAILABILITY DATA

Loratadine 10 mg dose as 2 x 5 mg or 1 x 10 mg From measured data <b>uncorrected for potency</b> Geometric Mean Arithmetic Mean (CV%)				
Parameter	Test 2 x 5 mg Claritin RediTabs Tablets (U.S.) (n=45)	Reference 1 x 10 mg Claritin RediTabs Tablet (U.S.) (n=45)	% Ratio of Geometric Means	90% Confidence Interval
AUC <sub>T</sub> (ng·hr/mL)	7.26 10.68 (90.53)	7.67 10.67 (88.33)	94.69	87.34-102.66
AUC <sub>I</sub> (ng·hr/mL)	7.66 <sup>c</sup> 11.33 (90.43) <sup>c</sup>	8.12 11.27 (87.51)	95.88	88.37-104.03
C <sub>max</sub> (ng/mL)	2.60 3.67 (81.01)	2.70 3.67 (78.90)	96.61	86.94-107.35
T <sub>max</sub> <sup>a</sup> (hr)	1.50 (1.00-4.50)	1.50 (0.50-2.50)		
T <sub>½</sub> <sup>b</sup> (hr)	14.09 (87.60) <sup>c</sup>	13.55 (86.72)		

<sup>a</sup>Expressed as the median (range) only

<sup>b</sup>Expressed as the arithmetic mean (CV%) only

<sup>c</sup>N=44

Desloratadine 10 mg dose as 2 x 5 mg or 1 x 10 mg From measured data <b>uncorrected for potency</b> Geometric Mean Arithmetic Mean (CV%)				
Parameter	Test 2 x 5 mg Claritin RediTabs Tablets (U.S.) (n=42)	Reference 1 x 10 mg Claritin RediTabs Tablet (U.S.) (n=42)	% Ratio of Geometric Means	90% Confidence Interval
AUC <sub>T</sub> (ng.hr/mL)	40.72 43.28 (36.81)	41.22 43.41 (32.51)	98.87	93.77-104.24
AUC <sub>I</sub> (ng.hr/mL)	42.10 44.67 (36.45)	42.58 44.78 (32.18)	98.95	94.01-104.14
C <sub>max</sub> (ng/mL)	3.04 3.15 (27.24)	3.06 3.21 (36.51)	99.69	94.66-104.99
T <sub>max</sub> <sup>a</sup> (hr)	1.50 (1.00-5.50)	1.50 (1.00-5.50)		
T <sub>1/2</sub> <sup>b</sup> (hr)	21.84 (23.77)	21.97 (22.36)		

<sup>a</sup>Expressed as the median (range) only

<sup>b</sup>Expressed as the arithmetic mean (CV%) only

## DETAILED PHARMACOLOGY

### Animal Pharmacology:

Loratadine is an orally effective antihistamine in both mice and guinea pigs. The oral PD<sub>50</sub>\* value for preventing histamine-induced lethality in guinea pigs is 0.19 mg/kg for loratadine compared to 0.009 mg/kg for azatadine (which of the marketed antihistamines is most closely related in structure to loratadine), and 0.15 mg/kg for chlorpheniramine. In terms of duration of antihistamine action, loratadine at twice its antihistamine PD<sub>50</sub> (0.5 mg/kg) is longer acting (duration: 18-24 hours) than an equi-effective dose of azatadine (duration 8-12 hours). For preventing histamine-induced paw edema in mice, loratadine has an oral PD<sub>50</sub> value of 1.3 mg/kg compared to 0.068 mg/kg for azatadine and 9.6 mg/kg for chlorpheniramine. On the basis of these two tests of antihistamine activity, loratadine is at least equipotent to chlorpheniramine but less potent than azatadine. Loratadine also exhibited antihistamine activity when tested in vitro against histamine-

induced contraction of the guinea pig ileum. In this test, loratadine ( $pA_2$ : 7.3) was less potent than azatadine ( $pA_2$ : 9.1) or chlorpheniramine ( $pA_2$ : 9.6).

\* Dose that provides protection in 50% of animals tested.

$\leftrightarrow pA_2$  = the negative logarithm of the concentration of the antagonist

Because there is no single laboratory test which itself can be considered predictive of the sedating effects of antihistamines, a multidimensional approach was used to assess the CNS activity of loratadine with several standard antihistamines.

In contrast to the standards, loratadine had only weak or no CNS activity in mice, rats, dogs and monkeys after oral administration. These observations included: a lack of effect vs. acetic acid writhing and electroconvulsive shock (ECS) seizures in mice at doses up to 320 mg/kg, no overt behavioral, neurologic or autonomic effects in mice or rats after doses of 10-300 mg/kg, in dogs at doses of 15-30 mg/kg and in monkeys at doses of 30-60 mg/kg.

Ex vivo studies indicate that loratadine does not readily penetrate into the CNS. Loratadine exhibited a greater affinity for peripheral  $H_1$ -receptors ( $K_i$ : 35 nM) than for central  $H_1$ -receptors ( $K_i$  - 118 nM) as determined by  $^3H$ -mepyramine binding inhibition at membrane receptor sites from the cerebral cortex and lungs of guinea pigs. Loratadine also had no effect on brain  $^3H$ -mepyramine binding in mice following an oral dose of 2.6 mg/kg (twice its antihistamine  $ED_{50}$  in this species). In studies determining the binding inhibition of  $^3H$ -WB4101, an  $\alpha$ -1 receptor ligand, loratadine was the weakest inhibitor ( $IC_{50}$  value ranging from 13 to 64  $\mu M$ ) of the several standard antihistamines studied.

□  $K_i$  = the dissociation constant of an enzyme inhibitor

The compound has a lower affinity for central receptors than for peripheral receptors, and it does not readily penetrate into the brain tissue.

In terms of other pharmacologic actions studied, loratadine does not have significant  $H_2$ -receptor activity in vitro at concentrations up to  $5 \times 10^{-6}$  mmol, and does not seem to inhibit norepinephrine uptake as evidenced by its lack of effect on tetrabenazine-induced ptosis in mice at oral doses of 160 or 320 mg/kg. Loratadine also did not exhibit in vivo anticholinergic activity as measured by the lack of mydriasis in mice or rats at oral doses up to 200 mg/kg, in dogs at oral doses up to 60 mg/kg and in monkeys at doses up to 90 mg/kg. Moreover, loratadine did not antagonize physostigmine-induced lethality, which is another measure of anticholinergic activity, at oral doses up to 320 mg/kg in mice.

Loratadine had no effect on blood pressure or electrocardiogram in conscious dogs after oral doses of 1, 2.5 or 10 mg/kg. At 10 mg/kg, loratadine significantly increased heart rate. Loratadine did not significantly increase heart rate in monkeys at 2.5 mg/kg, which is about 12 times the maximum projected daily human dose. Moreover, loratadine did not increase the rate of contraction of isolated guinea pig atria which suggests that it does not directly affect pacemaker activity.

Drug interaction studies in mice showed that at 80 mg/kg of loratadine (approximately 50 times its  $ED_{50}$  for blocking histamine-induced paw edema), loratadine potentiated the anticonvulsant effects of diazepam.

At a high dose of 320 mg/kg, loratadine potentiated the ability of high doses of ethanol and hexobarbital to induce loss of righting reflexes. No interaction was seen with propranolol, alpha methyl dopa, cimetidine, pseudoephedrine or d-amphetamine. A nearly identical interaction profile was seen with terfenadine.

Pharmacokinetics and Metabolism: The absorption, tissue distribution, metabolism and excretion (ADME) of  $^3\text{H}$ - and/or  $^{14}\text{C}$ -loratadine were evaluated in rats, rabbits and cynomolgus monkeys after oral and intravenous administration. Biliary excretion, enterohepatic circulation and placental transfer were evaluated in rats and enzyme induction was determined in hepatic microsomes of rats. In man, the pharmacokinetic and metabolic disposition of  $^3\text{H}$ - and  $^{14}\text{C}$ -loratadine was investigated in healthy normal volunteers, following single and multiple oral doses.

Loratadine is well absorbed by all species studied and is almost totally metabolized. First pass metabolism is extensive. The time to maximum plasma concentration was shortest in rats (0.5 hours) and longest in monkeys (3.3 hours) while normal volunteers exhibited a  $T_{\text{max}}$  of 1.1 hours.

The plasma half-life of loratadine varies between species; the shortest half-life (14.0 hours) occurs in the rat and the longest in man. The half-life of the major metabolite, descarboethoxyloratadine, could not be determined in animal species. The pharmacokinetic parameters of loratadine and its major metabolite are comparable in healthy adult volunteers and healthy geriatric volunteers. Steady-state levels of loratadine are reached after the fifth 40 mg daily dose.

In rats, given  $^{14}\text{C}$ -loratadine, loratadine and its metabolites are widely distributed throughout the tissues examined. Concentrations of radioactivity are highest in lungs, liver, kidneys, adrenals, pituitary and spleen. Lowest concentrations occur in brain. Radioactivity in all tissues decreases with time and no drug accumulation occurs in tissues with multiple dosing.

In animals, loratadine and its metabolites are excreted in urine (largely during the first 24 hours) and feces, after drug administration. In animals, a larger portion of the loratadine dose is excreted into the feces than into urine. In man, approximately 40% of the dose is excreted in the urine and 42% in feces over a 10-day period. Approximately 27% of the dose is eliminated in the urine during the first 24 hours.

In rats, loratadine and its metabolites undergo enterohepatic circulation. The radioactivity is eliminated in the gastrointestinal tract via the biliary route (major) and direct passage through the gastrointestinal mucosa (minor).

In pregnant rats,  $^{14}\text{C}$ -loratadine crosses the placental barrier both at the end of embryonic formation (day 14 of pregnancy) and at near-term (day 20 of pregnancy). At 20 days, the tissue distribution pattern in fetuses is similar to that in dams; however, the concentrations of radioactivity in fetal tissues are considerably lower than the concentrations in corresponding maternal tissues. The radioactivity disappears with time from both fetuses and dams and does not accumulate in fetal tissues.

The metabolic profiles of loratadine in fetal and maternal plasma are similar.

Enzyme induction studies with high doses demonstrate that loratadine is only a weak inducer of hepatic drug metabolizing enzyme systems in rats. Results from plasma protein binding studies revealed that loratadine is highly bound (97% to 99% in man, 98% to 99% in rat and 96% to 99% in monkey) and its active metabolite moderately bound (73% to 76% in man, 70% to 71% in rat and monkey) to human and animal plasma proteins.

### **Human Pharmacology:**

Suppression of Histamine-Induced Skin Wheals: The antihistaminic activity and dose-response profile of loratadine were evaluated in three clinical pharmacologic studies using a histamine-induced skin wheal suppression model in healthy male volunteers.

Two randomized, single-blind studies evaluated the wheal suppression effects of loratadine at single oral doses ranging from 10 to 160 mg. At these doses, loratadine demonstrated a rapid onset of action; wheal suppression was observed within two hours of treatment. All doses were significantly more effective than placebo in suppressing the formation of histamine-induced skin wheals ( $p < 0.05$ ); the suppression of wheal formation by loratadine was dose related.

In a third randomized, double-blind study the suppressant effects of loratadine on histamine-induced wheal formation were measured at doses ranging from 10 to 40 mg administered orally twice daily (b.i.d.) for 28 days. Wheal suppression was observed at two hours after the first dose, and by four hours, each of the four active treatments (loratadine 10mg, 20mg, & 40 mg and chlorpheniramine 12 mg) caused a significantly greater suppression of the wheal formation than placebo ( $p < 0.05$ ); this effect remained consistent over the entire 28 day study period.

In a comparative study of loratadine oral solution, terfenadine suspension and placebo in reducing histamine-induced wheals and flares, single doses of 10 mg loratadine oral solution and 60 mg terfenadine suspension were comparable in reducing histamine-induced wheals and flares and both were significantly more effective than placebo.

### **Loratadine and Alcohol:**

Special tests were designed to assess the effects of loratadine either alone or in combination with alcohol on driving and psychomotor performance. In a double-blind study, the ability of healthy male volunteers to concentrate, as measured by multiple choice reactions and visuomotor coordination tests was not impaired by either 40 mg loratadine alone or in combination with 0.75 g/kg of alcohol. In another double-blind study on driving performance, 10 or 20 mg loratadine and placebo were without effect while 10 mg triprolidine significantly impaired performance. Furthermore, after ingestion of alcohol in quantities of 1.07 g/kg of lean body weight, a second test demonstrated that loratadine did not potentiate the effects of alcohol on driving performance.

### **Loratadine and Nursing Mothers**

Loratadine and its active metabolite are eliminated in the breast milk of lactating women with milk concentrations being similar to plasma concentrations. Through 48 hours after dosing, only



0.029% of the loratadine dose is eliminated in the milk as unchanged loratadine and its active metabolite, descarboethoxyloratadine (DCL).

## MICROBIOLOGY

Not applicable

## TOXICOLOGY

### Acute Toxicity

The oral LD<sub>50</sub>s were estimated to be greater than 5000 mg/kg in both species. In mice, intraperitoneal LD<sub>50</sub> values were calculated to be 1601 and 1458 mg/kg for males and females, respectively. In male and female rats, the intraperitoneal LD<sub>50</sub> values were determined to be 5134 and 2908 mg/kg respectively. Rising single doses up to 1280 mg/kg were relatively well tolerated in monkeys with emesis at this high dose precluding the determination of acute lethal levels.

**Table 8: Acute Oral Toxicity of Loratadine in Young Animals**

Species	Sex	LD <sub>50</sub> Value* mg/kg	Maximum Asymptomatic mg/kg	Maximum Non Lethal mg/kg
Rat	M	125-200 <sup>a</sup>	<125	125
[7 day old]	F	191 [138-242]	<125	125 <sup>b</sup>
Rat	M	5734 [4020→ 10, 000]	1580	2000
[30 day old]	F	5500 [4114→ 10,000]	<1580	1580 <sup>c</sup>
Monkey	M&F	---	100	>200
[7-15 mos]				
* 95% fiducial limits				

a LD<sub>50</sub> value could not be calculated due to the distribution of the data.

b One of 10 pups died at this dose, but no signs of toxicity were observed, suggesting that the death may not have been compound-related.

c Although 1 of 10 rats died at this dose, no deaths occurred at 2000 mg/kg.

Results of studies of loratadine in adult animals suggest that there are no significant differences in acute toxicity between adults and juvenile rats or young monkeys. Repeated dose studies in young

rats for one month and young monkeys for three months indicate that loratadine was well tolerated when given in a suspension up to 25 mg/kg for rats and up to 24 mg/kg for monkeys.

Plasma concentrations of loratadine from monkeys indicated that absorption of loratadine was dose-related with no trend toward accumulation during the three-month dosing period.

## **Intermediate-Term Studies**

**Table 9: Repeated Dose Studies**

Species/Type/No. Used	Duration of Study	Dosage mg/kg (once daily)	Method and Vehicle
Rats, 10/sex/group	2 weeks	15, 60, 240	gavage, 0.25% aqueous methylcellulose
Rats, 15 or 20/group	3 months	8, 32, 128	gavage, 0.4% methylcellulose
Rats, 15/sex/group	6 months	4, 16, 72	In diet
Monkeys, 4 or 6/sex/group	3 months	8, 24, 72	gavage, 0.4% aqueous methylcellulose
Monkeys, 6/sex/group	3 months	0.4, 1.2, 2.4	gavage, 0.4% aqueous methylcellulose
Monkeys, 4/sex/group	6 months	4, 16, 72	gavage, 0.4% aqueous methylcellulose

Charles River CD Type rats or cynomolgus monkeys were used. All groups had similar controls and were given the vehicle or diet alone.

Rats were more sensitive than monkeys to the effects of loratadine; females more sensitive than males. Anticholinergic effects, evidence by reduced fecal excretion and/or mydriasis were observed in both species. In long-term studies, anticholinergic effects were apparent in rats at a dose of 128 mg/kg/day or greater; in monkeys such effects were observed at a dose of 16 mg/kg/day. Phospholipidosis was also observed; the incidence and severity were dose related and were more pronounced in the rat. Minimal signs of phospholipidosis were observed in rats at a dose of 8 mg/kg/day; in monkeys evidence was apparent at 4 mg/kg/day or more. The degree of phospholipidosis did not interfere with cellular function, appeared to lessen over time and appeared to be reversible. No evidence of phospholipidosis was observed in man following treatment with 40 mg/kg for three months. Other compounds currently in therapeutic use (e.g. imipramine and chlorphentermine) which are amphiphilic as is loratadine, have been reported to produce phospholipidosis in animals. Prolongation of QRS-interval was observed in monkeys at a dose 200 times the proposed clinical dose. The quinidine-like effect is commonly seen with antihistamines and is not associated with significant clinical effects.

## **Long-Term Toxicity Studies**

During long-term toxicity studies conducted in mice, rats and monkeys, changes were observed in reproductive organs of male rats, consisting of weight reduction of the prostate gland and the testes; those changes were without consequence after a recovery period of 28 days. Similar changes in the male rat have been observed after administering drugs like antazoline, dexchlorpheniramine, meclizine, phenbenzamine and pyribenzamine.

**Table 10: Long term Toxicity Studies**

<u>Species</u>	<u>Duration</u>	<u>Loratadine</u>			<u>Vehicle and Method Used</u>
		Dosage mg/kg/day			
Rat	12 mos	0.2	0.5	1.0	Diet oral
	12 mos	2	8	32	Diet oral
	24 mos	4	10	25	Diet oral
Mouse	18 mos	4	12	40	Diet oral
Monkey	17 mos	4	12	40	0.4% methylcellulose; esophageal intubation

## **Mutagenicity Studies**

In five distinctly different genetic toxicity assays designed to detect the major types of genotoxicity i.e. Ames test, Mouse Lymphoma, Chinese Hamster Ovary, Human Lymphocyte and the Mouse Micronucleus Assays, the only activity elicited by loratadine was observed in the nonactivation phase of the mouse lymphoma assay. This activity was not dose-related.

## **Reproduction Studies**

Loratadine was not teratogenic in rats or rabbits. In rats, decreased fertility was observed at the highest dose tested, approximately 320 times the proposed clinical dose. Subsequent matings within this segment of the reproduction studies demonstrated this effect to be readily reversible. Other pregnancy parameters (pregnancy rate, litter size, number of implantations, corpora lutea) were not affected at doses approximately 40-120 times the anticipated clinical dose. Effects on these parameters above these dose levels were generally related to the pharmacodynamic activity of loratadine, and have been reported to be associated with other antihistamines.

## **Mucous membrane irritation study**

No evidence of mucous membrane irritation was observed after daily administration of up to 12 tablets (120mg) of Loratadine Orally Disintegrating Tablet, 10 mg into the hamster cheek pouch for five days.

## REFERENCES

1. Barnett A., Lorio L.C., Kreutner W., Tozzi S., Ahn H.S., Gulbenkian A.; Evaluation of the CNS Properties of SCH-29851, A Potential Non-Sedating Antihistamine: *Agents and Actions*, 1984; 14: 590-597.
2. Data on file, Schering-Plough Canada Inc., Kirkland (Québec).
3. Hilbert J., Radwanski E., Weglein R., Luc V., Perentesis G., Symchowicz S., Zampaglione N.; Pharmacokinetics and Dose Proportionality of Loratadine: *J Clin Pharmacol.* 1987; 27(9): 694-698.
4. Dockhorn R.J., Bergner A., Connell J.T., Falliers C.J., Grabiec S.V., Weiler J.M., Shellenberger M.K.; Safety and Efficacy of Loratadine (SCH 29851): A New Non-Sedating Antihistamine in Seasonal Allergic Rhinitis: *Annals of Allergy* 1987; 58: 407-411.
5. Kreutner W., Chapman R.W., Gulbenkian A., Siegel M.I.; Antiallergic Activity of Loratadine, a Non-Sedating Antihistamine: *Allergy* 1987; 42: 57-63.
6. Roth T., Roehrs T., Koshorek G., Sicklesteel J., Zorick F.; Sedative Effects of Antihistamines: *J Allergy Clin Immunol.* 1987; 80: 94-98.
7. Horak F., Bruttman G., Pedrali P., Weeke B., Frolund D., Wolff H.H., Christophers E.; A Multicentric Study of Loratadine, Terfenadine and Placebo in Patients with Seasonal Allergic Rhinitis: *Arzneimittelforschung/Drug Res.* 1988; 38(1):124-128.
8. Roman I.J., Kassem N., Gural R.P., Herron J.; Suppression of Histamine-Induced Wheal Response by Loratadine (SCH 29851) Over 28 Days in Man: *Annals of Allergy* 1986; 57: 253-256.
9. Hassan A.B., Ayoub M.M., Doghaim R.E.M., Youssef H.I., Eid M.A.; Studies on the Effect of Some Antihistamines on the Reproductive Organs of Male Rats: *Vet Med J.* 1983; 31: 277-286.
10. Ercoli N., Schachter R.J., Hueper W.C., Lewis M.N.; The Toxicologic and Antihistaminic Properties of N,N'-dimethyl-N'-phenyl-N'-(2-thienylmethyl) ethylene-diamine hydrochloride (diatrin): *J Pharmacol Exp Ther.* 1948; 93: 210-222.
11. Moser, L., et al; The Influence of SCH 29851 on Psychophysical Performance in Combination with Alcohol: *Schering Plough Research Institute, Kenilworth, NJ* 1985 (185-212).
12. Riedel, W.J., et al; The Effects of Loratadine Alone and in Combination with Alcohol on Actual Driving Performance: *Institute for Drugs, Safety and Behavior, University of Limburg, The Netherlands* August 1987.

## PART III: CONSUMER INFORMATION

### CLARITIN® ALLERGY Loratadine Tablets USP, 10 mg

This leaflet is part III of a three-part "Product Monograph" published when CLARITIN ALLERGY was approved for sale in Canada and is designed specifically for Consumers. This leaflet is a summary and will not tell you everything about CLARITIN ALLERGY. Contact your doctor or pharmacist if you have any questions about the drug.

#### ABOUT THIS MEDICATION

##### What the medication is used for:

CLARITIN ALLERGY provides:

- fast relief from symptoms of allergies, including sneezing, runny nose and itchy nose, as well as itchy watery red burning eyes, caused by exposure to seasonal allergens (trees, grass, and ragweed pollen) and perennial (year round) allergens (dust mites, animal dander and moulds).
- fast relief of allergic skin conditions, such as skin itch and hives.

##### What it does:

CLARITIN ALLERGY contains a long-acting antihistamine, which blocks the action of histamine and relieves allergy symptoms. Histamine is a chemical released by the immune system – the body's defence against invading substances – when the body is affected by substances that you are allergic to (allergens).

Most people will feel relief of allergy symptoms within 2 hours of taking the medication.

Symptom relief will be maintained for 24 hours.

CLARITIN ALLERGY does not cause drowsiness. It lets you stay alert and focused while relieving allergy symptoms.

##### When it should not be used:

CLARITIN ALLERGY should not be used:

- if you are allergic to loratadine, desloratadine or to any of the other product ingredients (see What the important non-medicinal ingredients are).
- if you are pregnant or breastfeeding

##### What the medicinal ingredient is:

Loratadine

##### What the important non-medicinal ingredients are:

In alphabetical order: corn starch, lactose, and magnesium stearate.

##### What dosage forms it comes in:

Tablets, 10 mg

#### WARNINGS AND PRECAUTIONS

BEFORE you use CLARITIN ALLERGY talk to your doctor or pharmacist if you:

- plan to become pregnant
- have kidney disease
- have liver disease as you may require a dose adjustment

Stop taking CLARITIN ALLERGY 48 hours prior to any skin testing procedures.

#### INTERACTIONS WITH THIS MEDICATION

CLARITIN ALLERGY may interact with drugs known to reduce liver metabolism.

If you are taking any medication, it is important to ask your doctor or pharmacist before taking CLARITIN ALLERGY.

Alcohol has not been found to interact with CLARITIN ALLERGY.

#### PROPER USE OF THIS MEDICATION

##### Usual dose:

Adults and children (12 years of age and older): One tablet daily, with water.

Adults and children (over 12 years of age) can take this medication for up to 6 months.

##### Overdose:

In case of drug overdose, contact your Poison Control Centre, doctor or pharmacist as soon as possible, even if there are no symptoms.

##### Missed Dose:

If you miss taking your dose on time, do not worry; take your dose when you remember. Do not exceed more than one dose in 24 hours.

## SIDE EFFECTS AND WHAT TO DO ABOUT THEM

Along with its desired effects, CLARITIN ALLERGY may cause undesirable effects.

Mild side effects that may occur include: fatigue, headache, dry mouth, sedation, stomach and digestive discomfort such as gastritis (inflammation of the stomach) and nausea.

Uncommon side effects include: Increase in appetite, coughing, and dizziness. Rarely, you may experience allergic reactions to the medication that may appear as a rash, swelling or difficulty in breathing. Additionally, hair loss, abnormal liver function, and abnormally fast heart rate or heart palpitations may occur rarely. Convulsions and seizures may occur very rarely.

Uncommon side effects in children include nervousness and nervous ticks as well as side effects involving the stomach or intestines.

## SERIOUS SIDE EFFECTS, HOW OFTEN THEY HAPPEN AND WHAT TO DO ABOUT THEM

Symptom / effect		Talk to your doctor or pharmacist		Stop taking drug and call your doctor or pharmacist
		Only if severe	In all cases	
Common	Stomach discomfort - i.e. gastritis (inflammation of the stomach)			√
Uncommon	Allergic reaction (rash, swelling, difficulty in breathing)			√
Rare	Fast heart rate or heart palpitations			√
	Liver dysfunction			√

*This is not a complete list of side effects. For any unexpected effects while taking CLARITIN ALLERGY, contact your doctor or pharmacist.*

## HOW TO STORE IT

Store between 15° and 30°C. Protect from exposure to excessive moisture.

**Keep out of reach of children.**

## Reporting Side Effects

You can report any suspected side effects associated with the use of health products to Health Canada by:

- Visiting the Web page on Adverse Reaction Reporting (<http://www.hc-sc.gc.ca/dhp-mps/medeff/report-declaration/index-eng.php>) for information on how to report online, by mail or by fax; or
- Calling toll-free at 1-866-234-2345.

*NOTE: Contact your health professional if you need information about how to manage your side effects. The Canada Vigilance Program does not provide medical advice.*

## MORE INFORMATION

This document plus the full product monograph, prepared for health professionals can be found at: [www.bayer.ca](http://www.bayer.ca).

This leaflet was prepared by Bayer Inc., Mississauga, ON, L4W 5R6.

® TM see [www.bayer.ca/tm-mc](http://www.bayer.ca/tm-mc)

Last revised: May 16<sup>th</sup>, 2019

Bayer Cross Logo

## PART III: CONSUMER INFORMATION

### CLARITIN® Rapid Dissolve™ Loratadine Orally Disintegrating Tablets USP, 10 mg

This leaflet is part III of a three-part "Product Monograph" published when CLARITIN RAPID DISSOLVE was approved for sale in Canada and is designed specifically for Consumers. This leaflet is a summary and will not tell you everything about CLARITIN RAPID DISSOLVE. Contact your doctor or pharmacist if you have any questions about the drug.

#### ABOUT THIS MEDICATION

##### What the medication is used for:

CLARITIN RAPID DISSOLVE provides:

- fast relief from symptoms of allergies, including sneezing, runny nose and itchy nose, as well as itchy watery red burning eyes, caused by exposure to seasonal allergens (trees, grass, and ragweed pollen) and perennial (year round) allergens (dust mites, animal dander and moulds).
- fast relief of allergic skin conditions, such as skin itch and hives.

##### What it does:

CLARITIN RAPID DISSOLVE contains a long-acting antihistamine, which blocks the action of histamine and relieves allergy symptoms. Histamine is a chemical released by the immune system – the body's defence against invading substances – when the body is affected by substances that you are allergic to (allergens).

Most people will feel relief of allergy symptoms within 2 hours of taking the medication.

Symptom relief will be maintained for 24 hours.

CLARITIN RAPID DISSOLVE does not cause drowsiness. It lets you stay alert and focused while relieving allergy symptoms.

##### When it should not be used:

CLARITIN RAPID DISSOLVE should not be used:

- if you are allergic to loratadine, desloratadine or to any of the other product ingredients (see What the important non-medicinal ingredients are).
- if you are pregnant or breastfeeding.

##### What the medicinal ingredient is:

Loratadine

##### What the important non-medicinal ingredients are:

In alphabetical order: Citric acid, gelatin, mannitol, and mint flavour.

##### What dosage forms it comes in:

Orally Disintegrating Tablets, 10 mg

#### WARNINGS AND PRECAUTIONS

BEFORE you use CLARITIN RAPID DISSOLVE talk to your doctor or pharmacist if you:

- plan to become pregnant
- have kidney disease
- have liver disease as you may require a dose adjustment

Stop taking CLARITIN RAPID DISSOLVE 48 hours prior to any skin testing procedures.

#### INTERACTIONS WITH THIS MEDICATION

CLARITIN RAPID DISSOLVE may interact with drugs known to reduce liver metabolism.

If you are taking any medication, it is important to ask your doctor or pharmacist before taking CLARITIN RAPID DISSOLVE.

Alcohol has not been found to interact with CLARITIN RAPID DISSOLVE.

#### PROPER USE OF THIS MEDICATION

##### OPENING INSTRUCTIONS FOR CHILD RESISTANT BLISTER:

READ THESE INSTRUCTIONS BEFORE ATTEMPTING TO REMOVE TABLET. DO NOT ATTEMPT TO PUSH TABLET THROUGH FOIL. Follow the step-by-step approach to get the tablet out. To help protect the tablet from moisture, special care has been taken in the design of the blister card. Follow instructions carefully as exposure to moisture will quickly dissolve the tablet.



1. Peel back the foil before removing the tablet.





2. Invert blister.
  3. Gently push tablet out.
- Every tablet is debossed with "C10."**



4. Place tablet on your tongue and close your mouth. The tablet will dissolve within seconds.

#### **Usual dose:**

Adults and children (12 years of age and older): One mint flavored tablet daily. The tablet will melt instantly on the tongue - water is not needed. Take on an empty stomach.

Adults and children (over 12 years of age) can take this medication for up to 6 months.

#### **Overdose:**

In case of drug overdose, contact your Poison Control Centre, doctor or pharmacist as soon as possible, even if there are no symptoms.

#### **Missed Dose:**

If you miss taking your dose on time, do not worry; take your dose when you remember. Do not exceed more than one dose in 24 hours.

### **SIDE EFFECTS AND WHAT TO DO ABOUT THEM**

Along with its desired effects, CLARITIN RAPID DISSOLVE may cause undesirable effects.

Mild side effects that may occur include: fatigue, headache, dry mouth, sedation, stomach and digestive discomfort such as gastritis (inflammation of the stomach) and nausea.

Uncommon side effects include: Increase in appetite, coughing, and dizziness. Rarely, you may experience allergic reactions to the medication that may appear as a rash, swelling or difficulty in breathing. Additionally, hair loss, abnormal liver function, and abnormally fast heart rate or heart palpitations may occur rarely. Convulsions and seizures may occur very rarely.

Uncommon side effects in children include

nervousness and nervous ticks as well as side effects involving the stomach or intestines.

### **SERIOUS SIDE EFFECTS, HOW OFTEN THEY HAPPEN AND WHAT TO DO ABOUT THEM**

Symptom / effect		Talk to your doctor or pharmacist		Stop taking drug and call your doctor or pharmacist
		Only if severe	In all cases	
Common	Stomach discomfort - i.e. gastritis (inflammation of the stomach)			√
	Allergic reaction (rash, swelling, difficulty in breathing)			√
Rare	Fast heart rate or heart palpitations			√
	Liver dysfunction			√

*This is not a complete list of side effects. For any unexpected effects while taking CLARITIN RAPID DISSOLVE, contact your doctor or pharmacist.*

### **HOW TO STORE IT**

Store between 20° and 25°C. Use immediately upon opening tablet blister.

**Keep out of reach of children.**

**Reporting Side Effects**

You can report any suspected side effects associated with the use of health products to Health Canada by:

- Visiting the Web page on Adverse Reaction Reporting (<http://www.hc-sc.gc.ca/dhp-mps/medeff/report-declaration/index-eng.php>) for information on how to report online, by mail or by fax; or
- Calling toll-free at 1-866-234-2345.

*NOTE: Contact your health professional if you need information about how to manage your side effects. The Canada Vigilance Program does not provide medical advice.*

**MORE INFORMATION**

This document plus the full product monograph, prepared for health professionals can be found at: [www.bayer.ca](http://www.bayer.ca).

This leaflet was prepared by Bayer Inc., Mississauga, ON, L4W 5R6.

® TM see [www.bayer.ca/tm-mc](http://www.bayer.ca/tm-mc)

Last revised: May 16<sup>th</sup>, 2019  
Bayer Cross Logo

### PART III: CONSUMER INFORMATION

#### CLARITIN® Rapid Dissolve™ Loratadine Orally Disintegrating Tablets USP, 5 mg

This leaflet is part III of a three-part "Product Monograph" published when CLARITIN RAPID DISSOLVE was approved for sale in Canada and is designed specifically for Consumers. This leaflet is a summary and will not tell you everything about CLARITIN RAPID DISSOLVE. Contact your doctor or pharmacist if you have any questions about the drug.

#### ABOUT THIS MEDICATION

##### What the medication is used for:

CLARITIN RAPID DISSOLVE provides:

- fast relief from symptoms of allergies, including sneezing, runny nose and itchy nose, as well as itchy watery red burning eyes, caused by exposure to seasonal allergens (trees, grass, and ragweed pollen) and perennial (year round) allergens (dust mites, animal dander and moulds).
- fast relief of allergic skin conditions, such as skin itch and hives.

##### What it does:

CLARITIN RAPID DISSOLVE contains a long-acting antihistamine, which blocks the action of histamine and relieves allergy symptoms. Histamine is a chemical released by the immune system – the body's defence against invading substances – when the body is affected by substances that you are allergic to (allergens).

Most people will feel relief of allergy symptoms within 2 hours of taking the medication.

Symptom relief will be maintained for 24 hours.

CLARITIN RAPID DISSOLVE does not cause drowsiness. It lets you stay alert and focused while relieving allergy symptoms.

##### When it should not be used:

CLARITIN RAPID DISSOLVE should not be used:

- if you are allergic to loratadine, desloratadine or to any of the other product ingredients (see What the important non-medicinal ingredients are).
- if you are pregnant or nursing.

##### What the medicinal ingredient is:

Loratadine

##### What the important non-medicinal ingredients are:

In alphabetical order: Citric acid, gelatin, mannitol, and mint flavour.

##### What dosage forms it comes in:

Orally Disintegrating Tablets, 5 mg

#### WARNINGS AND PRECAUTIONS

BEFORE you use CLARITIN RAPID DISSOLVE talk to your doctor or pharmacist if you:

- plan to become pregnant
- have kidney disease
- have liver disease as you may require a dose adjustment

Stop taking CLARITIN RAPID DISSOLVE 48 hours prior to any skin testing procedures.

#### INTERACTIONS WITH THIS MEDICATION

CLARITIN RAPID DISSOLVE may interact with drugs known to reduce liver metabolism.

If you are taking any medication, it is important to ask your doctor or pharmacist before taking CLARITIN RAPID DISSOLVE.

Alcohol has not been found to interact with CLARITIN RAPID DISSOLVE.

#### PROPER USE OF THIS MEDICATION

##### Usual dose:

Adults and children (12 years of age and older): Two mint flavored tablets daily. The tablet will melt instantly on the tongue - water is not needed. Take on an empty stomach.

Adults and children (over 12 years of age) can take this medication for up to 6 months.

##### Overdose:

In case of drug overdose, contact your Poison Control Centre, doctor or pharmacist as soon as possible, even if there are no symptoms.

##### Missed Dose:

If you miss taking your dose on time, do not worry; take your dose when you remember. Do not exceed more than one dose in 24 hours.

#### SIDE EFFECTS AND WHAT TO DO ABOUT THEM

Along with its desired effects, CLARITIN RAPID DISSOLVE may cause undesirable effects.

Mild side effects that may occur include fatigue, headache, dry mouth, sedation, stomach and digestive discomfort such as gastritis (inflammation of the stomach) and nausea.

Uncommon side effects include: Increase in appetite, coughing, and dizziness. Rarely, you may experience allergic reactions to the medication that may appear as a rash, swelling or difficulty in breathing. Additionally, hair loss, abnormal liver function, and abnormally fast heart rate or heart palpitations may occur rarely. Convulsions and seizures may occur very rarely.

Uncommon side effects in children include nervousness and nervous ticks as well as side effects involving the stomach or intestines.

### Reporting Side Effects

You can report any suspected side effects associated with the use of health products to Health Canada by:

- Visiting the Web page on Adverse Reaction Reporting (<http://www.hc-sc.gc.ca/dhp-mps/medeff/report-declaration/index-eng.php>) for information on how to report online, by mail or by fax; or
- Calling toll-free at 1-866-234-2345.

*NOTE: Contact your health professional if you need information about how to manage your side effects. The Canada Vigilance Program does not provide medical advice.*

### MORE INFORMATION

This document plus the full product monograph, prepared for health professionals can be found at: [www.bayer.ca](http://www.bayer.ca).

This leaflet was prepared by Bayer Inc., Mississauga, ON, L4W 5R6.

® TM see [www.bayer.ca/tm-mc](http://www.bayer.ca/tm-mc)

Last revised: May 16<sup>th</sup>, 2019  
Bayer Cross Logo

### SERIOUS SIDE EFFECTS, HOW OFTEN THEY HAPPEN AND WHAT TO DO ABOUT THEM

Symptom / effect		Talk to your doctor or pharmacist		Stop taking drug and call your doctor or pharmacist
		Only if severe	In all cases	
Common	Stomach discomfort - i.e. gastritis (inflammation of the stomach)			√
Uncommon	Allergic reaction (rash, swelling, difficulty in breathing)			√
Rare	Fast heart rate or heart palpitations			√
	Liver dysfunction			√

*This is not a complete list of side effects. For any unexpected effects while taking CLARITIN RAPID DISSOLVE, contact your doctor or pharmacist.*

### HOW TO STORE IT

Store between 20° and 25°C. Use immediately upon opening tablet blister.

**Keep out of reach of children.**

## PART III: CONSUMER INFORMATION

### CLARITIN® KIDS

Loratadine Oral Solution USP, 1 mg/mL

This leaflet is part III of a three-part "Product Monograph" published when CLARITIN KIDS was approved for sale in Canada and is designed specifically for Consumers. This leaflet is a summary and will not tell you everything about CLARITIN KIDS. Contact your doctor or pharmacist if you have any questions about the drug.

### ABOUT THIS MEDICATION

#### What the medication is used for:

CLARITIN KIDS provides:

- fast relief from seasonal allergy symptoms including sneezing, runny nose and itchy nose, as well as itchy watery red burning eyes
- fast relief of allergic skin conditions, such as skin itch and hives.

#### What it does:

CLARITIN KIDS contains a long-acting antihistamine, which blocks the action of histamine and relieves allergy symptoms. Histamine is a chemical released by the immune system – the body's defence against invading substances – when the body is affected by substances that you are allergic to (allergens).

Most people will feel relief of allergy symptoms within 2 hours of taking the medication.

Symptom relief will be maintained for 24 hours.

CLARITIN KIDS does not cause drowsiness. It lets you stay alert and focused while relieving allergy symptoms.

#### When it should not be used:

CLARITIN KIDS should not be used:

- if you are allergic to loratadine, desloratadine or to any of the other product ingredients (see What the important non-medicinal ingredients are).
- if you are pregnant or breastfeeding.

#### What the medicinal ingredient is:

Loratadine

#### What the important non-medicinal ingredients are:

In alphabetical order: artificial grape flavour, edetate disodium, glycerin, maltitol, monobasic sodium phosphate dihydrate, phosphoric acid, propylene glycol, purified water, sodium benzoate, sorbitol, sucralose.

#### What dosage forms it comes in:

Oral Solution, 1 mg/mL

### WARNINGS AND PRECAUTIONS

BEFORE you use CLARITIN KIDS talk to your doctor or pharmacist if you:

- plan to become pregnant
- have kidney disease
- have liver disease as you may require a dose adjustment

Stop taking CLARITIN KIDS 48 hours prior to any skin testing procedures.

### INTERACTIONS WITH THIS MEDICATION

CLARITIN KIDS may interact with drugs known to reduce liver metabolism.

If you are taking any medication, it is important to ask your doctor or pharmacist before taking CLARITIN KIDS.

Alcohol has not been found to interact with CLARITIN KIDS.

### PROPER USE OF THIS MEDICATION

#### Usual dose:

Adults and children 10 years of age and older (weight > 30 kg): 10 mL once daily.

Children 2 - 9 years of age (weight ≤ 30 kg): 5 mL once daily.

Adults and children (over 12 years of age) can take this medication for up to 6 months.

Do not give CLARITIN KIDS to children between 2 and 12 years of age for longer than 14 days, unless recommended by your doctor.

### Overdose:

In case of drug overdose, contact your Poison Control Centre, doctor or pharmacist as soon as possible, even if there are no symptoms.

### Missed Dose:

If you miss taking your dose on time, do not worry; take your dose when you remember. Do not exceed more than one dose in 24 hours.

## SIDE EFFECTS AND WHAT TO DO ABOUT THEM

Along with its desired effects, CLARITIN KIDS may cause undesirable effects.

Mild side effects that may occur include fatigue, headache, dry mouth, sedation, stomach and digestive discomfort such as gastritis (inflammation of the stomach) and nausea.

Uncommon side effects include: Increase in appetite, coughing, and dizziness. Rarely, you may experience allergic reactions to the medication that may appear as a rash, swelling or difficulty in breathing. Additionally, hair loss, abnormal liver function, and abnormally fast heart rate or heart palpitations may occur rarely. Convulsions and seizures may occur very rarely.

Uncommon side effects in children include nervousness and nervous ticks as well as side effects involving the stomach or intestines.

## SERIOUS SIDE EFFECTS, HOW OFTEN THEY HAPPEN AND WHAT TO DO ABOUT THEM

Symptom / effect		Talk to your doctor or pharmacist		Stop taking drug and call your doctor or pharmacist
		Only if severe	In all cases	
Common	Stomach discomfort - i.e. gastritis (inflammation of the stomach)			√
Uncommon	Allergic reaction (rash, swelling, difficulty in breathing)			√
Rare	Fast heart rate or heart palpitations			√

## SERIOUS SIDE EFFECTS, HOW OFTEN THEY HAPPEN AND WHAT TO DO ABOUT THEM

Symptom / effect		Talk to your doctor or pharmacist		Stop taking drug and call your doctor or pharmacist
		Only if severe	In all cases	
Rare	Liver dysfunction			√

*This is not a complete list of side effects. For any unexpected effects while taking Claritin Kids, contact your doctor or pharmacist.*

## HOW TO STORE IT

Store between 15° and 30°C.

Keep out of reach of children.

### Reporting Side Effects

You can report any suspected side effects associated with the use of health products to Health Canada by:

- Visiting the Web page on Adverse Reaction Reporting (<http://www.hc-sc.gc.ca/dhp-mps/medeff/report-declaration/index-eng.php>) for information on how to report online, by mail or by fax; or
- Calling toll-free at 1-866-234-2345.

*NOTE: Contact your health professional if you need information about how to manage your side effects. The Canada Vigilance Program does not provide medical advice.*

## MORE INFORMATION

This document plus the full product monograph, prepared for health professionals can be found at: [www.bayer.ca](http://www.bayer.ca).

This leaflet was prepared by Bayer Inc., Mississauga, ON, L4W 5R6.

® TM see [www.bayer.ca/tm-mc](http://www.bayer.ca/tm-mc)

Last revised: May 16<sup>th</sup>, 2019  
Bayer Cross Logo