Brand Names

Dramamine, Dramamine Motion Sickness Relief, Driminate, Travel Sickness, TripTone

Indication Specific Dosing

For the treatment of motion sickness

Oral dosage

Adults

50 to 100 mg PO every 4 to 6 hours as needed. Max: 400 mg/day.

Children and Adolescents 12 to 17 years

50 to 100 mg PO every 4 to 6 hours as needed. Max: 400 mg/day.

Children 6 to 11 years

25 to 50 mg PO every 6 to 8 hours as needed. Max: 150 mg/day.

Children 2 to 5 years

12.5 to 25 mg PO every 6 to 8 hours as needed. Max: 75 mg/day.

Intravenous or Intramuscular dosage

Adults

50 mg IV or IM every 4 hours as needed. If needed and tolerated, 100 mg IV or IM every 4 hours may be given if drowsiness is not objectionable or is even desirable. Usual Max: 400 mg/day.

Children and Adolescents 2 to 17 years

1.25 mg/kg/dose or 37.5 mg/m2/dose IM 4 times daily as needed. Max: 300 mg/day.

For motion sickness prophylaxis

Oral dosage

Adults

50 mg PO 30 to 60 minutes before starting the activity, then 50 to 100 mg PO every 4 to 6 hours as needed. Max: 400 mg/day.

Children and Adolescents 12 to 17 years

50 mg PO 30 to 60 minutes before starting the activity, then 50 to 100 mg PO every 4 to 6 hours as needed. Max: 400 mg/day.

Children 6 to 11 years

25 to 50 mg PO 30 to 60 minutes before starting the activity, then 25 to 50 mg PO every 6 to 8 hours as needed. Max: 150 mg/day.

Children 2 to 5 years

12.5 to 25 mg PO 30 to 60 minutes before starting the activity, then 12.5 to 25 mg PO every 6 to 8 hours as needed. Max: 75 mg/day.

Intravenous or Intramuscular dosage

Adults

50 mg IV or IM every 4 hours as needed. If needed and tolerated, 100 mg IV or IM every 4 hours may be given if drowsiness is not objectionable or is even desirable. Usual Max: 400 mg/day.

Children and Adolescents 2 to 17 years

1.25 mg/kg/dose or 37.5 mg/m2/dose IM 4 times daily as needed. Max: 300 mg/day.

For the treatment of vertigo† and nausea† associated with Meniere disease

Oral dosage

Adults

25 to 50 mg PO every 6 hours as needed.

For the treatment of pregnancy-induced nausea/vomiting†

Oral dosage

Adults

25 to 50 mg PO every 4 to 6 hours as needed. Max: 400 mg/day; limit to 200 mg/day if used concomitantly with doxylamine.

Intravenous dosage

Adults

50 mg IV every 4 to 6 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. Dimenhydrinate is a first-generation antihistamine of the ethanolamine class. Allergies to one antihistamine can sometimes lead to cross-reactivity with other chemically-related antihistamines. Patients with a history of hypersensitivity to the components of dimenhydrinate (diphenhydramine or 8-chlorotheophylline) should not be treated with dimenhydrinate.

activities requiring coordination and concentration, driving or operating machinery

Dimenhydrinate can cause drowsiness. Advise individuals receiving dimenhydrinate to avoid driving or operating machinery and activities requiring coordination and concentration until the effects of the drug are known. The use of alcohol or other CNS depressants with dimenhydrinate may increase drowsiness.

asthma, chronic obstructive pulmonary disease

Use dimenhydrinate nonprescription products with caution in people with chronic obstructive pulmonary disease (COPD), including emphysema or chronic bronchitis. The anticholinergic activity of dimenhydrinate may result in thickened bronchial secretions in the respiratory tract, thereby aggravating COPD. The prescription-only products advise using dimenhydrinate with caution in people with bronchial asthma.

bladder obstruction, prostatic hypertrophy

Due to the anticholinergic effects which may aggravate urinary retention, dimenhydrinate should be used with caution in people with trouble urinating due to prostatic hypertrophy. The injection should additionally be used with caution in people who have bladder neck obstruction (bladder obstruction).

glaucoma

Dimenhydrinate should be used with caution in people with glaucoma, as an increase in intraocular pressure may occur from the anticholinergic actions of the medication.

cardiac arrhythmias

Dimenhydrinate injection should be used with caution in people with cardiac arrhythmias. The anticholinergic effects of dimenhydrinate could aggravate these conditions.

gastric outlet obstruction

Due to the anticholinergic effects, dimenhydrinate injection should be used with caution in people having conditions which might be aggravated by the anticholinergic actions, including gastric outlet obstruction (including stenosing peptic ulcer or pyloroduodenal obstruction).

phenylketonuria

Some formulations of dimenhydrinate chewable tablets may contain aspartame, a source of phenylalanine. Check inactive ingredient labels if dimenhydrinate is used in individuals with phenylketonuria.

neonates, premature neonates

Dimenhydrinate injection is contraindicated for use in neonates. Dimenhydrinate injection contains benzyl alcohol as a preservative. Benzyl alcohol has been associated with a fatal toxic (gasping) syndrome, particularly in premature neonates and low-birth weight infants.

geriatric

Dimenhydrinate has significant anticholinergic effects that are additive with other anticholinergic medications in any population, and particularly in the older adult. The Beers Criteria identifies first-generation antihistamines, such as dimenhydrinate, as potentially inappropriate medications (PIMs) for geriatric adults, recommending their avoidance due to their high anticholinergic properties, decreased clearance in older age, the development of tolerance when used as sleep aids, and an increased risk of anticholinergic effects and toxicity compared to younger individuals. These medications should particularly be avoided in patients with dementia or cognitive impairment (due to adverse CNS effects), those at high risk for delirium (which can worsen or trigger new-onset delirium), and men with lower urinary tract symptoms or benign prostatic hyperplasia (due to risks of urinary retention or hesitancy).

labor, obstetric delivery, pregnancy

There are no adequate and well-controlled studies of dimenhydrinate during pregnancy. However, studies of dimenhydrinate during pregnancy have not indicated an association with fetal abnormalities, regardless of the trimester of use. Animal studies indicate that the possibility of fetal harm is remote. Dimenhydrinate has been used to treat nausea and vomiting during pregnancy, but such use should occur under the advice and supervision of a qualified health care professional. The risks of using dimenhydrinate in pregnancy appear to be low, and the American College of Obstetrics and Gynecology (ACOG) guidelines and opinions allow for use as a second-line pharmacologic option in treatment algorithms for nausea/vomiting during pregnancy; nonpharmacologic options and pyridoxine taken alone or in combination with doxylamine are first-line options. Caution is advised in the use of dimenhydrinate during labor or obstetric delivery. Safety and efficacy of dimenhydrinate in these settings have not been established. Injectable dimenhydrinate has been reported to have an oxytocic effect. In select cases, when used without consideration of this effect, use may be deleterious, causing uterine hyperstimulation and fetal distress.

breast-feeding

Use dimenhydrinate with caution during breast-feeding. Small amounts of

dimenhydrinate are excreted in human milk. Consider the benefits of breast-feeding, the risk of potential infant drug exposure, and the risk of an untreated or inadequately treated maternal condition. Occasional doses during breast-feeding should not pose a risk; however, prolonged use or larger doses of antihistamine-type drugs may cause effects in the infant (e.g., drowsiness), or may decrease milk production. Pregnant individuals should consult their care team before using nonprescription (OTC) dimenhydrinate products.

Pregnancy And Lactation

Use dimenhydrinate with caution during breast-feeding. Small amounts of dimenhydrinate are excreted in human milk. Consider the benefits of breast-feeding, the risk of potential infant drug exposure, and the risk of an untreated or inadequately treated maternal condition. Occasional doses during breast-feeding should not pose a risk; however, prolonged use or larger doses of antihistamine-type drugs may cause effects in the infant (e.g., drowsiness), or may decrease milk production. Pregnant individuals should consult their care team before using nonprescription (OTC) dimenhydrinate products.

Interactions

Acetaminophen; Caffeine; Dihydrocodeine: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
Acetaminophen; Codeine: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
Acetaminophen; HYDROcodone: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
Acetaminophen; oxyCODONE: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid

pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
ALFentanil: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
Alosetron: (Moderate) Alosetron, if combined with drugs that possess anticholinergic properties like sedating H1 blockers, may seriously worsen constipation, leading to events such as GI obstruction/impaction or paralytic ileus.
ALPRAZolam: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.
Amantadine: (Moderate) Medications with significant anticholinergic activity may potentiate the anticholinergic effects of amantadine, and may increase the risk of antimuscarinic-related side effects. Additive drowsiness may also occur.
Amikacin: (Minor) Dimenhydrinate and other antiemetics should be used carefully with aminoglycosides because they can mask symptoms of ototoxicity, including nausea secondary to vertigo.
Aminoglycosides: (Minor) Dimenhydrinate and other antiemetics should be used carefully with aminoglycosides because they can mask symptoms of ototoxicity, including nausea secondary to vertigo.
Amitriptyline: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
Amivantamab; Hyaluronidase: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.
Amobarbital: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate.
Amoxapine: (Moderate) Additive anticholinergic effects may be seen when amoxapine is used concomitantly with drugs are known to possess relatively significant antimuscarinic properties, including sedating H1-blockers. Antimuscarinic effects might be seen not only on GI smooth muscle, but also on bladder function, the eye, and temperature Additive sedation may also occur.
Amphetamine: (Moderate) Amphetamines may pharmacodynamically counteract the sedative properties of some antihistamines, such as the sedating H1-blockers (i.e.,

diphenhydramine). This effect may be clinically important if a patient is receiving an antihistamine agent for treatment of insomnia. Alternatively, if a patient is receiving an amphetamine for treatment of narcolepsy, the combination with a sedating antihistamine may reverse the action of the amphetamine.
Amphetamine; Dextroamphetamine Salts: (Moderate) Amphetamines may pharmacodynamically counteract the sedative properties of some antihistamines, such as the sedating H1-blockers (i.e., diphenhydramine). This effect may be clinically important if a patient is receiving an antihistamine agent for treatment of insomnia. Alternatively, if a patient is receiving an amphetamine for treatment of narcolepsy, the combination with a sedating antihistamine may reverse the action of the amphetamine.
Amphetamine; Dextroamphetamine: (Moderate) Amphetamines may pharmacodynamically counteract the sedative properties of some antihistamines, such as the sedating H1-blockers (i.e., diphenhydramine). This effect may be clinically important if a patient is receiving an antihistamine agent for treatment of insomnia. Alternatively, if a patient is receiving an amphetamine for treatment of narcolepsy, the combination with a sedating antihistamine may reverse the action of the amphetamine.
Apomorphine: (Moderate) Apomorphine causes significant somnolence. Concomitant administration of apomorphine and dimenhydrinate could result in additive depressant effects. Careful monitoring is recommended during combined use. A dose reduction of one or both drugs may be warranted.
ARIPiprazole: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of dimenhydrinate and aripiprazole due to the risk for additive CNS depression.
Asenapine: (Moderate) Using drugs that can cause CNS depression, such as sedating H1-blockers, concomitantly with asenapine may increase both the frequency and the intensity of adverse effects such as drowsiness, sedation, and dizziness.
Aspirin, ASA; Butalbital; Caffeine: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate.
Aspirin, ASA; Caffeine; Orphenadrine: (Moderate) Additive anticholinergic effects may be seen when drugs with anticholinergic properties, like sedating H1-blockers and orphenadrine, are used concomitantly. Adverse effects may be seen not only on GI smooth muscle, but also on bladder function, the CNS, the eye, and temperature regulation. Additive drowsiness may also occur.
Aspirin, ASA; Carisoprodol; Codeine: (Moderate) Carisoprodol is metabolized to meprobamate, a significant CNS depressant. Carisoprodol can cause additive CNS depression if used concomitantly with other CNS depressants. Additive effects of sedation and dizziness, which can impair the ability to undertake tasks requiring mental alertness, may occur if carisoprodol is taken with sedating H1-blockers. Utilize appropriate caution if carisoprodol is coadministered with another CNS depressant.
(Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause

excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Aspirin, ASA; oxyCODONE: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Atezolizumab; Hyaluronidase: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.

Atropine: (Moderate) Monitor for unusual drowsiness or excess sedation and for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and atropine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects.

Atropine; Difenoxin: (Moderate) An enhanced CNS depressant effect may occur when diphenoxylate/difenoxin is combined with other CNS depressants.

Diphenoxylate/difenoxin decreases GI motility. Other drugs that also decrease GI motility, such as sedating H1 blockers, may produce additive effects with diphenoxylate/difenoxin if used concomitantly. (Moderate) Monitor for unusual drowsiness or excess sedation and for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and atropine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects.

Azelastine: (Major) Avoid concomitant use of azelastine and sedating H1-blockers due to risk for additive CNS depression.

Azelastine; Fluticasone: (Major) Avoid concomitant use of azelastine and sedating H1-blockers due to risk for additive CNS depression.

Baclofen: (Moderate) An enhanced CNS depressant effect may occur when sedating H1-blockers are combined with other CNS depressants including skeletal muscle relaxants, such as baclofen.

Barbiturates: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate.

Belladonna; Opium: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect. (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant

sedating H1-blocker and belladonna use. Concomitant use may result in additive anticholinergic adverse effects.

Benzgalantamine: (Moderate) Concurrent use of sedating H1-blockers and galantamine should be avoided if possible. Galantamine inhibits acetylcholinesterase, the enzyme responsible for the degradation of acetylcholine, and improves the availability of acetylcholine. Sedating H1-blockers may exhibit significant anticholinergic activity, thereby interfering with the therapeutic effect of galantamine.

Benzhydrocodone; Acetaminophen: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Benzodiazepines: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.

Benzoic Acid; Hyoscyamine; Methenamine; Methylene Blue; Phenyl Salicylate: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and hyoscyamine use. Concomitant use may result in additive anticholinergic adverse effects.

Benzphetamine: (Moderate) Amphetamines may pharmacodynamically counteract the sedative properties of some antihistamines, such as the sedating H1-blockers. This effect may be clinically important if a patient is receiving an antihistamine agent for treatment of insomnia. Alternatively, if a patient is receiving an amphetamine for treatment of narcolepsy, the combination with a sedating antihistamine may reverse the action of the amphetamine.

Benztropine: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and benztropine use. Concomitant use may result in additive anticholinergic adverse effects.

Budesonide; Glycopyrrolate; Formoterol: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and glycopyrrolate use. Concomitant use may result in additive anticholinergic adverse effects.

Buprenorphine: (Major) Reserve concomitant prescribing of buprenorphine and dimenhydrinate for use in 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. Gradually tapering a patient off other CNS depressants or decreasing to the lowest effective dose is preferred in most cases of patients being treated for opioid use disorder. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose. Also monitor for signs of urinary retention or reduced gastric motility during concomitant use. 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 prescribing of buprenorphine and dimenhydrinate for use in 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. Gradually tapering a patient off other CNS depressants or decreasing to the lowest effective dose is preferred in most cases of patients being treated for opioid use disorder. If concomitant use is necessary, consider prescribing naloxone for the emergency treatment of opioid overdose. Also monitor for signs of urinary retention or reduced gastric motility during concomitant use. 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) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate.

Butalbital; Acetaminophen; Caffeine: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate.

Butalbital; Acetaminophen; Caffeine; Codeine: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate. (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Butalbital; Aspirin; Caffeine; Codeine: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate. (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Butorphanol: (Moderate) Concomitant use of butorphanol with sedating H1-blockers can potentiate the effects of butorphanol on CNS and/or respiratory depression. Use together with caution. If a CNS depressant needs to be used with butorphanol, use the smallest effective dose and the longest dosing frequency of butorphanol.

Cannabidiol: (Moderate) Monitor for excessive sedation and somnolence during coadministration of cannabidiol and sedating H1-blockers. CNS depressants can potentiate the effects of cannabidiol.

Capsaicin; Metaxalone: (Moderate) Concomitant administration of metaxalone with other CNS depressants can potentiate the sedative effects of either agent.

Carbidopa; Levodopa; Entacapone: (Moderate) COMT inhibitors should be given cautiously with other agents that cause CNS depression, including sedating H1-blockers, due to the possibility of additive sedation. 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.

Carisoprodol: (Moderate) Carisoprodol is metabolized to meprobamate, a significant CNS depressant. Carisoprodol can cause additive CNS depression if used concomitantly with other CNS depressants. Additive effects of sedation and dizziness, which can impair the ability to undertake tasks requiring mental alertness, may occur if carisoprodol is taken with sedating H1-blockers. Utilize appropriate caution if carisoprodol is coadministered with another CNS depressant.

Celecoxib; Tramadol: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Cenobamate: (Moderate) Monitor for excessive sedation and somnolence during coadministration of cenobamate and sedating H1-blockers. Concurrent use may result in additive CNS depression.

Cetirizine: (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.

Cetirizine; 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.

chlordiazePOXIDE: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.

chlordiazePOXIDE; Amitriptyline: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination. (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.

chlordiazePOXIDE; Clidinium: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.

Chlorpheniramine; Codeine: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Chlorpheniramine; HYDROcodone: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

chlorproMAZINE: (Moderate) Additive anticholinergic and sedative effects may be seen when chlorpromazine is used with first generation antihistamines, such as dimenhydrinate. Patients should be informed to read non-prescription motion sickness, allergy, sleep, and cough and cold product labels carefully for additional interacting antihistamines.

Chlorzoxazone: (Moderate) Additive CNS depression is possible if chlorzoxazone is used concomitantly with other CNS depressants including sedating H1-blockers. Additive effects of sedation and dizziness can occur, which can impair the ability to undertake tasks requiring mental alertness. Dosage adjustments of one or both medications may be necessary.

cloBAZam: (Moderate) Clobazam, a benzodiazepine, may cause drowsiness or other CNS effects. Additive drowsiness may occur when clobazam is combined with CNS depressants such as sedating H1-blockers. In addition, caution is recommended when administering clobazam with medications extensively metabolized by CYP2D6 such as diphenhydramine because clobazam has been shown to inhibit CYP2D6 in vivo and may increase concentrations of drugs metabolized by this enzyme.

clomiPRAMINE: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.

clonazePAM: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.

Clorazepate: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.

cloZAPine: (Moderate) Clozapine exhibits clinically significant anticholinergic effects and sedation that may be additive with other medications that may cause anticholinergic effects and sedation, including antihistamines such as dimenhydrinate. Patients should

be informed to read non-prescription cough and cold product labels carefully for additional interacting antihistamines and to avoid tasks requiring mental alertness until they are aware of the effects of the combination.

Codeine: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Codeine; Dexbrompheniramine: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Codeine; guaiFENesin: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Codeine; guaiFENesin; Pseudoephedrine: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Codeine; Phenylephrine; Promethazine: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect. (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of diphenhydramine and promethazine. Concomitant use may result in additive CNS depression or anticholinergic effects.

Codeine; Promethazine: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect. (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of diphenhydramine and promethazine. Concomitant use may result in additive CNS depression or anticholinergic effects.

COMT inhibitors: (Moderate) COMT inhibitors should be given cautiously with other agents that cause CNS depression, including sedating H1-blockers, due to the possibility of additive sedation. 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 or excess sedation and for signs or symptoms of anticholinergic toxicity during concomitant dimenhydrinate and cyclobenzaprine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects.
Dantrolene: (Moderate) Because sedating H1-blockers cause sedation, an enhanced CNS depressant effect (e.g., drowsiness) may occur when dantrolene is combined with other CNS depressants.
Daratumumab; Hyaluronidase: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.
Desflurane: (Minor) Because sedating H1-blockers cause sedation, an enhanced CNS depressant effect may occur when they are combined with general anesthetics.
Desipramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate 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) Advise patients that concurrent use of deutetrabenazine and drugs that can cause CNS depression, such as dimenhydrinate, may have additive effects and worsen drowsiness or sedation.
dexmedeTOMIDine: (Moderate) Consider a dosage reduction for dexmedetomidine or the sedating antihistamine during concomitant use due to the risk of additive CNS effects.
Dextroamphetamine: (Moderate) Amphetamines may pharmacodynamically counteract

the sedative properties of some antihistamines, such as the sedating H1-blockers (i.e., diphenhydramine). This effect may be clinically important if a patient is receiving an antihistamine agent for treatment of insomnia. Alternatively, if a patient is receiving an amphetamine for treatment of narcolepsy, the combination with a sedating antihistamine may reverse the action of the amphetamine.

diazePAM: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.

Dicyclomine: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker 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.

Digoxin: (Moderate) Patients receiving oral digoxin therapy should be monitored for increased digoxin effects when receiving drugs with substantial anticholinergic activity. Dimenhydrinate can theoretically increase the absorption of digoxin by decreasing gastrointestinal motility. Anticholinergics, because of their ability to cause tachycardia, can also antagonize the beneficial actions of digoxin in atrial fibrillation/flutter.

Diphenoxylate; Atropine: (Moderate) An enhanced CNS depressant effect may occur when diphenoxylate/difenoxin is combined with other CNS depressants. Diphenoxylate/difenoxin decreases GI motility. Other drugs that also decrease GI motility, such as sedating H1 blockers, may produce additive effects with diphenoxylate/difenoxin if used concomitantly. (Moderate) Monitor for unusual drowsiness or excess sedation and for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and atropine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects.

Disopyramide: (Moderate) The anticholinergic effects of sedating H1-blockers may be enhanced when combined with other drugs with moderate to significant anticholinergic effects including disopyramide. Clinicians should note that antimuscarinic effects might be seen not only on GI smooth muscle, but also on bladder function, the eye, and temperature regulation.

Donepezil: (Moderate) Concurrent use of sedating H1-blockers and donepezil should be avoided if possible. Donepezil inhibits acetylcholinesterase, the enzyme responsible for the degradation of acetylcholine, and improves the availability of acetylcholine. Sedating H1-blockers may exhibit significant anticholinergic activity, thereby interfering with the therapeutic effect of donepezil.

Donepezil; Memantine: (Moderate) Concurrent use of sedating H1-blockers and donepezil should be avoided if possible. Donepezil inhibits acetylcholinesterase, the enzyme responsible for the degradation of acetylcholine, and improves the availability of acetylcholine. Sedating H1-blockers may exhibit significant anticholinergic activity,

thereby interfering with the therapeutic effect of donepezil.
Doxepin: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
droNABinol: (Moderate) Use caution if coadministration of dronabinol with antihistamines is necessary. Concurrent use of dronabinol, THC with antihistamines may result in additive drowsiness, hypertension, tachycardia, and possibly cardiotoxicity.
droPERidol: (Moderate) Sedating H1-blockers have additive or potentiating sedative and other CNS effects with droperidol. Following administration of droperidol, lower doses of the other CNS depressant may need to be used.
Efgartigimod Alfa; Hyaluronidase: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.
Entacapone: (Moderate) COMT inhibitors should be given cautiously with other agents that cause CNS depression, including sedating H1-blockers, due to the possibility of additive sedation. 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 dimenhydrinate 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) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.
Eszopiclone: (Moderate) A reduction in the dose of eszopiclone and concomitantly administered CNS depressants, such as sedating H1-blockers, should be considered to minimize additive sedative effects. In addition, the risk of next-day psychomotor impairment is increased during co-administration of eszopiclone and other CNS depressants, which may decrease the ability to perform tasks requiring full mental alertness such as driving.
Ethanol: (Major) Advise patients to avoid alcohol consumption while taking CNS depressants. Alcohol consumption may result in additive CNS depression.
Etomidate: (Minor) Because sedating H1-blockers cause sedation, an enhanced CNS depressant effect may occur when they are combined with general anesthetics.
Fenfluramine: (Moderate) Monitor for excessive sedation and somnolence during

coadministration of fenfluramine and dimenhydrinate. Concurrent use may result in additive CNS depression.

fentaNYL: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

flavoxATE: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and flavoxate use. Concomitant use may result in additive anticholinergic adverse effects.

Flibanserin: (Moderate) The concomitant use of flibanserin with CNS depressants, such as sedating H1-blockers, may increase the risk of CNS depression (e.g., dizziness, somnolence) compared to the use of flibanserin alone. Patients should avoid activities requiring full alertness (e.g., operating machinery or driving) until at least 6 hours after each dose and until they know how flibanserin affects them.

fluPHENAZine: (Moderate) Additive sedative effects may be seen when fluphenazine is used with first generation antihistamines, such as dimenhydrinate. Patients should be informed to read non-prescription motion sickness, allergy, sleep, and cough and cold product labels carefully for additional interacting antihistamines.

Flurazepam: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.

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 excessive sedation and somnolence during coadministration of dimenhydrinate and gabapentin. Concurrent use may result in additive CNS depression.

Galantamine: (Moderate) Concurrent use of sedating H1-blockers and galantamine should be avoided if possible. Galantamine inhibits acetylcholinesterase, the enzyme responsible for the degradation of acetylcholine, and improves the availability of acetylcholine. Sedating H1-blockers may exhibit significant anticholinergic activity, thereby interfering with the therapeutic effect of galantamine.

Gentamicin: (Minor) Dimenhydrinate and other antiemetics should be used carefully with aminoglycosides because they can mask symptoms of ototoxicity, including nausea secondary to vertigo.

Glycopyrrolate: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker 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 sedating H1-blocker and glycopyrrolate use. Concomitant use may result in additive anticholinergic adverse effects.

Halogenated Anesthetics: (Minor) Because sedating H1-blockers cause sedation, an enhanced CNS depressant effect may occur when they are combined with general anesthetics.
Haloperidol: (Moderate) Haloperidol can potentiate the actions of other CNS depressants such as the sedating H1-blockers. Additive anticholinergic effects may occur. Clinicians should note that antimuscarinic effects may be seen not only on GI smooth muscle, but also on bladder function, the eye, and temperature regulation. Additive drowsiness or CNS effects may also occur.
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.
Homatropine; HYDROcodone: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
(Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and homatropine use. Concomitant use may result in additive anticholinergic adverse effects.
Hyaluronidase, Recombinant; Immune Globulin: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.
Hyaluronidase: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.
HYDROcodone: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
HYDROcodone; Ibuprofen: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
HYDROmorphone: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication

with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
Hyoscyamine: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker 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 sedating H1-blocker and hyoscyamine use. Concomitant use may result in additive anticholinergic adverse effects.
Iloperidone: (Moderate) Drugs that can cause CNS depression, if used concomitantly with iloperidone, may increase both the frequency and the intensity of adverse effects such as drowsiness, sedation, and dizziness. Caution should be used when iloperidone is given in combination with other centrally-acting medications, such as sedating H1-blockers.
Imipramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate 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 sedating H1-blocker and glycopyrrolate use. Concomitant use may result in additive anticholinergic adverse effects.
Isocarboxazid: (Contraindicated) Concomitant use of monoamine oxidase inhibitors and sedating H1-blockers is contraindicated due to increased anticholinergic effects.
Isoflurane: (Minor) Because sedating H1-blockers cause sedation, an enhanced CNS depressant effect may occur when they are combined with general anesthetics.
Ketamine: (Minor) Because sedating H1-blockers cause sedation, an enhanced CNS depressant effect may occur when they are combined with general anesthetics.
Lasmiditan: (Moderate) Monitor for excessive sedation and somnolence during coadministration of lasmiditan and sedating H1-blockers. Concurrent use may result in additive CNS depression.
Lemborexant: (Moderate) Monitor for excessive sedation and somnolence during coadministration of lemborexant and sedating antihistamines (H1-blockers). Dosage adjustments of lemborexant and sedating H1-blockers 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. Patients should generally avoid nonprescription antihistamine products that are marketed as sleep-aids concurrently with lemborexant.
Levocetirizine: (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.

Levorphanol: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Lofexidine: (Moderate) Monitor for excessive hypotension and sedation during coadministration of lofexidine and dimenhydrinate. Lofexidine can potentiate the effects of CNS depressants.

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) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.

Loxapine: (Moderate) Sedating H1-blockers are associated with anticholinergic effects and sedation; therefore, additive effects may be seen during concurrent use with other drugs having anticholinergic activity and CNS depressant properties such as traditional antipsychotic agents, including loxapine. Clinicians should note that antimuscarinic effects may be seen not only on GI smooth muscle, but also on bladder function, the eye, and temperature regulation. Additive drowsiness or other CNS effects may also occur.

Lumateperone: (Moderate) Monitor for excessive sedation and somnolence during coadministration of lumateperone and dimenhydrinate. Concurrent use may result in additive CNS depression.

Lurasidone: (Moderate) Due to the CNS effects of lurasidone, caution should be used when lurasidone is given in combination with other centrally acting medications. Sedating H1-blockers are associated with sedation; therefore, additive effects may be seen during concurrent use with other drugs having CNS depressant properties such as antipsychotics. Additive drowsiness or other CNS effects may occur.

Maprotiline: (Moderate) Additive anticholinergic effects may be seen when maprotiline is used concomitantly with other commonly used drugs with moderate to significant anticholinergic effects including sedating h1-blockers.

Meclizine: (Major) Meclizine is an H1-blocker which exhibits significant anticholinergic effects. The anticholinergic effects of meclizine may be enhanced when combined with

other drugs with antimuscarinic activity, including other sedating H1-blockers. Clinicians should note that antimuscarinic effects might be seen not only on GI smooth muscle, but also on bladder function, the eye, and temperature regulation. Additive sedation may also occur.

Melatonin: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of melatonin and sedating H1-blockers due to the risk for additive CNS depression.

Meperidine: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Meprobamate: (Moderate) The CNS-depressant effects of meprobamate can be potentiated with concomitant administration of other drugs known to cause CNS depression including sedating H1-blockers.

Metaxalone: (Moderate) Concomitant administration of metaxalone with other CNS depressants can potentiate the sedative effects of either agent.

Methadone: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Methamphetamine: (Moderate) Amphetamines may pharmacodynamically counteract the sedative properties of sedating H1-blockers. This effect may be clinically important if a patient is receiving an antihistamine agent for treatment of insomnia. Alternatively, if a patient is receiving an amphetamine for treatment of narcolepsy, the combination with a sedating antihistamine may reverse the action of the amphetamine. Coadminister with caution and monitor for altered response to drug therapy.

Methenamine; Sodium Acid Phosphate; Methylene Blue; Hyoscyamine: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and hyoscyamine use. Concomitant use may result in additive anticholinergic adverse effects.

Methocarbamol: (Moderate) Methocarbamol may cause additive CNS depression if used concomitantly with other CNS depressants such as sedating H1-blockers. Combination therapy can cause additive effects of sedation and dizziness, which can impair the patient's ability to undertake tasks requiring mental alertness. Dosage adjustments of either or both medications may be necessary.

Methohexital: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate.

Methscopolamine: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity

during concomitant sedating H1-blocker and methscopolamine use. Concomitant use may result in additive anticholinergic adverse effects.
Metoclopramide: (Minor) Combined use of metoclopramide and other CNS depressants, such as anxiolytics, sedatives, and hypnotics, can increase possible sedation.
metyraPONE: (Moderate) Metyrapone may cause dizziness and/or drowsiness. Other drugs that may also cause drowsiness, such as sedating H1-blockers, should be used with caution. Additive drowsiness and/or dizziness is possible.
metyroSINE: (Moderate) The concomitant administration of metyrosine with sedating H1-blockers can result in additive sedative effects.
Midazolam: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.
Minocycline: (Minor) Injectable minocycline contains magnesium sulfate heptahydrate. Because of the CNS-depressant effects of magnesium sulfate, additive central-depressant effects can occur following concurrent administration with CNS depressants, such as sedating H1-blockers. Caution should be exercised when using these agents concurrently.
Mirtazapine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of dimenhydrinate and mirtazapine due to the risk for additive CNS depression.
Mitotane: (Moderate) Mitotane can cause sedation, lethargy, vertigo, and other CNS side effects. Concomitant administration of mitotane and CNS depressants, including sedating h1-blockers, may cause additive CNS effects.
Molindone: (Moderate) An enhanced CNS depressant effect may occur when sedating h1-blockers are combined with other CNS depressants including molindone.
Monoamine oxidase inhibitors: (Contraindicated) Concomitant use of monoamine oxidase inhibitors and sedating H1-blockers is contraindicated due to increased anticholinergic effects.
Morphine: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
Nalbuphine: (Moderate) Concomitant use of nalbuphine with other CNS depressants, such as sedating H1-blockers, can potentiate the effects of nalbuphine on respiratory depression, CNS depression, and sedation.
Nefazodone: (Moderate) An enhanced CNS depressant effect may occur when sedating H1-blockers are combined with other CNS depressants including nefazodone.
Neostigmine; Glycopyrrolate: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and glycopyrrolate use. Concomitant use may result in additive anticholinergic adverse effects.

Nivolumab; Hyaluronidase: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.

Nortriptyline: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.

Ocrelizumab; Hyaluronidase: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.

OLANZapine: (Moderate) Olanzapine exhibits anticholinergic effects that may be clinically significant. Clinicians should keep this in mind when using antimuscarinics and other medications with anticholinergic activity in combination with olanzapine. Some medications exhibit additive anticholinergic effects include sedating H1-blockers. Olanzapine may also cause additive sedation with many of these drugs.

OLANZapine; FLUoxetine: (Moderate) Olanzapine exhibits anticholinergic effects that may be clinically significant. Clinicians should keep this in mind when using antimuscarinics and other medications with anticholinergic activity in combination with olanzapine. Some medications exhibit additive anticholinergic effects include sedating H1-blockers. Olanzapine may also cause additive sedation with many of these drugs.

OLANZapine; Samidorphan: (Moderate) Olanzapine exhibits anticholinergic effects that may be clinically significant. Clinicians should keep this in mind when using antimuscarinics and other medications with anticholinergic activity in combination with olanzapine. Some medications exhibit additive anticholinergic effects include sedating H1-blockers. Olanzapine may also cause additive sedation with many of these drugs.

Oliceridine: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Opiate Agonists: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Opicapone: (Moderate) COMT inhibitors should be given cautiously with other agents that cause CNS depression, including sedating H1-blockers, due to the possibility of additive sedation. 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) Additive anticholinergic effects may be seen when drugs with anticholinergic properties, like sedating H1-blockers and orphenadrine, are used concomitantly. Adverse effects may be seen not only on GI smooth muscle, but also on bladder function, the CNS, the eye, and temperature regulation. Additive drowsiness may also occur.

Oxazepam: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.

oxyBUTYnin: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and oxybutynin use. Concomitant use may result in additive anticholinergic adverse effects.

oxyCODONE: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

oxyMORphone: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Paliperidone: (Moderate) Coadministration of drugs with CNS depressant effects, including paliperidone and dimenhydrinate, can increase both the frequency and the intensity of adverse effects such as drowsiness, sedation, and dizziness. Monitor for signs and symptoms of CNS depression and advise patients to avoid driving or engaging in other activities requiring mental alertness until they know how this combination affects them.

Paromomycin: (Minor) Dimenhydrinate and other antiemetics should be used carefully with aminoglycosides because they can mask symptoms of ototoxicity, including nausea secondary to vertigo.

Pembrolizumab; berahyaluronidase alfa: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.

Pentazocine; Naloxone: (Moderate) Use pentazocine with caution in any patient receiving medication with CNS depressant and/or anticholinergic activity.

Coadministration of pentazocine with sedating H1-blockers may result in additive respiratory and CNS depression and anticholinergic effects, such as urinary retention and constipation.

PENTobarbital: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate.

Perampanel: (Moderate) Co-administration of perampanel with CNS depressants, including ethanol, may increase CNS depression. The combination of perampanel (particularly at high doses) with ethanol has led to decreased mental alertness and ability to perform complex tasks (such as driving), as well as increased levels of anger, confusion, and depression; similar reactions should be expected with concomitant use of other CNS depressants, such as sedating H1-blockers.

Perphenazine: (Moderate) Additive anticholinergic and sedative effects may be seen when perphenazine is used with first generation antihistamines, such as dimenhydrinate. Patients should be informed to read non-prescription motion sickness, allergy, sleep, and cough and cold product labels carefully for additional interacting antihistamines.

Perphenazine; Amitriptyline: (Moderate) Additive anticholinergic and sedative effects may be seen when perphenazine is used with first generation antihistamines, such as dimenhydrinate. Patients should be informed to read non-prescription motion sickness, allergy, sleep, and cough and cold product labels carefully for additional interacting antihistamines. (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.

Pertuzumab; Trastuzumab; Hyaluronidase: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.

Phenelzine: (Contraindicated) Concomitant use of monoamine oxidase inhibitors and sedating H1-blockers is contraindicated due to increased anticholinergic effects.

PHENobarbital: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate.

PHENobarbital; Hyoscyamine; Atropine; Scopolamine: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate. (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker 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 sedating H1-blocker 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 sedating H1-blocker and scopolamine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects.

Pimozide: (Moderate) Due to the effects of pimozide on cognition, it should be used cautiously with other CNS depressants including sedating antihistamines. Sedating H1-blockers are associated with anticholinergic effects and sedation; therefore, additive effects may be seen during concurrent use with pimozide. Additive drowsiness or other CNS effects may occur.

Pitolisant: (Major) Avoid coadministration of pitolisant with dimenhydrinate as the effect of pitolisant may be decreased. Pitolisant increases histamine concentrations in the brain; therefore, H1-receptor antagonists like dimenhydrinate, may reduce pitolisant efficacy.

Plazomicin: (Minor) Dimenhydrinate and other antiemetics should be used carefully with aminoglycosides because they can mask symptoms of ototoxicity, including nausea secondary to vertigo.

Pramipexole: (Moderate) Concomitant use of pramipexole with other CNS depressants, such as sedating H1-blockers, can potentiate the sedation effects of pramipexole.

Pregabalin: (Moderate) Monitor for excessive sedation and somnolence during coadministration of dimenhydrinate and pregabalin. Concurrent use may result in additive CNS depression.

Primidone: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate.

Procarbazine: (Moderate) Use procarbazine and sedating H1-blockers together with caution; additive central nervous system depression may occur.

Prochlorperazine: (Moderate) Additive anticholinergic and sedative effects may be seen when Prochlorperazine is used with first generation antihistamines, such as dimenhydrinate. Patients should be informed to read non-prescription motion sickness, allergy, sleep, and cough and cold product labels carefully for additional interacting antihistamines.

Promethazine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of diphenhydramine and promethazine. Concomitant use may result in additive CNS depression or anticholinergic effects.

Promethazine; Dextromethorphan: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of diphenhydramine and promethazine. Concomitant use may result in additive CNS depression or anticholinergic effects.

Promethazine; Phenylephrine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of diphenhydramine and promethazine. Concomitant use may result in additive CNS

depression or anticholinergic effects.
Propantheline: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and propantheline use. Concomitant use may result in additive anticholinergic adverse effects.
Propofol: (Minor) Because sedating H1-blockers cause sedation, an enhanced CNS depressant effect may occur when they are combined with general anesthetics.
Protriptyline: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
Quazepam: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.
QUEtiapine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate and quetiapine. Concomitant use may result in additive CNS depression or anticholinergic effects.
Ramelteon: (Moderate) Because sedating H1-blockers cause sedation, an enhanced CNS depressant effect may occur when it is combined with other CNS depressants including anxiolytics, sedatives, and hypnotics, such as ramelteon.
Rasagiline: (Moderate) Concurrent use of monoamine oxidase inhibitors (MAOIs) and sedating H1-blockers (sedating antihistamines) may result in additive sedation, anticholinergic effects, or hypotensive reactions. Rasagiline may be less likely to produce these interactions than other MAOIs, due to MAO-B selectivity. However, consider alternatives therapy to antihistamines where possible. If alternative combinations are not available, these medications may be used together with close monitoring. Many non-prescription products for coughs, colds, allergy, hay fever or insomnia contain sedating antihistamines. Patients receiving rasagiline should be counseled that it is essential to consult their healthcare provider or pharmacist prior to the use of any non-prescription products. Patients should also be advised against driving or engaging in other activities requiring mental alertness until they know how this combination affects them.
Remifentanil: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
Remimazolam: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.
risperiDONE: (Moderate) Due to the primary CNS effects of risperidone, caution should be used when risperidone is given in combination with other centrally acting medications including sedating H1-blockers. Additive drowsiness or other CNS effects

may occur.
riTUXimab; Hyaluronidase: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.
Rivastigmine: (Moderate) Concurrent use of sedating H1-blockers and rivastigmine should be avoided if possible. Rivastigmine inhibits acetylcholinesterase, the enzyme responsible for the degradation of acetylcholine, and improves the availability of acetylcholine. Sedating H1-blockers may exhibit significant anticholinergic activity, thereby interfering with the therapeutic effect of rivastigmine.
rOPINIRole: (Moderate) Concomitant use of ropinirole with other CNS depressants, such as sedating H1-blockers, can potentiate the sedation effects of ropinirole.
Safinamide: (Moderate) Dopaminergic medications, including safinamide, may cause a sudden onset of somnolence which sometimes has resulted in motor vehicle accidents. Patients may not perceive warning signs, such as excessive drowsiness, or they may report feeling alert immediately prior to the event. Because of possible additive effects, advise patients about the potential for increased somnolence during concurrent use of other sedating medications, such as sedating H1-blockers.
Scopolamine: (Moderate) Monitor for unusual drowsiness or excess sedation and for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and scopolamine use. Concomitant use may result in additive CNS depression or anticholinergic adverse effects.
Secobarbital: (Moderate) Additive CNS depression may occur if barbiturates are used concomitantly with dimenhydrinate.
Selegiline: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of dimenhydrinate and selegiline due to the risk for additive CNS depression.
Sevoflurane: (Minor) Because sedating H1-blockers cause sedation, an enhanced CNS depressant effect may occur when they are combined with general anesthetics.
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.
Solifenacin: (Moderate) Additive anticholinergic effects may be seen when drugs with antimuscarinic properties like solifenacin are used concomitantly with other antimuscarinics, such as dimenhydrinate.
Stiripentol: (Moderate) Monitor for excessive sedation and somnolence during coadministration of stiripentol and dimenhydrinate. CNS depressants can potentiate the effects of stiripentol.
Streptomycin: (Minor) Dimenhydrinate and other antiemetics should be used carefully with aminoglycosides because they can mask symptoms of ototoxicity, including nausea

secondary to vertigo.
SUFentanil: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
Suvorexant: (Moderate) Monitor for excessive sedation and somnolence during coadministration of suvorexant and sedating antihistamines (H1-blockers). Dosage adjustments of suvorexant and sedating H1-blockers may be necessary when administered together because of potentially additive CNS effects. The risk of next-day impairment, including impaired driving, is increased if suvorexant is taken with other CNS depressants. Patients should generally avoid nonprescription antihistamine products that are marketed as sleep-aids concurrently with suvorexant.
Tapentadol: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.
Tasimelteon: (Moderate) Because sedating H1-blockers cause sedation, an enhanced CNS depressant effect may occur when it is combined with other CNS depressants including anxiolytics, sedatives, and hypnotics, such as tasimelteon.
Temazepam: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.
Thalidomide: (Major) Avoid the concomitant use of thalidomide with opiate agonists; antihistamines; antipsychotics; anxiolytics, sedatives, and hypnotics; and other central nervous system depressants due to the potential for additive sedative effects.
Thioridazine: (Moderate) Additive anticholinergic and sedative effects may be seen when thioridazine is used with first generation antihistamines, such as dimenhydrinate. Patients should be informed to read non-prescription motion sickness, allergy, sleep, and cough and cold product labels carefully for additional interacting antihistamines.
Thiothixene: (Moderate) Additive anticholinergic effects may be seen when antipsychotics, such as thiothixene, are used concomitantly with other drugs such as sedating H1-blockers. Additive drowsiness or other CNS effects may also occur.
tiZANidine: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of dimenhydrinate and tizanidine due to the risk for additive CNS depression.
Tobramycin: (Minor) Dimenhydrinate and other antiemetics should be used carefully with aminoglycosides because they can mask symptoms of ototoxicity, including nausea secondary to vertigo.
Tolcapone: (Moderate) COMT inhibitors should be given cautiously with other agents

that cause CNS depression, including sedating H1-blockers, due to the possibility of additive sedation. 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: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Tramadol; Acetaminophen: (Moderate) Concomitant use of opioid agonists with dimenhydrinate may cause excessive sedation and somnolence. Limit the use of opioid pain medication with dimenhydrinate to only patients for whom alternative treatment options are inadequate. If concurrent use is necessary, use the lowest effective doses and minimum treatment durations needed to achieve the desired clinical effect.

Tranylcypromine: (Contraindicated) Concomitant use of monoamine oxidase inhibitors and sedating H1-blockers is contraindicated due to increased anticholinergic effects.

Trastuzumab; Hyaluronidase: (Minor) H1-blockers (antihistamines), when given in large systemic doses, may render tissues partially resistant to the action of hyaluronidase. Patients receiving these medications may require larger amounts of hyaluronidase for equivalent dispersing effect.

traZODone: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of dimenhydrinate and trazodone due to the risk for additive CNS depression.

Triazolam: (Moderate) Coadministration can potentiate the CNS effects (e.g., increased sedation or respiratory depression) of either agent. Use caution with this combination.

Tricyclic antidepressants: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.

Trifluoperazine: (Moderate) Additive anticholinergic and sedative effects may be seen when trifluoperazine is used with first generation antihistamines, such as dimenhydrinate. Patients should be informed to read non-prescription motion sickness, allergy, sleep, and cough and cold product labels carefully for additional interacting antihistamines.

Trihexyphenidyl: (Moderate) Monitor for signs or symptoms of anticholinergic toxicity during concomitant sedating H1-blocker and trihexyphenidyl use. Concomitant use may result in additive anticholinergic adverse effects.

Trimethobenzamide: (Moderate) The concurrent use of trimethobenzamide with other medications that cause CNS depression, like the sedating h1-blockers, may potentiate the effects of either trimethobenzamide or the sedating h1-blocker.
Trimipramine: (Moderate) Monitor for unusual drowsiness and sedation, urinary retention, and reduced gastric motility during coadministration of dimenhydrinate and tricyclic antidepressants. Concomitant use may result in additive CNS depression or anticholinergic effects.
Trospium: (Moderate) Additive anticholinergic effects may be seen when trospium is used concomitantly with drugs that are known to possess relatively significant antimuscarinic properties, including sedating H1-blockers. Clinicians should note that additive antimuscarinic effects may be seen not only on GI smooth muscle, but also on bladder function and temperature regulation. While CNS-related side effects such as drowsiness and blurred vision are not typically noted with trospium, they may occur in some patients.
Vigabatrin: (Moderate) Vigabatrin may cause somnolence and fatigue. Drugs that can cause CNS depression, if used concomitantly with vigabatrin, may increase both the frequency and the intensity of adverse effects such as drowsiness, sedation, and dizziness. Caution should be used when vigabatrin is given with sedating H1-blockers.
Vilazodone: (Moderate) Due to the CNS effects of vilazodone, caution should be used when vilazodone is given in combination with other centrally acting medications such as anxiolytics, sedatives, and hypnotics. Also, Cyproheptadine is an antagonist of serotonin in the CNS, a property which may oppose some of the pharmacologic effects of vilazodone. Cyproheptadine has been used for the management of orgasm dysfunction caused by the serotonergic antidepressants and for the adjunctive treatment of serotonin syndrome; however, a reversal of antidepressant effects may occur when cyproheptadine is given in a routine manner along with the antidepressant. Clinically, cyproheptadine reportedly has interfered with the antidepressant and anti-bulimia actions of fluoxetine, but more data are needed to confirm a direct drug-drug interaction.
Xanomeline; Trospium: (Moderate) Additive anticholinergic effects may be seen when trospium is used concomitantly with drugs that are known to possess relatively significant antimuscarinic properties, including sedating H1-blockers. Clinicians should note that additive antimuscarinic effects may be seen not only on GI smooth muscle, but also on bladder function and temperature regulation. While CNS-related side effects such as drowsiness and blurred vision are not typically noted with trospium, they may occur in some patients.
Zaleplon: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of sedating H1-blockers and zaleplon due to the risk for additive CNS depression and next-day psychomotor impairment; dose adjustments may be necessary.

Ziconotide: (Moderate) Sedating H1-blockers are CNS depressant medications that may increase drowsiness, dizziness, and confusion that are associated with ziconotide.
Ziprasidone: (Moderate) Sedating H1-blockers are associated with sedation; therefore, additive effects may be seen during concurrent use with other drugs having CNS depressant properties such as antipsychotics. Additive drowsiness or other CNS effects may occur with ziprasidone.
Zolpidem: (Moderate) Monitor for unusual drowsiness and sedation during coadministration of sedating H1-blockers 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, blurred vision, confusion, delirium, dizziness, drowsiness, hallucinations, headache, impaired cognition, malaise, nasal dryness, psychosis, tinnitus, xerophthalmia

Drowsiness, malaise, or lethargy commonly occur following administration of dimenhydrinate due to its antimuscarinic effects. This effect is exaggerated with concomitant use of alcoholic beverages or other CNS depressants. Other common CNS or head and neck adverse effects due to the anticholinergic effects of dimenhydrinate include: headache, blurred vision, xerophthalmia, tinnitus, nasal dryness, dry throat, incoordination (ataxia), confusion, impaired cognition, lassitude, and dizziness. Geriatric patients are more susceptible to these adverse reactions, since endogenous cholinergic activity declines with age. Hallucinations and delirium are rarely reported with dimenhydrinate. Abuse of dimenhydrinate has resulted in psychosis.

excitability, insomnia, restlessness

Paradoxical CNS stimulation (excitability) can occur in children and occasionally in adults due to the antihistaminic effects of dimenhydrinate. Restlessness, nervousness, or insomnia (especially in children) may also occur.

wheezing

The anticholinergic effects of dimenhydrinate may cause thickening of bronchial secretions, chest tightness, or wheezing, especially in patients with pulmonary disorders.

AV block, hypotension, palpitations, sinus tachycardia

Adverse cardiovascular responses to dimenhydrinate are also likely to be associated with its anticholinergic properties. These responses may include cardiac arrhythmias ECG changes (e.g., widened QRS), palpitations, and/or sinus tachycardia. Alpha-adrenergic blockade may lead to hypotension. Life-threatening cardiac arrhythmias (e.g., extrasystoles, AV block) have occurred in patients who have abused or taken an overdose of dimenhydrinate.

anorexia, constipation, diarrhea, dyspepsia, dysuria, nausea, urinary retention, urinary urgency, xerostomia

Gastrointestinal and genitourinary tract effects of dimenhydrinate include: dry mouth (xerostomia), anorexia, constipation, epigastric distress (dyspepsia), diarrhea, nausea, urinary urgency, dysuria, and difficult urination or urinary retention.

seizures

Dimenhydrinate may precipitate seizures in patients with a pre-existing seizure disorder. Overdose of dimenhydrinate has resulted in generalized seizures.

Description

Dimenhydrinate is an oral and parenteral antihistaminic agent with antiemetic and antivertigo activity. Dimenhydrinate is an ethanolamine-derivative sedating antihistamine (H1-blocker). It is the chlorotheophylline salt of diphenhydramine. The active moiety of dimenhydrinate is diphenhydramine. Very few parenteral formulations exist on the U.S. market; these are indicated for the prevention and treatment of nausea, vomiting, or vertigo of motion sickness. Nonprescription (OTC) oral dimenhydrinate products are also used to prevent and treat the nausea, vomiting, dizziness, or vertigo associated with motion sickness. The American College of Obstetrics and Gynecology (ACOG) states that dimenhydrinate may be considered as a second-line pharmacologic option for nausea/vomiting during pregnancy if symptoms persist after a trial of nonpharmacologic options and pyridoxine taken alone or in combination with doxylamine.

Mechanism Of Action

Diphenhydramine, the active moiety of dimenhydrinate, has CNS depressant, anticholinergic, antiemetic, antihistaminic, and local anesthetic effects. The

anticholinergic effects of dimenhydrinate are proposed to inhibit vestibular stimulation which occurs during motion sickness and vertigo. Dimenhydrinate has also been reported to inhibit labyrinthine stimulation for up to 3 hours. The exact mechanisms for the antiemetic effects of diphenhydramine are unknown. Dimenhydrinate inhibits the emetic response to apomorphine. Some decrease in antiemetic effectiveness may occur with prolonged use. The antimuscarinic effects can result in significant sedation. Tolerance to the CNS depressant effects usually occurs after a few days of treatment.

Pharmacokinetics

Dimenhydrinate is administered orally or parenterally, and is well absorbed following administration via either route. The duration of action is 3 to 6 hours.

Dimenhydrinate contains about 55% diphenhydramine, the active moiety, and about 45% 8-chlorotheophylline. The exact distribution of dimenhydrinate is unknown. Diphenhydramine is widely distributed in the body, including the central nervous system and is 78% bound to plasma proteins. Data for the metabolic fate of dimenhydrinate are not available. The active moiety, diphenhydramine, is extensively metabolized by the liver. Diphenhydramine is excreted almost exclusively as metabolites within a 24 hour period; minimal unchanged drug is excreted in the urine. The elimination half-life of diphenhydramine is about 3.5 hours.

Route-Specific Pharmacokinetics

- **Oral Route**

Antiemetic effects occur within 15—30 minutes following oral administration.

- **Intravenous Route**

Antiemetic effects occur almost immediately following IV administration.

- **Intramuscular Route**

Antiemetic effects occur within 20—30 minutes following IM administration.

Administration

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

Oral Administration

Oral Solid Formulations

Tablets
If administering to prevent motion sickness, the first dose should be taken 30 minutes to 1 hour before starting the activity which may cause motion sickness.

Chewable tablets
Chew tablet, then swallow.
If administering to prevent motion sickness, the first dose should be taken 30 minutes to 1 hour before starting the activity which may cause motion sickness.

Injectable Administration

For use when the patient is unable to receive oral therapy; replace with oral therapy as soon as feasible.
Administer by intravenous or intramuscular injection only. Do not administer intra-arterially.
Do not administer to neonates. The injectable product contains benzyl alcohol, which has been associated with a 'gasping syndrome' in neonates.
Visually inspect parenteral products for particulate matter and discoloration prior to administration whenever solution and container permit.

Intravenous Administration

Dilute dosage in 10 mL of 0.9% Sodium Choride for injection prior to IV administration.
Administer by slow IV push (over at least 2 minutes).

Intramuscular Administration

Inject intramuscularly into a large muscle mass.

Maximum Dosage Limits

- **Adults**
  400 mg/day PO, IM or IV.
- **Geriatric**
  400 mg/day PO, IM or IV.
- **Adolescents**
  400 mg/day PO, or 5 mg/kg/day IM or IV (not to exceed 300 mg/day).
- **Children**
  12 years: 400 mg/day PO, or 5 mg/kg/day IM or IV (not to exceed 300 mg/day).
  6 to 11 years: 150 mg/day PO, or 5 mg/kg/day IM or IV (not to exceed 300 mg/day).

2 to 5 years: 75 mg/day PO, or 5 mg/kg/day IM or IV (not to exceed 300 mg/day).
Less than 2 years: Safety and efficacy have not been established.

- **Infants**
  Safety and efficacy have not been established.
- **Neonates**
  Use is contraindicated.

Dosage Forms

- CVS Motion Sickness 50mg Tablet
- Dimenhydrinate 50mg/1mL Solution for injection
- Dimenhydrinate Bulk powder
- Dramamine 50mg Chewable Tablet
- Dramamine 50mg Chewable Tablet (Orange)
- Dramamine Children's Motion Sickness Relief 25mg Chewable Tablet
- Dramamine Motion Sickness Relief Original Formula 50mg Tablet
- Driminate 50mg Tablet
- Equate Motion Sickness Relief 50mg Tablet
- Foster & Thrive Motion Sickness 50mg Tablet
- GNP Motion Sickness Tablet
- Leader Motion Sickness Relief 50mg Tablet
- Premier Value Motion Sickness Tablet
- Quality Choice Motion Sickness Relief 50mg Tablet
- Quality Choice Travel Sickness 50mg Tablet
- RITE AID Motion Sickness Relief 50mg Tablet
- Wal-Dram 50mg Tablet

Dosage Adjustment Guidelines

Hepatic Impairment

Specific guidelines are not available. Dosage reduction may be considered in patients with significant hepatic impairment; dimenhydrinate is eliminated primarily by liver metabolism.

Renal Impairment

No dosage adjustment is necessary.

Intermittent Hemodialysis

No specific guidelines are available. Dosage adjustment is probably not needed due to the relatively high protein binding and hepatic route of elimination.