Brand Names

All Day Allergy , All Day Allergy Children's, Allergy Relief, Children's Allergy Relief, PediaCare Children's Allergy, Quzyttir, Wal-Zyr, ZERVIATE, Zyrtec, Zyrtec Chewable, Zyrtec Children's, Zyrtec Children's Allergy , ZYRTEC Children's Dye Free, Zyrtec Children's Hives , Zyrtec Dissolve, ZYRTEC Dye Free, Zyrtec Hives Relief , Zyrtec Liquid Gel , Zyrtec Pre-Filled Spoons, Zyrtec Syrup

Indication Specific Dosing

For the management of symptoms of seasonal allergies or perennial allergies, including allergic rhinitis

Oral dosage (tablets, orally disintegrating tablets, and liquid-filled capsules)

Adults

5 to 10 mg PO once daily, depending on severity of symptoms. Most adults in clinical trials were started at 10 mg/day.

Older Adults

5 to 10 mg PO once daily, depending on severity of symptoms. In adults 77 years and older, a dose of 5 mg PO once daily is recommended.

Children and Adolescents 6 to 17 years

5 to 10 mg PO once daily, depending on severity of symptoms. Most children 12 years and older in clinical trials were started at 10 mg/day. Alternatively, 5 mg PO twice daily may better maintain symptom control for some individuals.

Oral dosage (chewable tablets)

Adults

5 to 10 mg PO once daily, depending on severity of symptoms.

Older Adults

5 to 10 mg PO once daily, depending on severity of symptoms. In adults 77 years and older, a dose of 5 mg PO once daily is recommended.

Children and Adolescents 6 to 17 years

5 to 10 mg PO once daily, depending on severity of symptoms.

Children 2 to 5 years

2.5 mg PO once daily. If needed, may increase the dose to 5 mg PO once daily or 2.5 mg PO every 12 hours.

Oral dosage (syrup and solution)

Adults

5 to 10 mg PO once daily, depending on severity of symptoms.

Older Adults

5 to 10 mg PO once daily, depending on severity of symptoms. In adults 77 years and older, a dose of 5 mg PO once daily is recommended.

Children and Adolescents 6 to 17 years

5 to 10 mg PO once daily, depending on severity of symptoms.

Children 2 to 5 years

2.5 mg PO once daily. If needed, may increase the dose to 5 mg PO once daily or 2.5 mg PO every 12 hours.

Children less than 2 years of age

2.5 mg PO once daily. If needed, may increase the dose to 2.5 mg PO every 12 hours.

Infants 6 to 11 months

2.5 mg PO once daily.

For the treatment of symptoms of chronic spontaneous urticaria (e.g., relief of pruritus, reduction in the size and number of hives)

Oral dosage (tablets)

Adults

5 to 10 mg PO once daily, depending on severity of symptoms. Most adults in clinical trials started at 10 mg.

Older Adults

5 to 10 mg PO once daily, depending on the severity of symptoms. In adults 77 years and older, a dose of 5 mg PO once daily is recommended.

Children and Adolescents 6 to 17 years

5 to 10 mg PO once daily, depending on severity of symptoms. During clinical trials, most patients 12 years and older started at 10 mg.

Oral dosage (chewable tablets)

Adults

5 to 10 mg PO once daily, depending on severity of symptoms.

Older Adults

5 to 10 mg PO once daily, depending on the severity of symptoms. In adults 77 years and older, a dose of 5 mg PO once daily is recommended.

Children and Adolescents 6 to 17 years

5 to 10 mg PO once daily, depending on severity of symptoms.

Children 2 to 5 years

2.5 mg PO once daily. If needed, may increase to 5 mg PO once daily or 2.5 mg every 12 hours.

Oral dosage (syrup and solution)

Adults

5 to 10 mg PO once daily, depending on severity of symptoms.

Older Adults

5 to 10 mg PO once daily, depending on the severity of symptoms. In adults 77 years and older, a dose of 5 mg PO once daily is recommended.

Children and Adolescents 6 to 17 years

5 to 10 mg PO once daily, depending on severity of symptoms.

Children 2 to 5 years

2.5 mg PO once daily. If needed, may increase to 5 mg once daily or 2.5 mg every 12 hours.

Children less than 2 years of age

2.5 mg PO once daily. If needed, may increase to 2.5 mg every 12 hours. Prescription use only.

Infants 6 to 11 months

2.5 mg PO once daily. Prescription use only.

For the treatment of ocular pruritus associated with allergic conjunctivitis

Ophthalmic dosage

Adults

1 drop in the affected eye(s) twice daily (approximately 8 hours apart).

Children and Adolescents 2 to 17 years

1 drop in the affected eye(s) twice daily (approximately 8 hours apart).

For the treatment of acute urticaria

Intravenous dosage

Adults

10 mg IV once every 24 hours as needed.

Children and Adolescents 12 years and older

10 mg IV once every 24 hours as needed.

Children 6 to 11 years

5 mg or 10 mg IV (depending on symptom severity) once every 24 hours as needed.

Children 1 to 5 years

2.5 mg IV once every 24 hours as needed.

Infants 6 months and older

2.5 mg IV once every 24 hours as needed.

Contraindications And Precaution

Drug Interactions

The coadministration of certain medications may lead to harm and require avoidance or therapy modification; review all drug interactions prior to concomitant use of other medications.

Hypersensitivity

This medication is contraindicated in patients with a history of hypersensitivity to it or any of its components. Cetirizine is contraindicated for use in patients with a levocetirizine or hyroxyzine hypersensitivity. Cetirizine is a known human metabolite of hydroxyzine, and levocetirizine is an enantiomer of cetirizine.

activities requiring coordination and concentration, driving or operating machinery

Drowsiness has been reported in some systemic cetirizine recipients; use caution when driving or operating machinery or with other activities requiring coordination and concentration until the effects of the drug are known. Concurrent use of cetirizine with alcohol or other CNS depressants should be avoided because additional reductions in alertness and additional impairment of CNS performance may occur.

renal failure, renal impairment

Before oral cetirizine use, people with renal impairment or failure should consult with their health care provider as dosage reduction may be recommended. Data for infants and young children less than 6 years of age with renal impairment/failure are limited. No dosage adjustment of intravenous cetirizine is required in patients with renal impairment or renal failure; however the manufacturer recommends monitoring for antihistaminic side effects in these individuals. No renal precautions apply to ophthalmic use.

hepatic failure

Before oral cetirizine use, people with hepatic failure or impairment should consult with their health care provider as dosage reduction may be recommended. No dosage adjustment of intravenous cetirizine is required in people with hepatic failure or impairment; however the manufacturer recommends monitoring for antihistaminic side effects in these individuals. No hepatic precautions apply to ophthalmic use.

pregnancy

Oral cetirizine may be used during pregnancy. Animal studies do not reveal a risk for teratogenesis with cetirizine, even at doses greatly exceeding the maximum recommended daily human dose on mg/m2 basis. Use cetirizine injection during pregnancy only if the potential benefit justifies the potential risk to the fetus as there are no adequate and well-controlled studies of use of this product during human pregnancy. Ophthalmic use of cetirizine is not expected to result in significant systemic absorption, but use during pregnancy only when needed. Loratadine and oral cetirizine are acceptable antihistamine alternatives for allergic conditions or urticaria based on their excellent safety data and recommendation in multiple guidelines for use during pregnancy. As with many medications, self-medication with cetirizine (nonprescription formulations) during pregnancy is not recommended and pregnant individuals should see their health care professional for a proper diagnosis and treatment recommendations.

breast-feeding

Cetirizine may be used during breast-feeding. While cetirizine is excreted in human breast milk after systemic administration, published data indicate that transfer of cetirizine into human breast milk is low and therefore adverse effects are not expected in breastfed infants. While data are not specifically available, use of ophthalmic cetirizine would be expected to produce even lower concentrations in breast milk at the doses administered to the eye(s). Levocetirizine, as the R-enantiomer of cetirizine, is also found

in low concentrations in breast milk and is considered compatible during lactation. Because of its lack of sedation and low milk concentrations, loratadine is also not expected to cause adverse effects in breastfed infants and is usually considered compatible with breast-feeding. Some guidelines also recommend loratadine or cetirizine at the lowest dose as preferred antihistamines in individuals who are breast-feeding.

Pregnancy And Lactation

Oral cetirizine may be used during pregnancy. Animal studies do not reveal a risk for teratogenesis with cetirizine, even at doses greatly exceeding the maximum recommended daily human dose on mg/m2 basis. Use cetirizine injection during pregnancy only if the potential benefit justifies the potential risk to the fetus as there are no adequate and well-controlled studies of use of this product during human pregnancy. Ophthalmic use of cetirizine is not expected to result in significant systemic absorption, but use during pregnancy only when needed. Loratadine and oral cetirizine are acceptable antihistamine alternatives for allergic conditions or urticaria based on their excellent safety data and recommendation in multiple guidelines for use during pregnancy. As with many medications, self-medication with cetirizine (nonprescription formulations) during pregnancy is not recommended and pregnant individuals should see their health care professional for a proper diagnosis and treatment recommendations.

Interactions

Acetaminophen; Aspirin; diphenhydrAMINE: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Acetaminophen; Caffeine; Dihydrocodeine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Acetaminophen; Caffeine; Pyrilamine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of

cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Acetaminophen; Chlorpheniramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Acetaminophen; Chlorpheniramine; Dextromethorphan: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Acetaminophen; Chlorpheniramine; Dextromethorphan; Phenylephrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Acetaminophen; Chlorpheniramine; Dextromethorphan; Pseudoephedrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Acetaminophen; Chlorpheniramine; Phenylephrine : (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Acetaminophen; Codeine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Acetaminophen; Dextromethorphan; Doxylamine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Acetaminophen; diphenhydrAMINE: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Acetaminophen; HYDROcodone: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit

dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Acetaminophen; oxyCODONE: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Acetaminophen; Pamabrom; Pyrilamine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
ALFentanil: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
ALPRAZolam: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Amitriptyline: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
Amobarbital: (Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Amoxapine: (Moderate) Concurrent use of cetirizine/levocetirizine with heterocyclic antidepressants should generally be avoided. Coadministration may increase the risk of

anticholinergic and CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive anticholinergic effects, sedation, and somnolence.
Apomorphine: (Moderate) Concurrent use of cetirizine/levocetirizine with apomorphine should generally be avoided because of the possibility of additive sedative effects. Dopaminergic agents have also been associated with sudden sleep onset during activities of daily living such as driving, which has resulted in accidents in some cases. Prescribers should re-assess patients for drowsiness or sleepiness regularly throughout treatment, especially since events may occur well after the start of treatment.
ARIPiprazole: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Asenapine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Aspirin, ASA; Butalbital; Caffeine: (Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Aspirin, ASA; Caffeine; Orphenadrine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and skeletal muscle relaxants due to the risk for additive CNS depression.
Aspirin, ASA; Carisoprodol; Codeine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus. (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and skeletal muscle relaxants due to the risk for additive CNS depression.
Aspirin, ASA; oxyCODONE: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Atropine: (Moderate) Monitor for unusual drowsiness or excess sedation and for signs

or symptoms of anticholinergic toxicity during concomitant cetirizine and atropine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects.
Atropine; Difenoxin: (Moderate) Concurrent administration of diphenoxylate/difenoxin with cetirizine can potentiate the CNS-depressant effects of diphenoxylate/difenoxin. Use caution during coadministration. (Moderate) Monitor for unusual drowsiness or excess sedation and for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and atropine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects.
atypical antipsychotic: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Baclofen: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and skeletal muscle relaxants due to the risk for additive CNS depression.
Barbiturates: (Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Belladonna; Opium: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus. (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and belladonna use. Concomitant use may result in additive anticholinergic adverse effects.
Benzhydrocodone; Acetaminophen: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Benzodiazepines: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of

CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Benzoic Acid; Hyoscyamine; Methenamine; Methylene Blue; Phenyl Salicylate: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and hyoscyamine use. Concomitant use may result in additive anticholinergic adverse effects.
Benztropine: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and benztropine use. Concomitant use may result in additive anticholinergic adverse effects.
Brexpiprazole: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Brompheniramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Brompheniramine; Dextromethorphan; Phenylephrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Brompheniramine; Phenylephrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Brompheniramine; Pseudoephedrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Brompheniramine; Pseudoephedrine; Dextromethorphan: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Budesonide; Glycopyrrolate; Formoterol: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and glycopyrrolate use. Concomitant use may result in additive anticholinergic adverse effects.
Buprenorphine: (Major) Reserve concomitant use of buprenorphine and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary

retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Buprenorphine; Naloxone: (Major) Reserve concomitant use of buprenorphine and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Butalbital; Acetaminophen: (Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Butalbital; Acetaminophen; Caffeine: (Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Butalbital; Acetaminophen; Caffeine; Codeine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
(Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Butalbital; Aspirin; Caffeine; Codeine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
(Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side

effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Butorphanol: (Moderate) Concurrent use of cetirizine/levocetirizine with butorphanol should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Calcium, Magnesium, Potassium, Sodium Oxybates: (Moderate) Concurrent use of cetirizine/levocetirizine with sodium oxybate should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Cannabidiol: (Moderate) Concurrent use of cetirizine with cannabidiol should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Capsaicin; Metaxalone: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and skeletal muscle relaxants due to the risk for additive CNS depression.
Carbidopa; Levodopa; Entacapone: (Moderate) Caution is recommended during concurrent use of cetirizine or levocetirizine with COMT inhibitors because of the possibility for additive sedative effects. COMT inhibitors have also been associated with sudden sleep onset during activities of daily living such as driving, which has resulted in accidents in some cases. Prescribers should re-assess patients for drowsiness or sleepiness regularly throughout treatment, especially since events may occur well after the start of treatment. Patients should be advised to avoid driving or other tasks requiring mental alertness until they know how the combination affects them.
Carbinoxamine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Cariprazine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Carisoprodol: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and skeletal muscle relaxants due to the risk for additive CNS depression.
Celecoxib; Tramadol: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as

urinary retention and/or severe constipation, which may lead to paralytic ileus.
Cenobamate: (Moderate) Monitor for excessive sedation and somnolence during coadministration of cenobamate and cetirizine. Concurrent use may result in additive CNS depression.
Chlophedianol; Dexbrompheniramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Chlophedianol; Dexchlorpheniramine; Pseudoephedrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Chlorcyclizine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
chlordiazePOXIDE: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
chlordiazePOXIDE; Amitriptyline: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence. (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
chlordiazePOXIDE; Clidinium: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Chlorpheniramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Chlorpheniramine; Codeine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary

retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
(Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Chlorpheniramine; Dextromethorphan: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Chlorpheniramine; Dextromethorphan; Phenylephrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Chlorpheniramine; Dextromethorphan; Pseudoephedrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Chlorpheniramine; HYDROcodone: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
(Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Chlorpheniramine; Ibuprofen; Pseudoephedrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Chlorpheniramine; Phenylephrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Chlorpheniramine; Pseudoephedrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS

depression or anticholinergic effects.
Chlorzoxazone: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and skeletal muscle relaxants due to the risk for additive CNS depression.
Clemastine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
clomiPRAMINE: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
clonazePAM: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
cloNIDine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and clonidine due to the risk for additive CNS depression.
Clorazepate: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
cloZAPine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Codeine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Codeine; Dexbrompheniramine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well

as urinary retention and/or severe constipation, which may lead to paralytic ileus. (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects. Codeine; guaiFENesin: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus. Codeine; guaiFENesin; Pseudoephedrine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus. Codeine; Phenylephrine; Promethazine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus. Codeine; Promethazine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus. COMT inhibitors: (Moderate) Caution is recommended during concurrent use of cetirizine or levocetirizine with COMT inhibitors because of the possibility for additive sedative effects. COMT inhibitors have also been associated with sudden sleep onset during activities of daily living such as driving, which has resulted in accidents in some

cases. Prescribers should re-assess patients for drowsiness or sleepiness regularly throughout treatment, especially since events may occur well after the start of treatment. Patients should be advised to avoid driving or other tasks requiring mental alertness until they know how the combination affects them.
Cyclobenzaprine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and skeletal muscle relaxants due to the risk for additive CNS depression.
Cyproheptadine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Dantrolene: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and skeletal muscle relaxants due to the risk for additive CNS depression.
Desipramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
Desloratadine: (Minor) Although desloratadine is considered a 'non-sedating' antihistamine, dose-related sedation has been noted. For this reason, it would be prudent to monitor for drowsiness during concurrent use of desloratadine with CNS depressants such as other H1-blockers.
Desloratadine; Pseudoephedrine: (Minor) Although desloratadine is considered a 'non-sedating' antihistamine, dose-related sedation has been noted. For this reason, it would be prudent to monitor for drowsiness during concurrent use of desloratadine with CNS depressants such as other H1-blockers.
Deutetrabenazine: (Moderate) Concurrent use of cetirizine/levocetirizine with deutetrabenazine should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Dexbrompheniramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Dexbrompheniramine; Dextromethorphan; Phenylephrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Dexbrompheniramine; Pseudoephedrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of

cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Dexchlorpheniramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Dexchlorpheniramine; Dextromethorphan; Pseudoephedrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
dexmedeTOMIDine: (Moderate) Concurrent use of cetirizine/levocetirizine with dexmedetomidine should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. CNS depression is a desired effect of dexmedetomidine; however, concurrent use with a CNS depressant may prolong recovery. If concurrent use is necessary, monitor patients closely.
Dextromethorphan; diphenhydrAMINE; Phenylephrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
diazePAM: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Dicyclomine: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and dicyclomine use. Concomitant use may result in additive anticholinergic adverse effects.
Difelikefalin: (Moderate) Monitor for dizziness, somnolence, mental status changes, and gait disturbances if concomitant use of difelikefalin with CNS depressants is necessary. Concomitant use may increase the risk for these adverse reactions.
dimenhyDRINATE: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
diphenhydrAMINE: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
diphenhydrAMINE; Ibuprofen: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or

anticholinergic effects.
diphenhydrAMINE; Naproxen: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
diphenhydrAMINE; Phenylephrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Diphenoxylate; Atropine: (Moderate) Concurrent administration of diphenoxylate/difenoxin with cetirizine can potentiate the CNS-depressant effects of diphenoxylate/difenoxin. Use caution during coadministration. (Moderate) Monitor for unusual drowsiness or excess sedation and for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and atropine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects.
Doxepin: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
Doxylamine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Doxylamine; Pyridoxine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
droNABinol: (Moderate) Additive drowsiness may occur if cetirizine/levocetirizine is administered with other drugs that depress the CNS, including dronabinol.
droPERidol: (Moderate) Concurrent use of cetirizine/levocetirizine with droperidol should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Entacapone: (Moderate) Caution is recommended during concurrent use of cetirizine or levocetirizine with COMT inhibitors because of the possibility for additive sedative effects. COMT inhibitors have also been associated with sudden sleep onset during activities of daily living such as driving, which has resulted in accidents in some cases. Prescribers should re-assess patients for drowsiness or sleepiness regularly throughout treatment, especially since events may occur well after the start of treatment. Patients should be advised to avoid driving or other tasks requiring mental alertness until they

know how the combination affects them.
Esketamine: (Moderate) Closely monitor patients receiving esketamine and cetirizine for sedation and other CNS depressant effects. Instruct patients who receive a dose of esketamine not to drive or engage in other activities requiring alertness until the next day after a restful sleep.
Estazolam: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Eszopiclone: (Moderate) Concurrent use of cetirizine/levocetirizine with eszopiclone should generally be avoided. Concurrent use of eszopiclone with other CNS depressants increases the risk for CNS depression and complex sleep-related behaviors (e.g., driving, talking, eating, or performing other activities while not fully awake). If concurrent use is necessary, patients should be instructed to contact their provider immediately if these symptoms or behaviors occur.
Ethanol: (Major) Advise patients to avoid alcohol consumption while taking CNS depressants. Alcohol consumption may result in additive CNS depression.
Etomidate: (Moderate) Concurrent use of cetirizine/levocetirizine with general anesthetics should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. CNS depression is a desired effect of general anesthetics; however, concurrent use with a CNS depressant may prolong recovery. If concurrent use is necessary, monitor patients closely.
Fenfluramine: (Moderate) Monitor for excessive sedation and somnolence during coadministration of fenfluramine and cetirizine. Concurrent use may result in additive CNS depression.
fentaNYL: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
flavoxATE: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and flavoxate use. Concomitant use may result in additive anticholinergic adverse effects.
Flibanserin: (Moderate) Concurrent use of cetirizine/levocetirizine with flibanserin should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.

Flurazepam: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Food: (Major) Advise patients to avoid cannabis use while taking CNS depressants due to the risk for additive CNS depression and potential for other cognitive adverse reactions.
Gabapentin: (Moderate) Monitor for respiratory depression and sedation during concomitant cetirizine and gabapentin use; consider starting gabapentin at a low dose. Concomitant use increases the risk for additive CNS depression.
General anesthetics: (Moderate) Concurrent use of cetirizine/levocetirizine with general anesthetics should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. CNS depression is a desired effect of general anesthetics; however, concurrent use with a CNS depressant may prolong recovery. If concurrent use is necessary, monitor patients closely.
Glycopyrrolate: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and glycopyrrolate use. Concomitant use may result in additive anticholinergic adverse effects.
Glycopyrrolate; Formoterol: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and glycopyrrolate use. Concomitant use may result in additive anticholinergic adverse effects.
guanFACINE: (Moderate) Concurrent use of cetirizine/levocetirizine with guanfacine should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Haloperidol: (Moderate) Concurrent use of cetirizine/levocetirizine with haloperidol should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Heparin: (Minor) Antihistamines may partially counteract the anticoagulant actions of heparin, according to the product labels. However, this interaction is not likely of clinical significance since heparin therapy is adjusted to the partial thromboplastin time (aPTT) and other clinical parameters of the patient.
Heterocyclic antidepressants: (Moderate) Concurrent use of cetirizine/levocetirizine with heterocyclic antidepressants should generally be avoided. Coadministration may increase the risk of anticholinergic and CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive anticholinergic effects, sedation, and somnolence.
Homatropine; HYDROcodone: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory

depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
(Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and homatropine use. Concomitant use may result in additive anticholinergic adverse effects.
HYDROcodone: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
HYDROcodone; Ibuprofen: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
HYDROmorphone: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
hydrOXYzine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Hyoscyamine: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and hyoscyamine use. Concomitant use may result in additive anticholinergic adverse effects.
Hyoscyamine; Methenamine; Methylene Blue; Phenyl Salicylate; Sodium Biphosphate:

(Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and hyoscyamine use. Concomitant use may result in additive anticholinergic adverse effects.
Iloperidone: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Imipramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
Indacaterol; Glycopyrrolate: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and glycopyrrolate use. Concomitant use may result in additive anticholinergic adverse effects.
Isocarboxazid: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and monoamine oxidase inhibitors (MAOIs). Concomitant use may result in additive CNS depression or anticholinergic effects.
Isoflurane: (Moderate) Concurrent use of cetirizine/levocetirizine with general anesthetics should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. CNS depression is a desired effect of general anesthetics; however, concurrent use with a CNS depressant may prolong recovery. If concurrent use is necessary, monitor patients closely.
Ketamine: (Moderate) Concurrent use of cetirizine/levocetirizine with general anesthetics should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. CNS depression is a desired effect of general anesthetics; however, concurrent use with a CNS depressant may prolong recovery. If concurrent use is necessary, monitor patients closely.
Lemborexant: (Moderate) Monitor for excessive sedation and somnolence during coadministration of lemborexant and cetirizine. Dosage adjustments of lemborexant and cetirizine may be necessary when administered together because of potentially additive CNS effects. The risk of next-day impairment, including impaired driving, is increased if lemborexant is taken with other CNS depressants.
Levorphanol: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.

Lofexidine: (Moderate) Concurrent use of cetirizine/levocetirizine with lofexidine should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Lopinavir; Ritonavir: (Moderate) Coadministration of cetirizine and ritonavir resulted in a 42% increase in the AUC, 53% increase in half-life, and 29% decrease in clearance of cetirizine. Cetirizine did not alter ritonavir disposition.
Loratadine: (Minor) Although loratadine is considered a 'non-sedating' antihistamine, dose-related sedation has been noted. For this reason, it would be prudent to monitor for drowsiness during concurrent use of loratadine with CNS depressants such as other H1-blockers.
Loratadine; Pseudoephedrine: (Minor) Although loratadine is considered a 'non-sedating' antihistamine, dose-related sedation has been noted. For this reason, it would be prudent to monitor for drowsiness during concurrent use of loratadine with CNS depressants such as other H1-blockers.
LORazepam: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Loxapine: (Moderate) Concurrent use of cetirizine/levocetirizine with loxapine should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Lumateperone: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Lurasidone: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Maprotiline: (Moderate) Concurrent use of cetirizine/levocetirizine with heterocyclic antidepressants should generally be avoided. Coadministration may increase the risk of anticholinergic and CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive anticholinergic effects, sedation, and somnolence.
Meclizine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Melatonin: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and melatonin due to the risk for additive CNS depression.
Meperidine: (Major) Reserve concomitant use of opioids and cetirizine for patients in

whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Meprobamate: (Moderate) Concurrent use of cetirizine/levocetirizine with meprobamate should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Metaxalone: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and skeletal muscle relaxants due to the risk for additive CNS depression.
Methadone: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Methenamine; Sodium Acid Phosphate; Methylene Blue; Hyoscyamine: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and hyoscyamine use. Concomitant use may result in additive anticholinergic adverse effects.
Methohexital: (Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Methscopolamine: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and methscopolamine use. Concomitant use may result in additive anticholinergic adverse effects.
Methyldopa: (Moderate) Concurrent use of cetirizine/levocetirizine with methyldopa should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Midazolam: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and

somnolence.
Mirtazapine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and mirtazapine due to the risk for additive CNS depression.
Molindone: (Moderate) Concurrent use of cetirizine/levocetirizine with molindone should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Monoamine oxidase inhibitors: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and monoamine oxidase inhibitors (MAOIs). Concomitant use may result in additive CNS depression or anticholinergic effects.
Morphine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Nalbuphine: (Moderate) Concurrent use of cetirizine/levocetirizine with nalbuphine should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Nefazodone: (Moderate) Concurrent use of cetirizine/levocetirizine with nefazodone should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Neostigmine; Glycopyrrolate: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and glycopyrrolate use. Concomitant use may result in additive anticholinergic adverse effects.
Nirmatrelvir; Ritonavir: (Moderate) Coadministration of cetirizine and ritonavir resulted in a 42% increase in the AUC, 53% increase in half-life, and 29% decrease in clearance of cetirizine. Cetirizine did not alter ritonavir disposition.
Nortriptyline: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
OLANZapine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS

depression.
OLANZapine; FLUoxetine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
OLANZapine; Samidorphan: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Oliceridine: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Opiate Agonists: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Opicapone: (Moderate) Caution is recommended during concurrent use of cetirizine or levocetirizine with COMT inhibitors because of the possibility for additive sedative effects. COMT inhibitors have also been associated with sudden sleep onset during activities of daily living such as driving, which has resulted in accidents in some cases. Prescribers should re-assess patients for drowsiness or sleepiness regularly throughout treatment, especially since events may occur well after the start of treatment. Patients should be advised to avoid driving or other tasks requiring mental alertness until they know how the combination affects them.
Orphenadrine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and skeletal muscle relaxants due to the risk for additive CNS depression.
Oxazepam: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
oxyBUTYnin: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and oxybutynin use. Concomitant use may result in additive

anticholinergic adverse effects.
oxyCODONE: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
oxyMORphone: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Paliperidone: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Pentazocine; Naloxone: (Moderate) Concurrent use of cetirizine/levocetirizine with pentazocine should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
PENTobarbital: (Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Perampanel: (Moderate) Concurrent use of cetirizine/levocetirizine with perampanel should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Perphenazine; Amitriptyline: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
Phenelzine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and monoamine oxidase inhibitors (MAOIs). Concomitant use may result in additive CNS depression or anticholinergic effects.

PHENobarbital: (Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
PHENobarbital; Hyoscyamine; Atropine; Scopolamine: (Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence. (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and hyoscyamine use. Concomitant use may result in additive anticholinergic adverse effects. (Moderate) Monitor for unusual drowsiness or excess sedation and for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and atropine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects. (Moderate) Monitor for unusual drowsiness or excess sedation and for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and scopolamine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects.
Pimavanserin: (Moderate) Concurrent use of cetirizine/levocetirizine with pimavanserin should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Pimozide: (Moderate) Concurrent use of cetirizine/levocetirizine with pimozide should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Pramipexole: (Moderate) Concurrent use of cetirizine/levocetirizine with pramipexole should generally be avoided because of the possibility of additive sedative effects. Dopaminergic agents have also been associated with sudden sleep onset during activities of daily living such as driving, which has resulted in accidents in some cases. Prescribers should re-assess patients for drowsiness or sleepiness regularly throughout treatment, especially since events may occur well after the start of treatment.
Pregabalin: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and pregabalin due to the risk for additive CNS depression.
Primidone: (Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Propantheline: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and propantheline use. Concomitant use may result in

additive anticholinergic adverse effects.
Propofol: (Moderate) Concurrent use of cetirizine/levocetirizine with general anesthetics should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. CNS depression is a desired effect of general anesthetics; however, concurrent use with a CNS depressant may prolong recovery. If concurrent use is necessary, monitor patients closely.
Protriptyline: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
Pseudoephedrine; Triprolidine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Quazepam: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
QUEtiapine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Ramelteon: (Moderate) Concurrent use of cetirizine/levocetirizine with ramelton should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Rasagiline: (Moderate) Concurrent use of cetirizine/levocetirizine with rasagiline should generally be avoided because of the possibility of additive sedative effects.
Dopaminergic agents have also been associated with sudden sleep onset during activities of daily living such as driving, which has resulted in accidents in some cases. Prescribers should re-assess patients for drowsiness or sleepiness regularly throughout treatment, especially since events may occur well after the start of treatment.
Remifentanil: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Remimazolam: (Moderate) Concurrent use of cetirizine/levocetirizine with

benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
risperiDONE: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Ritonavir: (Moderate) Coadministration of cetirizine and ritonavir resulted in a 42% increase in the AUC, 53% increase in half-life, and 29% decrease in clearance of cetirizine. Cetirizine did not alter ritonavir disposition.
rOPINIRole: (Moderate) Concurrent use of cetirizine/levocetirizine with ropinirole should generally be avoided because of the possibility of additive sedative effects. Dopaminergic agents have also been associated with sudden sleep onset during activities of daily living such as driving, which has resulted in accidents in some cases. Prescribers should re-assess patients for drowsiness or sleepiness regularly throughout treatment, especially since events may occur well after the start of treatment.
Rotigotine: (Moderate) Concurrent use of cetirizine/levocetirizine with rotigotine should generally be avoided because of the possibility of additive sedative effects. Dopaminergic agents have also been associated with sudden sleep onset during activities of daily living such as driving, which has resulted in accidents in some cases. Prescribers should re-assess patients for drowsiness or sleepiness regularly throughout treatment, especially since events may occur well after the start of treatment.
Safinamide: (Moderate) Concurrent use of cetirizine/levocetirizine with safinamide should generally be avoided because of the possibility of additive sedative effects. Dopaminergic agents have also been associated with sudden sleep onset during activities of daily living such as driving, which has resulted in accidents in some cases. Prescribers should re-assess patients for drowsiness or sleepiness regularly throughout treatment, especially since events may occur well after the start of treatment.
Scopolamine: (Moderate) Monitor for unusual drowsiness or excess sedation and for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and scopolamine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects.
Secobarbital: (Moderate) Concurrent use of cetirizine/levocetirizine with barbiturates should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Sedating H1-blockers: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Selegiline: (Moderate) Monitor for unusual drowsiness and sedation during

coadministration of cetirizine and selegiline due to the risk for additive CNS depression.
Sevoflurane: (Moderate) Concurrent use of cetirizine/levocetirizine with general anesthetics should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. CNS depression is a desired effect of general anesthetics; however, concurrent use with a CNS depressant may prolong recovery. If concurrent use is necessary, monitor patients closely.
Sincalide: (Moderate) Sincalide-induced gallbladder ejection fraction may be affected by concurrent medications, including H1-blockers. False study results are possible; thorough patient history is important in the interpretation of procedure results.
Skeletal Muscle Relaxants: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and skeletal muscle relaxants due to the risk for additive CNS depression.
Sodium Oxybate: (Moderate) Concurrent use of cetirizine/levocetirizine with sodium oxybate should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Stiripentol: (Moderate) Concurrent use of cetirizine/levocetirizine with stiripentol should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
SUFentanil: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Suvorexant: (Moderate) Concurrent use of cetirizine/levocetirizine with suvorexant should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Tapentadol: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.

Tasimelteon: (Moderate) Concurrent use of cetirizine/levocetirizine with tasimelteon should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Temazepam: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Tetrabenazine: (Moderate) Concurrent use of cetirizine/levocetirizine with tetrabenazine should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Thalidomide: (Moderate) Concurrent use of cetirizine/levocetirizine with thalidomide should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Theophylline, Aminophylline: (Minor) Large doses of aminophylline may reduce the clearance of cetirizine/levocetirizine. Monitor the patient clinically for an altered response to cetirizine/levocetirizine if coadministered with aminophylline. (Minor) Large doses of theophylline may reduce the clearance of cetirizine/levocetirizine. Monitor the patient clinically for increased cetirizine/levocetirizine-related adverse effects if coadministered with theophylline.
Thiothixene: (Moderate) Concurrent use of cetirizine/levocetirizine with thiothixene should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Tolcapone: (Moderate) Caution is recommended during concurrent use of cetirizine or levocetirizine with COMT inhibitors because of the possibility for additive sedative effects. COMT inhibitors have also been associated with sudden sleep onset during activities of daily living such as driving, which has resulted in accidents in some cases. Prescribers should re-assess patients for drowsiness or sleepiness regularly throughout treatment, especially since events may occur well after the start of treatment. Patients should be advised to avoid driving or other tasks requiring mental alertness until they know how the combination affects them.
traMADol: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension,

respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Tramadol; Acetaminophen: (Major) Reserve concomitant use of opioids and cetirizine for patients in whom alternate treatment options are inadequate. Limit dosages and durations to the minimum required and monitor patients closely for respiratory depression and sedation. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose and monitor for signs of urinary retention or reduced gastric motility. Concomitant use can increase the risk of hypotension, respiratory depression, profound sedation, coma, and death as well as urinary retention and/or severe constipation, which may lead to paralytic ileus.
Tranylcypromine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and monoamine oxidase inhibitors (MAOIs). Concomitant use may result in additive CNS depression or anticholinergic effects.
traZODone: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and trazodone due to the risk for additive CNS depression.
Triazolam: (Moderate) Concurrent use of cetirizine/levocetirizine with benzodiazepines should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Tricyclic antidepressants: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
Trihexyphenidyl: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant cetirizine and trihexyphenidyl use. Concomitant use may result in additive anticholinergic adverse effects.
Trimipramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
Triprolidine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of cetirizine and sedating H1-blockers. Concomitant use may result in additive CNS depression or anticholinergic effects.
Trospium: (Moderate) Dry mouth and drowsiness may occur in patients receiving cetirizine/levocetirizine; caution may be necessary during concomitant use of cetirizine/levocetirizine with the antimuscarinics.
Valerian, Valeriana officinalis: (Moderate) Concurrent use of cetirizine/levocetirizine with valerian should generally be avoided. Coadministration may increase the risk of CNS

depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Valproic Acid, Divalproex Sodium: (Moderate) Concurrent use of cetirizine/levocetirizine with valproic acid should generally be avoided. Coadministration may increase the risk of CNS depressant-related side effects. If concurrent use is necessary, monitor for excessive sedation and somnolence.
Xanomeline; Trospium: (Moderate) Dry mouth and drowsiness may occur in patients receiving cetirizine/levocetirizine; caution may be necessary during concomitant use of cetirizine/levocetirizine with the antimuscarinics.
Zaleplon: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and zaleplon due to the risk for additive CNS depression and next-day psychomotor impairment; dose adjustments may be necessary.
Ziprasidone: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of atypical antipsychotics and cetirizine due to the risk for additive CNS depression.
Zolpidem: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of cetirizine and zolpidem due to the risk for additive CNS depression and next-day psychomotor impairment; dose adjustments may be necessary. Limit the dose of Intermezzo sublingual tablets to 1.75 mg/day.
Zuranolone: (Major) Avoid the use of multiple sedating agents due to the risk for additive CNS depression. If use is necessary, consider a downward dosage adjustment of either or both medications, especially in patients with additional risk factors for sedation-related harm.

Adverse Reaction

ataxia, dizziness, drowsiness, dyskinesia, dysphonia, fatigue, headache, hyperesthesia, hyperkinesis, hypertonia, hypoesthesia, insomnia, irritability, migraine, myelitis, myoclonia, paresthesias, ptosis, seizures, syncope, tremor, vertigo

During clinical trials of oral cetirizine (10 mg or less) in adults and children 12 years of age and older, the following centrally-mediated effects occurred in at least 2% of patients receiving cetirizine and at an incidence more frequent than with placebo: somnolence/drowsiness (13.7%), fatigue (5.9%), and dizziness (2%). Fatigue and drowsiness were found to be dose-related. The incidence of drowsiness was 11% at a dose of 5 mg/day, and with a 10-mg/day dose, the incidence was 14%. In patients 6 to 11 years of age the following CNS effects occurred more frequently with oral cetirizine than placebo: headache (11% to 14%) and drowsiness (1.9% to 4.2%). Adverse effects reported in pediatric patients 2 to 5 years of age in clinical trials were similar to those

reported in older pediatric patients. In controlled trials of infants and children 6 to 24 months of age, the incidences of adverse experiences, including somnolence, were similar in the cetirizine and placebo treatment groups in each study. In a study of 1 week duration in subjects 6 to 11 months of age, infants treated with cetirizine exhibited greater irritability/fussiness vs. infants taking placebo. In a study of 18 months duration in children 12 to 24 months, insomnia occurred more frequently in with cetirizine treatment (9%) compared to placebo (5.3%). CNS effects observed in less than 2% of adult or pediatric patients during clinical trial evaluations of cetirizine included abnormal coordination, ataxia, dysphonia, hyperesthesia, hyperkinesis, hypertonia, hypoesthesia, insomnia, migraine, myelitis, paralysis, paresthesias, ptosis, syncope, tremor, twitching, and vertigo. During postmarketing use, seizures, orofacial dyskinesia, tics, myoclonia, and extrapyramidal symptoms have been reported rarely. In a clinical trial, patients receiving cetirizine injection reported less sedation compared to patients treated with diphenhydramine. Paresthesias, headache, and presyncope were reported in less than 1% of cetirizine injection recipients. Data from clinical studies suggest that cetirizine may be more sedating than placebo and non-sedating second generation antihistamines (e.g., loratadine), but is less sedating than older first-generation antihistamines.

abdominal pain, anorexia, appetite stimulation, constipation, dental caries, diarrhea, dyspepsia, eructation, flatulence, gastritis, hemorrhoids, hypersalivation, melena, nausea, stomatitis, tongue discoloration, vomiting, xerostomia

During clinical trials of oral cetirizine (maximum dose of 10 mg) in adult and pediatric subjects 12 years and older, the following gastrointestinal (GI) effects occurred in at least 2% of cetirizine recipients and more frequently than with placebo: xerostomia (5%). In children 6 to 11 years the following GI effects occurred more frequently with cetirizine than with placebo: abdominal pain (4.4% to 5.6%), diarrhea (1.9% to 3.1%), nausea (1.9% to 2.8%), and vomiting (2.3% to 2.5%). Adverse effects reported in pediatric patients aged 2 to 5 years were similar to those reported in older children. In the placebo-controlled trials of pediatric patients 6 to 24 months of age, GI adverse events and incidences were similar in the cetirizine and placebo treatment groups in each study. GI effects observed in less than 2% of adult or pediatric patients 6 to 17 years of age during clinical trial evaluations of cetirizine included aggravated dental caries, anorexia, constipation, dyspepsia, eructation, flatulence, gastritis, hemorrhoids, hypersalivation, appetite stimulation, melena, rectal hemorrhage, stomatitis, ulcerative stomatitis, tongue discoloration, and tongue swelling. Dyspepsia was reported in less than 1% of patients receiving cetirizine injection.

cholestasis, elevated hepatic enzymes, hepatitis, hyperbilirubinemia

Abnormal hepatic function (unspecified) was observed in less than 2% of adult or pediatric subjects 6 to 17 years of age during clinical trial evaluations of cetirizine. Occasional instances of transient, reversible hepatic transaminase elevations (elevated hepatic enzymes) have occurred during cetirizine therapy. Hepatitis with significant transaminase elevation and elevated bilirubin (hyperbilirubinemia) has been reported in association with cetirizine use. Most of these events resolved spontaneously. Cholestasis and hepatitis have been reported during postmarketing use.

acne vulgaris, anaphylactoid reactions, angioedema, atopic dermatitis, furunculosis, hyperhidrosis, hyperkeratosis, hypertrichosis, maculopapular rash, photosensitivity, pruritus, purpura, rash, seborrhea, urticaria, xerosis

Severe itching, or pruritus, has been reported in individuals discontinuing cetirizine after long-term use. Individuals did not experience pruritus before initiating cetirizine, but typically within a few days of stopping cetirizine after daily use for a few months to years. Most individuals who experienced pruritus after discontinuation reported using cetirizine for more than 3 months; however, some experienced this reaction after less than 1 month of use. Reported cases were rare but sometimes serious, with individuals experiencing widespread, severe itching that required medical intervention. The FDA identified 209 cases worldwide (197 domestic) of pruritus after discontinuation of cetirizine (n = 180), levocetirizine (n = 27), or both (n = 2) supporting a causal relationship between stopping cetirizine or levocetirizine and pruritus. The number of pruritus cases increased with duration of use, suggesting that longer use may increase the risk for this reaction. Effective treatments have not been evaluated; however, symptoms resolved in most individuals who restarted cetirizine or who tapered off after restarting. Instruct individuals on the risk of pruritus after discontinuing cetirizine, especially if planned for chronic use. The following dermatologic and/or hypersensitivity effects were observed in less than 2% of adult or pediatric patients during clinical trial evaluations of cetirizine: acne vulgaris, angioedema, bullous eruption, dermatitis, xerosis, atopic dermatitis, erythematous rash, furunculosis, hyperkeratosis, hypertrichosis, hyperhidrosis, maculopapular rash, photosensitivity, photosensitivity toxic reaction, pruritus, purpura, rash, seborrhea, skin disorder (unspecified), skin nodule, and urticaria. Anaphylactoid reactions have rarely been reported during postmarketing use. Hyperhidrosis was reported in less than 1% of subjects receiving cetirizine injection.

bronchospasm, cough, dyspnea, epistaxis, hyperventilation, pharyngitis, rhinitis, sinusitis

During clinical trials of cetirizine (maximum dose of 10 mg) in adults and children 12

years of age and older, pharyngitis occurred in 2% of patients receiving cetirizine vs. 1.9% of patients receiving placebo. In pediatric patients 6 to 11 years of age receiving a dose of 5 or 10 mg, the following respiratory effects occurred more frequently with cetirizine than placebo: pharyngitis (2.8% to 6.2%), cough (2.8% to 4.4%), bronchospasm (1.9% to 3.1%), and epistaxis (1.9% to 3.7%). Adverse effects reported in pediatric patients 2 to 5 years of age in clinical trials were similar to those reported in children 6 to 11 years. Respiratory effects observed in less than 2% of adult or pediatric patients during clinical trial evaluations of cetirizine included bronchitis, dyspnea, hyperventilation, increased sputum, pneumonia, respiratory disorder, rhinitis, sinusitis, and upper respiratory tract infection.

heart failure, hypertension, hypotension, palpitations, sinus tachycardia

The following cardiac effects were observed in less than 2% of adult or pediatric patients 6 to 17 years of age during clinical trial evaluations of cetirizine: heart failure, hypertension, palpitations, and sinus tachycardia. Severe hypotension has been reported during postmarketing use.

cystitis, dysuria, glomerulonephritis, hematuria, increased urinary frequency, polyuria, urinary incontinence, urinary retention

The following genitourinary effects were observed in less than 2% of adult or pediatric patients during clinical trial evaluations of cetirizine: cystitis, dysuria, hematuria, micturition frequency (increased urinary frequency), polyuria, urinary incontinence, urinary tract infection, and urinary retention. A causal relationship between cetirizine and these infrequent effects has not been established. Glomerulonephritis has rarely been reported during postmarketing use.

blurred vision, conjunctival hyperemia, conjunctivitis, ocular hemorrhage, ocular hypertension, ocular pain, visual impairment, xerophthalmia

The following ophthalmic effects were observed in less than 2% of adult or pediatric patients during clinical trial evaluations of orally administered cetirizine: blindness (visual impairment), conjunctivitis, ocular pain, glaucoma (ocular hypertension), loss of accommodation with blurred vision, ocular hemorrhage, xerophthalmia, and visual field defect. Ocular conjunctival hyperemia, instillation site ocular pain, and reduced visual acuity were reported by 1% to 7% of patients receiving cetirizine ophthalmic solution during clinical trials.

hearing loss, otalgia, tinnitus

The following otic effects were observed in less than 2% of adult or pediatric patients during clinical trial evaluations of cetirizine: deafness (hearing loss), earache (otalgia), ototoxicity, and tinnitus. A causal relationship between cetirizine and these infrequent effects has not been established.

dehydration, diabetes mellitus, polydipsia

The following metabolic effects were observed in less than 2% of adult or pediatric patients during clinical trial evaluations of cetirizine: dehydration, diabetes mellitus, and thirst (polydipsia). A causal relationship between cetirizine and these infrequent effects has not been established.

arthralgia, arthropathy, muscle cramps, myalgia, myasthenia

The following musculoskeletal effects were observed in less than 2% of adult or pediatric patients during clinical trial evaluations of cetirizine: arthralgia, arthritis, arthrosis (arthropathy), myasthenia, myalgia, and muscle cramps (leg cramps). A causal relationship between cetirizine and these infrequent effects has not been established.

agitation, amnesia, anxiety, depression, emotional lability, euphoria, hallucinations, libido decrease, nightmares, suicidal ideation

The following psychiatric effects were observed in less than 2% of adult or pediatric patients during clinical trial evaluations of cetirizine: abnormal thinking, agitation, amnesia, anxiety, libido decrease, depersonalization, depression, emotional lability, euphoria, impaired concentration, nervousness, paroniria (abnormal dreams or nightmares), and sleep disorder (unspecified). A causal relationship has not been established. Aggressive reaction, hallucinations, suicidal ideation, and suicide have rarely been reported during postmarketing use.

dysmenorrhea, leukorrhea, mastalgia, menorrhagia, menstrual irregularity, vaginitis

The following reproductive effects were observed in less than 2% of adult or pediatric patients during clinical trial evaluations of cetirizine: dysmenorrhea, female breast pain (mastalgia), intermenstrual bleeding (menstrual irregularity), leukorrhea, menorrhagia, and vaginitis. A causal relationship between cetirizine and these infrequent effects has not been established.

lymphadenopathy

Lymphadenopathy was observed in less than 2% of oral cetirizine-treated adult and pediatric subjects 6 years of age and older during clinical trial evaluations.

dysgeusia, parosmia

The following special senses effects were observed in less than 2% of adult or pediatric patients during clinical trial evaluations of cetirizine: parosmia, taste loss, and taste perversion (dysgeusia). A causal relationship between cetirizine and these infrequent effects has not been established. Dysgeusia was reported in less than 1% of patients receiving cetirizine injection.

hemolytic anemia, thrombocytopenia

Hemolytic anemia and thrombocytopenia have rarely been reported during postmarketing use of cetirizine. Causality to the drug has not been established.

flushing

Flushing was observed in less than 2% of adult or pediatric patients 6 years of age and older during clinical trial evaluations of cetirizine.

asthenia, back pain, edema, fever, hot flashes, malaise, pallor, peripheral edema

The following general effects not listed elsewhere were observed in less than 2% of adult and pediatric oral cetirizine recipients 6 years and older during clinical trial evaluations: accidental injury, asthenia, back pain, chest pain (unspecified), enlarged abdomen, face edema, fever, generalized edema, hot flashes, increased weight (weight gain), leg edema, malaise, nasal polyp, pain, pallor, periorbital edema, peripheral edema, rigors. Stillbirth has rarely been reported during postmarketing use. Hot flashes were reported in less than 1% of patients receiving cetirizine injection.

Description

Cetirizine is a piperazine H1-receptor antagonist (H1-blocker) and the the active metabolite of hydroxyzine. Cetirizine differs from the parent compound by having greater affinity for the H1-receptor. Cetirizine is commercially available as oral, ophthalmic, and injectable formulations. The ophthalmic solution is indicated to treat ocular pruritus associated with allergic conjunctivitis. Oral cetirizine is used to treat seasonal and perennial allergic rhinitis and chronic idiopathic urticaria. In addition, oral cetirizine has been used off-label for symptomatic treatment of atopic dermatitis.

Cetirizine intravenous injection is used to treat acute urticaria. At recommended doses, cetirizine may cause a higher incidence of somnolence than the non-sedating antihistamines (e.g., loratadine) and thus cetirizine is often characterized as "low sedating", as it causes drowsiness to a much lesser degree than first-generation (sedating) antihistamines. Like loratadine, the cardiovascular safety of cetirizine has been demonstrated in drug-interaction studies, elevated-dose studies, and clinical trials. Rare but severe pruritus has been reported in individuals stopping cetirizine after long-term use (daily use, typically for at least a few months and often for years) that may require medical intervention. Oral cetirizine was initially FDA approved in 1995 as a prescription product and was subsequently approved for nonprescription use in 2007.

Mechanism Of Action

Cetirizine is a metabolite of hydroxyzine that has high affinity for histamine H1-receptors. It has less affinity, however, than terfenadine or hydroxyzine for calcium-channel, alpha-adrenergic, D2-dopamine, 5HT2-serotonin, and muscarinic receptors. The principal effects are mediated via selective inhibition of peripheral H receptors. The antihistaminic activity of cetirizine has been clearly documented in a variety of animal and human models. In vivo and ex vivo animal models have shown negligible anticholinergic and antiserotonergic activity. In clinical studies, however, dry mouth was more common with cetirizine than with placebo. In vitro receptor binding studies have shown no measurable affinity for other than H1receptors. Autoradiographic studies with radiolabeled cetirizine in the rat have shown negligible penetration into the brain. Ex vivo experiments in the mouse have shown that systemically administered cetirizine does not significantly occupy cerebral H1 receptors. The addition of the less lipophilic carboxyl group to the ethylamine side chain reduces the penetration of cetirizine into the CNS. Consequently, cetirizine produces a low incidence of sedation compared with older antihistamines. Drowsiness may, nevertheless, be dose-related.

In both atopic and normal human volunteers, cetirizine reduction of histamine wheal and flare is similar to that of clemastine, hydroxyzine, and terfenadine. The inflammatory response involves a number of mediators. Initial release of histamine from mast cells is followed by late-phase reactions involving a number of other cells. These include fibroblasts and epithelial cells, neutrophils, eosinophils (especially in conditions with raised IgE levels), macrophages, platelets, and lymphocytes. Cell adhesion can also be part of the inflammatory process. The action of cetirizine appears to involve a number of these mediators. Cetirizine's effect on mast cells has generated conflicting reports. Some investigators found that cetirizine decreased prostaglandin D2, while others did not. Similarly, cetirizine may decrease leukotriene C4 production. Cetirizine plays a part in suppressing neutrophil migration in IgE-mediated reactions. Cetirizine reduces eosinophil infiltration to nasal mucosa in patients with seasonal

allergic rhinitis. A similar effect is seen in patients with delayed-pressure urticaria. Cetirizine is not believed to affect the immune response, but it might affect cell adhesion. The mechanism of action may involve the inhibition of platelet-activating factor (PAF)-induced influx of eosinophils.

Pharmacokinetics

Cetirizine is administered orally, topically via the ophthalmic route, and as an intravenous injection. It is 93% protein-bound. Cetirizine undergoes a low degree of first-pass metabolism. It is metabolized to limited extent via O-dealkylation to a metabolite with negligible activity; the enzyme(s) responsible for metabolism have not been determined. Overall recovery of an administered dose is roughly 70% in the urine; approximately 50% of a dose is excreted as unchanged drug. Overall recovery from the feces is roughly 10%. The mean elimination half-life in 146 healthy adult volunteers across multiple pharmacokinetic studies was 8.3 hours and the apparent total body clearance for cetirizine was approximately 53 mL/minute.

Affected cytochrome P450 (CYP450) isoenzymes and drug transporters: None

Route-Specific Pharmacokinetics

- **Oral Route**

The bioavailability of cetirizine tablets and oral solution is comparable. The drug has a rapid onset (i.e., time to Cmax 1 hour in adults) and a long duration of action. The mean Cmax observed in healthy subjects receiving 10 mg tablets once daily for 10 days was 311 ng/mL. Cetirizine pharmacokinetics were linear for oral doses ranging from 5 to 60 mg. The overall bioavailability of cetirizine is not altered by the presence of food, although the rate of absorption can be slightly reduced.

- **Intravenous Route**

In a single dose crossover study in healthy volunteers under fasting conditions, cetirizine reached a mean Cmax of 495 ng/mL and 1,344 ng/mL following single dose intravenous (IV) administration of 5 mg and 10 mg, respectively, injected over a period of 1 to 1.5 minutes. Peak concentrations were reached at 0.06 hour (range 0.03 to 0.07 hour) and 0.03 hour (range 0.03 to 2.00 hour) for cetirizine 5 mg and 10 mg IV injection, respectively. The mean systemic exposure (AUC0-inf) for cetirizine hydrochloride 5 mg and 10 mg IV injection was 1,318 ng x hour/mL and 2,746 ng x hour/mL, respectively.

- **Other Route(s)**

Ophthalmic Route
Peak plasma concentrations (Cmax) obtained after administration of cetirizine ophthalmic solution are significantly lower than those achieved by the oral formulations. In a study of healthy subjects, twice daily administration of the ophthalmic solution for 1

week resulted in a Cmax of 3.1 ng/mL. The mean terminal half-life was 8.2 hours after twice-daily dosing of ophthalmic cetirizine for 1 week.

- **Hepatic Impairment**

Pharmacokinetic parameters of oral cetirizine have been investigated patients with impaired hepatic function. Despite limited hepatic metabolism of cetirizine, patients with hepatic impairment have an altered pharmacokinetic profile. Sixteen patients with chronic liver diseases (hepatocellular, cholestatics, and biliary cirrhosis), given 10 or 20 mg of oral cetirizine had a 50% increase in half-life along with a corresponding 40% decrease in clearance vs. the 16 healthy subjects. The pharmacokinetics of IV cetirizine has not been evaluated in patients with hepatic impairment.

- **Renal Impairment**

The kinetics of cetirizine were studied following multiple oral daily doses of cetirizine hydrochloride 10-mg for 7 days in 7 normal volunteers (creatine clearance 89 to 128 mL/minute), 8 patients with mild renal function impairment (creatinine clearance 42 to 77 mL/minute) and 7 patients with moderate renal function impairment (creatine clearance 11 to 31 mL/minute). The pharmacokinetics of oral cetirizine were similar in patients with mild renal impairment vs. normal volunteers. Moderately impaired patients had a 3-fold increase in half-life and a 70% decrease in clearance compared to normal volunteers. Patients on hemodialysis (n = 5) given a single 10-mg oral dose of cetirizinehad a 3-fold increase in half-life and a 70% decrease in clearance. Hemodialysis removes less than 10% of cetirizine from the blood. Oral dosing adjustment is recommended in patients with moderate or severe renal impairment (i.e., CrCl 31 mL/minute or less) and in those on dialysis. The pharmacokinetics of IV cetirizine have not been evaluated in patients in renal impairment.

- **Pediatrics**

Infants and Children

When pediatric patients aged 7 to 12 years received a single 5-mg oral cetirizine HCl capsule, the mean Cmax was 275 ng/mL. In pediatric patients aged 2 to 5 years who received 5-mg oral cetirizine, the mean Cmax was 660 ng/mL. In pediatric patients aged 6 to 23 months who received a single dose of 0.25 mg/kg cetirizine oral solution (mean dose 2.3 mg), the mean Cmax was 390 ng/mL. The average exposure (AUC) in children 6 months to less than 2 years receiving cetirizine hydrochloride oral solution 2.5 mg PO twice a day is expected to be 2-fold higher vs. adults receiving cetirizine 10 mg/day.

Reduction in half-life and increases in total body clearance (CL) in pediatric patients compared to adults :

Children 7 to 12 years: Half-life = 33% shorter than adults; CL = 33% greater than adults

Children 2 to 5 years: Half-life = 33% to 41% shorter than adults; CL = 81% to 111% greater than adults

Infants and Children 6 to 23 months: Half-life = 63% shorter than adults; CL = 304% greater than adults

- **Geriatric**

Pharmacokinetic parameters of cetirizine have been investigated in geriatric subjects. In general, elderly patients have decreased rates of clearance which correlate with age-associated reductions in renal function, and are not specifically age-related. Following a single, 10 mg oral dose, the elimination half-life was prolonged by 50% and the apparent total body clearance was 40% lower in 16 elderly subjects with a mean age of 77 years compared to 14 adult subjects with a mean age of 53 years. Oral dosage adjustment may be needed in adults 77 years of age and older. Dosage adjustments in the geriatric patient are not recommended for cetirizine injection.

- **Gender Differences**

The effect of gender on cetirizine pharmacokinetics has not been adequately studied.

- **Ethnic Differences**

No race-related differences in the kinetics of cetirizine have been observed.

Administration

For storage information, see the specific product information within the How Supplied section.

Oral Administration

The time of cetirizine administration (morning or evening) can be adjusted to meet individual patient needs.
May be administered without regard to meals.

Oral Solid Formulations

Tablets
Swallow tablets with liquid. No special instructions apply.
Liqui-gel capsules
Swallow liquid-filled capsules whole. Do not cut, chew, or crush.
Chewable tablets
Chew or crush chewable tablet before swallowing. May be taken with or without water.
Orally disintegrating tablets (ODT)
ODT melts in the mouth. Swallow with saliva when dissolved. May be taken with or without water.

Oral Liquid Formulations

Oral Solution
Administer oral solution using a calibrated oral measuring device.

Injectable Administration

Cetirizine injection is for intravenous administration only.
Visually inspect parenteral products for particulate matter and discoloration prior to administration whenever solution and container permit.
If using as an antihistamine prior to infusion product administration, refer to infusion product prescribing information for instructions.

Intravenous Administration

IV Push
Dilution is not necessary.
Administer cetirizine injection as an intravenous push over a period of 1 to 2 minutes.
The vial is for single-use only; discard any unused portion.

Ophthalmic Administration

Ophthalmic Solution (e.g., Zerviate)
For topical application to the eye only.
Instruct patients on proper instillation of the ophthalmic solution.
Wash hands before and after use.
Remove contact lenses prior to instillation, as the preservative in the solution (benzalkonium chloride) may be absorbed by soft contact lenses. Contact lenses may be reinserted 10 minutes after the dose has been administered. However, advise patients not to wear their contact lenses during use if their eyes are red.
Do not remove the cap from the multi-dose bottle or remove the single-use container from the original foil pouch until immediately prior to use.
Take care to avoid contamination. Do not touch the dropper tip of the multi-dose bottle or the tip of the single-use container to the eye, fingertips, or other surfaces.
Tilt the head back slightly and pull the lower eyelid down with the index finger to form a pouch. Squeeze 1 drop into the pouch of each affected eye and have patient gently close eyes. Do not blink. If administering the dose via a single-use container, 1 container can be used to dose both eyes.
Single-use containers should remain in original foil patch until ready to use.
Keep the multi-dose bottle closed when not in use. Discard the single-use container after use.

Maximum Dosage Limits

- **Adults**

10 mg/day PO; 10 mg/day IV. 2 drops/day per affected eye for ophthalmic solution.

- **Geriatric**
  Less than 77 years: 10 mg/day PO; 10 mg/day IV. 2 drops/day per affected eye for ophthalmic solution.
  77 years and older: 5 mg/day PO; 10 mg/day IV. 2 drops/day per affected eye for ophthalmic solution.
- **Adolescents**
  10 mg/day PO; 10 mg/day IV. 2 drops/day per affected eye for ophthalmic solution.
- **Children**
  6 years and older: 10 mg/day PO; 10 mg/day IV. 2 drops/day per affected eye for ophthalmic solution.
  3 to 5 years: 5 mg/day PO; 2.5 mg/day IV. 2 drops/day per affected eye for ophthalmic solution.
  2 years: 5 mg/day PO (FDA-approved); 0.25 mg/kg/dose PO twice daily has been used off-label for atopic dermatitis; 2.5 mg/day IV. 2 drops/day per affected eye for ophthalmic solution.
  1 year: 5 mg/day PO (FDA-approved); 0.25 mg/kg/dose PO twice daily has been used off-label for atopic dermatitis; 2.5 mg/day IV. Safety and efficacy not established for ophthalmic solution.
- **Infants**
  6 months and older: 2.5 mg/day PO; 2.5 mg/day IV. Safety and efficacy not established for ophthalmic solution.
  Younger than 6 months: Safety and efficacy have not been established.
- **Neonates**
  Safety and efficacy have not been established.

Dosage Forms

- 12 hour allergy-D 5mg-120mg Extended-Release Tablet
- ALL DAY Allergy 10mg Tablet
- All Day Allergy Relief 10mg Softgel
- All Day Allergy-D 12 Hour 5mg-120mg Extended-Release Tablet
- Allergy Relief 24 Hour Relief 10mg Tablet
- Allergy Relief 24 Hour Relief 10mg Tablet
- Allergy Relief 24 Hour Relief 10mg Tablet
- Allergy Relief 24 Hour Relief 10mg Tablet
- Allergy Relief Nasal Decongestant 12 Hour 5mg-120mg Extended-Release Tablet
- CAREALL Allergy Relief 24 Hour Relief 10mg Tablet
- Cetirizine Hydrochloride 10mg Chewable tablet

- Cetirizine Hydrochloride 10mg Oral capsule, liquid filled
- Cetirizine Hydrochloride 10mg Oral tablet
- Cetirizine Hydrochloride 1mg/1mL Oral solution
- Cetirizine Hydrochloride 5mg Chewable tablet
- Cetirizine Hydrochloride 5mg Oral tablet
- Cetirizine Hydrochloride 5mg, Pseudoephedrine Hydrochloride 120mg Oral tablet, extended release 12 hour
- Cetirizine Hydrochloride 5mg/5mL Oral solution
- Children's 24 Hour Allergy 5mg/5mL Solution (Grape)
- Children's Allergy Relief 1mg/mL Solution (Grape)
- CVS Allergy Relief 10mg Tablet
- CVS Allergy Relief 1mg/mL Solution (Cherry)
- CVS Allergy Relief 24 Hour Indoor/Outdoor 10mg Softgel
- CVS Allergy Relief-D 12 Hour 5mg-120mg Extended-Release Tablet
- CVS Children's Allergy Relief 10mg Chewable Tablet
- CVS Children's Allergy Relief 10mg Chewable Tablet (Tutti Frutti)
- CVS Children's Allergy Relief 1mg/mL Solution (Bubblegum)
- CVS Children's Allergy Relief 1mg/ml Solution (Grape)
- CVS Children's Allergy Relief 5mg Chewable Tablet (Tutti-Frutti)
- CVS Children's Allergy Relief 5mg/5ml Solution (Bubblegum)
- CVS Children's Allergy Relief 5mg/5mL Solution (Cherry)
- CVS Children's Allergy Relief 5mg/5ml Solution (Grape)
- Equaline All Day Allergy Relief 10mg Tablet
- Equaline Children's All Day Allergy 5mg/5mL Solution (Grape)
- Equate Allergy Relief 10mg Tablet
- Equate Allergy Relief 1mg/mL Solution (Cherry)
- Equate Allergy Relief D 12 Hour 5mg-120mg Extended-Release Tablet
- Equate Allergy Relief Nasal Decongestant Tablets
- Equate Cetirizine Hydrochloride 1mg/mL Solution
- Equate Children's Cetirizine Hydrochloride 10mg Chewable Tablet (Tutti-Frutti)
- Equate Children's Cetirizine Hydrochloride 1mg/mL Solution (Bubble Gum)
- Equate Children's Cetirizine Hydrochloride 1mg/mL Solution (Grape)
- Foster & Thrive All Day Allergy Original Prescription Strength 10mg Tablet
- Foster & Thrive All Day Allergy-D 12 Hour 5mg-120mg Extended-Release Tablet
- Foster & Thrive All Day Allergy-D 5mg-120mg Extended-Release Tablet
- Foster & Thrive Allergy Relief 10mg Tablet
- Foster & Thrive Children's All Day Allergy 1mg/mL Solution (Grape)
- Foster & Thrive Children's Allergy Relief 24 Hour Indoor/Outdoor 1mg/mL Solution (Bubblegum)
- GNP All Day Allergy 10mg Tablet

- GNP All Day Allergy 10mg Tablet
- GNP All Day Allergy Relief 10mg Softgel
- GNP All Day Allergy-D 12 Hour 5mg-120mg Extended-Release Tablet
- GNP All Day Allergy-D 12 Hour 5mg-120mg Extended-Release Tablet
- GNP Children's All Day Allergy 5mg/5mL Solution
- GNP Children's All Day Allergy 5mg/5mL Solution
- GNP Children's All Day Allergy 5mg/5mL Solution (Bubble Gum)
- GNP Children's All Day Allergy 5mg/5mL Solution (Grape)
- GoodSense All Day Allergy 10mg Tablet
- GoodSense All Day Allergy Relief 10mg Tablet
- GoodSense All Day Allergy-D 12 Hour 5mg-120mg Extended-Release Tablet
- GoodSense Children's All Day Allergy 5mg/5mL Solution
- GoodSense Children's All Day Allergy 5mg/5mL Solution (Bubblegum)
- GoodSense Children's All Day Allergy 5mg/5mL Solution (Grape)
- HEB All Day Allergy Relief-D 5-120mg ER Tablet
- HEB Allergy Relief 10mg Tablet
- HEB Allergy Relief 1mg/mL Solution
- HEB Children's Allergy 1mg/mL Solution
- Kirkland ALLER-TEC 10mg Tablet
- Kirkland ALLER-TEC D 12 Hour 5mg-120mg Extended-Release Tablet
- Kirkland Children's ALLER-TEC 5mg/5mL Solution (Grape)
- Kroger All Day Allergy 10mg Tablet
- Kroger All Day Allergy-D 12 Hour 5mg-120mg Extended-Release Tablet
- Leader All Day Allergy 10mg Softgel
- Leader All Day Allergy 10mg Tablet
- Leader Allergy D-12 Hour 5mg-120mg Extended-Release Tablet
- Leader Allergy Relief D 12 Hour 5mg-120mg Extended-Release Tablet
- Leader Children's All Day Allergy 1mg/mL Oral Solution (Bubblegum)
- Leader Children's All Day Allergy 1mg/mL Oral Solution (Cherry)
- Leader Children's All Day Allergy 5mg/5ml Solution (Cherry)
- Leader Children's All Day Allergy 5mg/5ml Solution (Grape)
- Leader Children's Allergy Relief 5mg/5ml Solution (Bubblegum)
- Picnic Allergy Relief 10mg Tablet
- Premier Value All Day Allergy 10mg Softgel
- Premier Value Allergy & Congestion 12 Hour 5mg-120mg Extended-Release Tablet
- Premier Value Cetirizine Hydrochloride 10mg Tablet
- Premier Value Children's Cetirizine Hydrochloride 1mg/mL Solution
- Premier Value Children's Cetirizine Hydrochloride 1mg/mL Solution (Bubblegum)
- Premier Value Children's Cetirizine Hydrochloride 1mg/mL Solution (Grape)
- Publix Allergy Relief D 5mg-120mg Extended-Release Tablet

- Publix Children's Allergy 5mg/5ml Solution
- Publix Indoor Outdoor Allergy Relief 10mg Tablet
- Quality Choice All Day Allergy 10mg Tablet
- Quality Choice All Day Allergy Relief 10mg Softgel
- Quality Choice Allergy Relief 10mg Tablet
- Quzyttir 10mg/mL Solution for Injection
- RITE AID All Day Allergy 10mg Tablet
- RITE AID Allergy & Congestion Relief-D 12 Hour 5mg-120mg Extended-Release Tablet
- RITE AID Allergy Relief 10mg Tablet
- RITE AID Allergy Relief 24 Hour Indoor/Outdoor 10mg Softgel
- RITE AID Cetiri-D 12 Hour 5mg-120mg Extended-Release Tablet
- RITE AID Children's Allergy Relief 10mg Chewable Tablet (Tutti Frutti)
- RITE AID Children's Allergy Relief 1mg/1mL Solution (Bubblegum)
- RITE AID Children's Allergy Relief 1mg/mL Solution (Grape)
- RITE AID Children's Allergy Relief 5mg/5mL Solution (Grape
- RITE AID Children's Allergy Relief 5mg/5mL Solution (Grape)
- Timely 24Hr Allergy Relief 5mg Tablet
- Today's Health Cetirizine Hydrochloride Allergy 10mg Tablet
- Top Care All Day Allergy 10mg Tablet
- Top Care All Day Allergy-D 12 Hour 5mg-120mg Extended-Release Tablet
- Top Care Children's All Day Allergy 5mg/5ml Solution
- Top Care Children's All-Day Allergy 5mg/5mL Solution (Grape)
- TopCare All Day Allergy-D 12 Hour 5mg-120mg Extended-Release Tablet
- Topcare Children's Allergy Relief 1mg/mL Solution (Bubble Gum)
- Wal-Zyr 24 Hour Allergy 10mg Orally Disintegrating Tablet
- Wal-Zyr 24 Hour Allergy 10mg Orally Disintegrating Tablet
- Wal-Zyr 24 Hour Allergy 10mg Tablet
- Wal-Zyr 24 Hour Allergy Relief 10mg Softgel
- Wal-Zyr Children & Adults 1mg/mL Solution (Cherry)
- Wal-Zyr Children's 1mg/mL Oral Liquid (Grape)
- Wal-Zyr Children's Dye-Free & Sugar-Free 24-Hour Allergy Solution (Grape)
- Wal-Zyr Children's Dye-Free 24-Hour Allergy Solution (Bubble Gum)
- Wal-Zyr D 12 Hour Allergy & Congestion Extended-Release Tablet
- Walgreens Children's Allergy Relief 1mg/1mL Solution (Bubblegum)
- Walgreens Allergy Relief 24 Hour 10mg Orally Disintegrating Tablet (Orange)
- Walgreens Allergy Relief 24 Hour 10mg Softgel
- Walgreens Allergy Relief D12 5mg-120mg Extended-Release Tablet
- Walgreens Children's 24 Hour Allergy 5mg/5mL Solution (Grape)
- Walgreens Children's Allergy Relief 1mg/mL Solution (Bubblegum)

- Walgreens Children's Allergy Relief 1mg/mL Solution (Grape)
- Walgreens Children's Allergy Relief 24 Hour 10mg Orally Disintegrating Tablet (Orange)
- ZERVIATE 0.24% Ophthalmic Solution
- Zyrtec 10mg Liquid Gel Capsule
- ZYRTEC 10mg Tablet
- ZYRTEC 10mg Tablet
- Zyrtec Children's 10mg Chewable Tablet (Citrus)
- Zyrtec Children's Allergy 10mg Orally Disintegrating Tablet (Citrus)
- Zyrtec Children's Allergy 10mg Orally Disintegrating Tablet (Citrus)
- Zyrtec Children's Allergy 1mg/mL Syrup (Bubblegum)
- Zyrtec Children's Allergy 1mg/mL Syrup (Grape)
- ZYRTEC Children's Dye-Free 10mg Chewable Tablet (Grape)
- ZYRTEC Children's Dye-Free 2.5mg Chewable Tablet (Grape)
- ZYRTEC Dye-Free 10mg Chewable Tablet (Grape)
- Zyrtec-D Allergy + Congestion 12 Hour 5mg-120mg Extended-Release Tablet
- Zyrtec-D Allergy + Sinus 12 Hour 5mg-120mg Extended-Release Tablet

Dosage Adjustment Guidelines

Hepatic Impairment

Oral Dosage forms
Adults, adolescents, and children 6 years and older: A dose of 5 mg PO once daily is recommended.
Children less than 6 years: Use is not recommended due to lack of data in hepatically-impaired pediatric patients in this age group.

Intravenous Injection
No dosage adjustment is required in patients with hepatic impairment; however these patients should be monitored for antihistaminic side effects.

Renal Impairment

Oral Dosage Forms
FDA-approved recommendations for patients with renal impairment :
Adults, Adolescents, and Children 6 years and older:
CrCl more than 31 mL/minute: No dosage adjustment needed.
CrCl 31 mL/minute or less: A dose of 5 mg PO once daily is recommended.
Children less than 6 years: Use not recommended due to a lack of data.

Alternative recommendations for pediatric patients with renal impairment :

CrCl 30 mL/minute/1.73 m2 or more: No dosage adjustment needed.
CrCl 10 to 29 mL/minute/1.73 m2: Administer 50% of the usual dosage.
CrCl less than 10 mL/minute/1.73 m2: Not recommended.

Intravenous Injection
No dosage adjustment is required in patients with moderate and severe renal impairment; however these patients should be monitored for antihistaminic side effects.

Intermittent hemodialysis
Oral Dosage Forms: Follow dosage recommendations as for CrCl 31 mL/minute or less; cetirizine is not removed by hemodialysis.
Intravenous Injection: No dosage adjustment is required.