Brand Names

Contac Cold 12 Hour, Dimetapp Decongestant, Drixoral, ElixSure Cold, ElixSure Congestion, Entex, Genaphed , KidKare , Myfedrine, NASAL Decongestant, Nasofed, Nexafed, PediaCare Infants' Decongestant, Pseudo-Time, Silfedrine, Sudafed, Sudafed 12 Hour, Sudafed 24 Hour, Sudafed Children's Nasal Decongestant, Sudafed Congestion, Sudafed Sinus Congestion, Sudogest, Sudogest 12 Hour, Sudogest Children's , Tylenol Children's Simply Stuffy, Zephrex-D

Indication Specific Dosing

For the temporary relief of the symptoms of sinus and nasal congestion due to the common cold, allergic rhinitis or other upper respiratory allergies or conditions, including eustachian tube congestion

Oral dosage (regular-release tablets or liquid-filled capsules)

Adults

60 mg PO every 4 to 6 hours (Max: 240 mg/day).

Children and Adolescents 12 to 17 years

60 mg PO every 4 to 6 hours (Max: 240 mg/day).

Children 6 to 11 years

30 mg PO every 4 to 6 hours (Max: 120 mg/day).

Oral dosage (12 Hour extended-release tablets; e.g., Sudafed 12-hour extended release tablets)

Adults

120 mg PO (1 tablet) every 12 hours (Max: 240 mg/day).

Children and Adolescents 12 to 17 years

120 mg PO (1 tablet) every 12 hours (Max: 240 mg/day).

Oral dosage (24 hour extended release tablets; e.g., Sudafed 24-Hour extended-release tablets)

Adults

240 mg PO every 24 hours (Max: 240 mg/day).

Children and Adolescents 12 to 17 years

240 mg PO every 24 hours (Max: 240 mg/day).

Oral dosage (oral solutions containing 15 mg pseudoephedrine per 5 mL OR 30 mg pseudoephedrine per 5 mL)

Adults

60 mg PO every 4 to 6 hours (Max: 240 mg/day).

Children and Adolescents 12 to 17 years

60 mg PO every 4 to 6 hours (Max: 240 mg/day).

Children 6 to 11 years

30 mg PO every 4 to 6 hours (Max: 120 mg/day).

Children 4 to 5 years

15 mg PO every 4 to 6 hours (Max: 60 mg/day).

Children 2 to 3 years†

4 mg/kg/day PO, divided into 4 doses. Do not exceed 15 mg/dose or 60 mg/day. For use under prescription only.

For otalgia prophylaxis† prior to air-pressure changes induced by jet-travel

Oral dosage (12 hour extended-release tablets; e.g., Sudafed 12 Hour extended-release tablets)

Adults

120 mg PO as a single dose administered 30 to 60 minutes prior to departure. Oral pseudoephedrine seems more effective than placebo at reducing the symptoms of barotrauma during air travel, such as ear pain and hearing loss, in adults with a history of ear pain during flight.

Children and Adolescents 12 to 17 years

120 mg PO as a single dose administered 30 to 60 minutes prior to departure. Oral pseudoephedrine seems more effective than placebo at reducing the symptoms of barotrauma during air travel, such as ear pain and hearing loss, in adults with a history of ear pain during flight.

Oral dosage (immediate-release tablets, capsules, or oral liquids)

Children 6 to 11 years

Efficacy not established. Oral pseudoephedrine (30 mg PO single dose administered 30 to 60 minutes prior to flight) appears no more effective at reducing ear pain at take-off or landing compared with placebo. Treatment did increase the risk of drowsiness when compared with placebo.

Infants and Children 6 months to 5 years

Efficacy not established. Oral pseudoephedrine (1 mg/kg PO single dose administered 30 to 60 minutes prior to flight) appears no more effective at reducing ear pain at take-off or landing compared with placebo. Treatment did increase the risk of drowsiness when compared with placebo. The FDA warns against the use of cough and cold products in children younger than 2 years. Serious adverse events, including death, have been associated with the misuse of these medications.

For the treatment of urinary incontinence† in adults with stress incontinence due to urethral sphincter weakness

Oral dosage (regular-release tablets, liquid-filled capsules, or oral solution)

Adults

Doses of 30 to 60 mg PO, given up to 4 times daily.

Older Adults

Doses of 15 to 30 mg PO, given up to 3 times daily. Lower doses are suggested for geriatric adults since they are more likely to have adverse reactions to sympathetic amines.

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.

cardiac disease, hypertension

Sympathomimetics such as pseudoephedrine may raise heart rate and/or blood pressure in susceptible individuals. Use pseudoephedrine with caution in individuals with cardiac disease or hypertension. People with heart disease or high blood pressure should check with their care team before nonprescription (OTC) use.

Hypersensitivity

This medication is contraindicated in patients with a history of hypersensitivity to it or any of its components.

diabetes mellitus, prostatic hypertrophy, thyroid disease

Use pseudoephedrine with caution in individuals with diabetes mellitus, difficulty urinating due to prostatic hypertrophy, or thyroid disease. Sympathomimetic agents such as pseudoephedrine may aggravate these conditions.

GI obstruction

People who have had GI obstruction or narrowing of the bowel should consult with their care team prior to use of the 24-hour (once daily) extended-release pseudoephedrine product formulations. Rarely, the 24-hour ER tablets of pseudoephedrine have been reported to cause bowel obstruction (blockage), especially in people with severe narrowing of the bowel (esophagus, stomach or intestine).

renal failure, renal impairment

Pseudoephedrine should be used with caution in people with severe renal impairment (CrCl less than 30 mL/minute) and dosage reduction has been suggested for these individuals if use is necessary. Due to decreased elimination and potential

pseudoephedrine drug accumulation, patients with renal failure may be at increased risk for drug-related toxicity. Many experts recommend against pseudoephedrine use in severe acute or chronic kidney disease (CKD) or renal failure.

children, infants, neonates

Due to the risk for serious adverse reactions, the FDA recommends against administration of over the counter (OTC) cough and cold products to neonates, infants and children younger than 2 years of age. When administering OTC medications to older pediatric patients, they advise caregivers to read product labels carefully, use caution when administering multiple products to avoid duplication of ingredients, and use only measuring devices specifically designed for use with medications. Care teams should thoroughly assess the use of similar products, both prescription and nonprescription, to avoid duplication of therapy and the potential for inadvertent overdose.

pregnancy

Oral decongestants such as pseudoephedrine should be avoided during the first trimester of pregnancy, and should be used cautiously at any time during pregnancy. Pseudoephedrine may reduce blood flow to the placenta and the fetus, and there is some evidence use may be associated with birth defects if used during early pregnancy. Evidence from case-control studies in human pregnancy indicate there may be an increased risk of gastroschisis, small intestinal atresia, and hemifacial microsomia in babies exposed in utero to pseudoephedrine, particularly in the first trimester. Non-pharmacologic methods (e.g., fluids and rest) are recommended to be tried first for symptomatic relief of congestion during pregnancy.

breast-feeding

Pseudoephedrine should be used with caution during breast-feeding. Treatment with non-systemic decongestant preparations such as intranasal sodium chloride or temporary use of intranasal decongestants should be considered prior to using an oral decongestant, including pseudoephedrine, during lactation. If use is necessary, monitor for potential adverse effects on the nursing infant or reduction in milk production. Pseudoephedrine is excreted into breast milk. Peak milk concentrations occur 1 to 1.5 hours after a maternal oral dosage, and peak milk concentrations usually exceed those of maternal plasma. The total amount of pseudoephedrine (measured by AUC) in milk is 2 to 3 times that of plasma. However, only 0.5% of a maternal dose would probably be ingested by an infant during breast-feeding within any 24 hours. Sympathomimetic adverse effects (irritability, excessive crying, and altered sleeping patterns) have been reported in a breastfed infant following maternal administration of pseudoephedrine;

symptoms resolved within 12 hours of drug discontinuation. Avoidance of breast-feeding during times of peak concentrations (i.e., within 1 to 2 hours after an oral immediate-release dose) may be considered. Another study estimated that a breastfed infant would receive 4.3% of the maternal weight-adjusted dose based on concentrations in breast milk and assuming a maternal pseudoephedrine dose of 240 mg/day PO. This study also showed milk production over a 24-hour period was reduced by an average of 24% compared to placebo after a single 60 mg dose of pseudoephedrine. The data from this study suggest that individuals should not receive pseudoephedrine if lactation is not yet well established or if there are difficulties producing sufficient 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.

Pregnancy And Lactation

Oral decongestants such as pseudoephedrine should be avoided during the first trimester of pregnancy, and should be used cautiously at any time during pregnancy. Pseudoephedrine may reduce blood flow to the placenta and the fetus, and there is some evidence use may be associated with birth defects if used during early pregnancy. Evidence from case-control studies in human pregnancy indicate there may be an increased risk of gastroschisis, small intestinal atresia, and hemifacial microsomia in babies exposed in utero to pseudoephedrine, particularly in the first trimester. Non-pharmacologic methods (e.g., fluids and rest) are recommended to be tried first for symptomatic relief of congestion during pregnancy.

Interactions

Acarbose: (Moderate) Sympathomimetic agents and adrenergic agonists tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine, phenylephrine, and other sympathomimetics are administered to patients taking antidiabetic agents. Epinephrine and other sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Acebutolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be

necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Acetaminophen; Aspirin, ASA; Caffeine: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Acetaminophen; Aspirin, ASA; Caffeine: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Acetaminophen; Caffeine: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Acetaminophen; Caffeine; Dihydrocodeine: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Acetaminophen; Caffeine; Pyrilamine: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Acetaminophen; Chlorpheniramine; Dextromethorphan; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Acetaminophen; Chlorpheniramine; Phenylephrine : (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Acetaminophen; Dextromethorphan; guaiFENesin; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant

quantities of other sympathomimetics.
Acetaminophen; Dextromethorphan; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Acetaminophen; guaiFENesin; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Acetaminophen; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
acetaZOLAMIDE: (Moderate) Acetazolamide and methazolamide can decrease excretion and enhance the effects of pseudoephedrine. Carbonic anhydrase inhibitors increase the alkalinity of the urine, thereby increasing the amount of nonionized pseudoephedrine available for renal tubular reabsorption. Use caution if acetazolamide or methazolamide is coadministered; monitor for excessive pseudoephedrine-related adverse effects.
Aclidinium; Formoterol: (Moderate) Monitor blood pressure and heart rate during concomitant pseudoephedrine and formoterol use. Concomitant use may potentiate sympathetic effects.
Albuterol: (Moderate) Monitor blood pressure and heart rate during concomitant albuterol and pseudoephedrine use. Concomitant use may potentiate sympathetic effects.
Albuterol; Budesonide: (Moderate) Monitor blood pressure and heart rate during concomitant albuterol and pseudoephedrine use. Concomitant use may potentiate sympathetic effects.
Aliskiren; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly.
Alkalinizing Agents: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Alogliptin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta-receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin

secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Alogliptin; metFORMIN: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta-receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Alogliptin; Pioglitazone: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking thiazolidinediones. Sympathomimetics, through stimulation of alpha- and beta-receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Alpha-blockers: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by alpha-blockers. Monitor blood pressure and

heart rate.
Alpha-glucosidase Inhibitors: (Moderate) Sympathomimetic agents and adrenergic agonists tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine, phenylephrine, and other sympathomimetics are administered to patients taking antidiabetic agents. Epinephrine and other sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Aluminum Hydroxide: (Minor) It appears that antacids containing aluminum hydroxide may increase pseudoephedrine plasma concentrations. This interaction can be avoided by separating the administration of pseudoephedrine and antacids by 1 to 2 hours. If aluminum-based antacids are used on a regular basis, an alternative to pseudoephedrine may be considered.
Aluminum Hydroxide; Magnesium Carbonate: (Minor) It appears that antacids containing aluminum hydroxide may increase pseudoephedrine plasma concentrations. This interaction can be avoided by separating the administration of pseudoephedrine and antacids by 1 to 2 hours. If aluminum-based antacids are used on a regular basis, an alternative to pseudoephedrine may be considered.
Aluminum Hydroxide; Magnesium Hydroxide: (Minor) It appears that antacids containing aluminum hydroxide may increase pseudoephedrine plasma concentrations. This interaction can be avoided by separating the administration of pseudoephedrine and antacids by 1 to 2 hours. If aluminum-based antacids are used on a regular basis, an alternative to pseudoephedrine may be considered.
Aluminum Hydroxide; Magnesium Hydroxide; Simethicone: (Minor) It appears that antacids containing aluminum hydroxide may increase pseudoephedrine plasma concentrations. This interaction can be avoided by separating the administration of pseudoephedrine and antacids by 1 to 2 hours. If aluminum-based antacids are used on a regular basis, an alternative to pseudoephedrine may be considered.
Aluminum Hydroxide; Magnesium Trisilicate: (Minor) It appears that antacids containing aluminum hydroxide may increase pseudoephedrine plasma concentrations. This interaction can be avoided by separating the administration of pseudoephedrine and antacids by 1 to 2 hours. If aluminum-based antacids are used on a regular basis, an alternative to pseudoephedrine may be considered.
aMILoride: (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially

systolic hypertension) has been reported in some patients.
aMILoride; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially systolic hypertension) has been reported in some patients.
Amitriptyline: (Major) Avoid use of pseudoephedrine and tricyclic antidepressants as tricyclic antidepressants may potentiate the effects of catecholamines.
amLODIPine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
amLODIPine; Atorvastatin: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
amLODIPine; Benazepril: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
amLODIPine; Celecoxib: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
amLODIPine; Olmesartan: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
amLODIPine; Valsartan: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
amLODIPine; Valsartan; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor

blood pressure and heart rate.
Amoxapine: (Major) Concomitant use of amoxapine with sympathomimetics should be avoided whenever possible; use with caution when concurrent use cannot be avoided. One drug information reference suggests that cyclic antidepressants potentiate the pharmacologic effects of direct-acting sympathomimetics, but decrease the pressor response to indirect-acting sympathomimetics, however, the data are not consistent.
Angiotensin II receptor antagonists: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Angiotensin II: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Angiotensin-converting enzyme inhibitors: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Arformoterol: (Moderate) Caution and close observation should be used when arformoterol is used concurrently with other adrenergic sympathomimetics, administered by any route, to avoid potential for increased cardiovascular effects.
Articaine; EPINEPHrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Aspirin, ASA; Butalbital; Caffeine: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Aspirin, ASA; Caffeine: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Aspirin, ASA; Caffeine; Orphenadrine: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Aspirin, ASA; Citric Acid; Sodium Bicarbonate: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for

increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Atenolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Atenolol; Chlorthalidone: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug. (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly.
Atomoxetine: (Moderate) Use atomoxetine with caution and monitor blood pressure in patients receiving concomitant pseudoephedrine due to potential effects on blood pressure.
Atropine: (Major) Atropine blocks the vagal reflex bradycardia caused by pseudoephedrine, and increases its pressor effect. Patients need to be asked whether they have taken pseudoephedrine before receiving atropine.
Atropine; Difenoxin: (Major) Atropine blocks the vagal reflex bradycardia caused by pseudoephedrine, and increases its pressor effect. Patients need to be asked whether they have taken pseudoephedrine before receiving atropine.
Azilsartan: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Azilsartan; Chlorthalidone: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Benazepril: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Benazepril; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Beta-blockers: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Betaxolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during

concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Bethanechol: (Moderate) Bethanechol offsets the effects of sympathomimetics at sites where sympathomimetic and cholinergic receptors have opposite effects.
Bexagliflozin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Bisoprolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Bisoprolol; hydroCHLOROthiazide, HCTZ: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug. (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly.
Bretylium: (Moderate) Monitor blood pressure and heart rate closely when sympathomimetics are administered with bretylium. The pressor and arrhythmogenic effects of catecholamines are enhanced by bretylium.
Brimonidine; Timolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Bromocriptine: (Moderate) One case report documented worsening headache, hypertension, premature ventricular complexes, and ventricular tachycardia in a post-partum patient receiving bromocriptine for lactation suppression who was subsequently prescribed acetaminophen; dichloralphenazone; isometheptene for a headache. A second case involved a post-partum patient receiving bromocriptine who was later prescribed phenylpropanolamine; guaifenesin and subsequently developed hypertension, tachycardia, seizures, and cerebral vasospasm. Also, ergot alkaloids, which are chemically related to bromocriptine, should not be administered with other vasoconstrictors. Therefore, until more data become available, concurrent use of bromocriptine and some sympathomimetics such as vasopressors (e.g., norepinephrine, dopamine, phenylephrine), cocaine, epinephrine, phenylpropanolamine, ephedra, ma huang, ephedrine, pseudoephedrine, amphetamines, and phentermine should be

approached with caution.
Brompheniramine; Dextromethorphan; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Brompheniramine; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Budesonide; Formoterol: (Moderate) Monitor blood pressure and heart rate during concomitant pseudoephedrine and formoterol use. Concomitant use may potentiate sympathetic effects.
Budesonide; Glycopyrrolate; Formoterol: (Moderate) Monitor blood pressure and heart rate during concomitant pseudoephedrine and formoterol use. Concomitant use may potentiate sympathetic effects.
Bumetanide: (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially systolic hypertension) has been reported in some patients.
BUPivacaine; EPINEPHrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
buPROPion: (Moderate) Use extreme caution when coadministering bupropion with other drugs that lower the seizure threshold, such as pseudoephedrine. Use low initial doses of bupropion and increase the dose gradually.
buPROPion; Naltrexone: (Moderate) Use extreme caution when coadministering bupropion with other drugs that lower the seizure threshold, such as pseudoephedrine. Use low initial doses of bupropion and increase the dose gradually.
Butalbital; Acetaminophen; Caffeine: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Butalbital; Acetaminophen; Caffeine; Codeine: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to

side effects like nervousness, irritability, insomnia, or tremor.
Butalbital; Aspirin; Caffeine; Codeine: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Caffeine: (Moderate) Caffeine is a CNS-stimulant and such actions are expected to be additive when coadministered with other CNS stimulants or psychostimulants.
(Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously.
Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Caffeine; Sodium Benzoate: (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Calcium Carbonate: (Minor) It appears that antacids increase pseudoephedrine plasma concentrations. This interaction can be avoided by separating the administration of pseudoephedrine and antacids by 1 to 2 hours. If antacids are used on a regular basis, an alternative to pseudoephedrine may be considered.
Calcium Carbonate; Famotidine; Magnesium Hydroxide: (Minor) It appears that antacids increase pseudoephedrine plasma concentrations. This interaction can be avoided by separating the administration of pseudoephedrine and antacids by 1 to 2 hours. If antacids are used on a regular basis, an alternative to pseudoephedrine may be considered.
Calcium Carbonate; Magnesium Hydroxide: (Minor) It appears that antacids increase pseudoephedrine plasma concentrations. This interaction can be avoided by separating the administration of pseudoephedrine and antacids by 1 to 2 hours. If antacids are used on a regular basis, an alternative to pseudoephedrine may be considered.
Calcium Carbonate; Magnesium Hydroxide; Simethicone: (Minor) It appears that antacids increase pseudoephedrine plasma concentrations. This interaction can be avoided by separating the administration of pseudoephedrine and antacids by 1 to 2 hours. If antacids are used on a regular basis, an alternative to pseudoephedrine may be considered.
Calcium Carbonate; Simethicone: (Minor) It appears that antacids increase pseudoephedrine plasma concentrations. This interaction can be avoided by separating the administration of pseudoephedrine and antacids by 1 to 2 hours. If antacids are used on a regular basis, an alternative to pseudoephedrine may be considered.

Calcium; Vitamin D: (Minor) It appears that antacids increase pseudoephedrine plasma concentrations. This interaction can be avoided by separating the administration of pseudoephedrine and antacids by 1 to 2 hours. If antacids are used on a regular basis, an alternative to pseudoephedrine may be considered.
Calcium-channel blockers: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Canagliflozin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Canagliflozin; metFORMIN: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Candesartan: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Candesartan; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart

rate and blood pressure.
Captopril: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Captopril; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Carteolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Carvedilol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
chlordiazePOXIDE; Amitriptyline: (Major) Avoid use of pseudoephedrine and tricyclic antidepressants as tricyclic antidepressants may potentiate the effects of catecholamines.
Chlorothiazide: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly.
Chlorpheniramine; Dextromethorphan; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Chlorpheniramine; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Chlorthalidone: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly.
Citric Acid; Potassium Citrate; Sodium Citrate: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Clevidipine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
clomiPRAMINE: (Major) Avoid use of pseudoephedrine and tricyclic antidepressants as

tricyclic antidepressants may potentiate the effects of catecholamines.
cloNIDine: (Moderate) Sympathomimetics, such as pseudoephedrine, can antagonize the antihypertensive effects of clonidine when administered concomitantly. Patients should be monitored for loss of blood pressure control.
Cocaine: (Major) Avoid concomitant use of additional vasoconstrictor agents with cocaine. If unavoidable, prolonged vital sign and ECG monitoring may be required. Myocardial ischemia, myocardial infarction, and ventricular arrhythmias have been reported after concomitant administration of topical intranasal cocaine and vasoconstrictor agents during nasal and sinus surgery. The risk for nervousness, irritability, convulsions, and other cardiac arrhythmias may increase during coadministration.
Codeine; Phenylephrine; Promethazine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Dapagliflozin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Dapagliflozin; metFORMIN: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for

diabetes.
Dapagliflozin; sAXagliptin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Desflurane: (Major) Avoid administration of pseudoephedrine products to patients who have recently undergone, or will soon undergo, a procedure or treatment that requires general anesthesia. Specifically, halogenated anesthetics may sensitize the myocardium to the effects of sympathomimetics, including pseudoephedrine.
Desipramine: (Major) Avoid use of pseudoephedrine and tricyclic antidepressants as tricyclic antidepressants may potentiate the effects of catecholamines.
Dexbrompheniramine; Dextromethorphan; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Dextromethorphan; buPROPion: (Moderate) Use extreme caution when coadministering bupropion with other drugs that lower the seizure threshold, such as pseudoephedrine. Use low initial doses of bupropion and increase the dose gradually.
Dextromethorphan; diphenhydrAMINE; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Dextromethorphan; guaiFENesin; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine

should be used cautiously in patients using significant quantities of other sympathomimetics.
Diazoxide: (Moderate) Use sympathomimetic agents with caution in patients receiving therapy for hypertension. Patients should be monitored to confirm that the desired antihypertensive effect is achieved. Sympathomimetics can increase blood pressure and heart rate, and antagonize the antihypertensive effects of vasodilators when administered concomitantly. Anginal pain may be induced when coronary insufficiency is present.
Dihydroergotamine: (Contraindicated) Concomitant use of ergotamine with pseudoephedrine is contraindicated due to the risk for a synergistic increase in blood pressure. Coadministration may also increase the risk for vasospasm which may lead to cerebral or peripheral ischemia.
dilTIAZem: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Dipeptidyl Peptidase-4 Inhibitors: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
diphenhydrAMINE; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Diphenoxylate; Atropine: (Major) Atropine blocks the vagal reflex bradycardia caused by pseudoephedrine, and increases its pressor effect. Patients need to be asked whether they have taken pseudoephedrine before receiving atropine.
DOPamine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Dorzolamide; Timolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Doxazosin: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the

antihypertensive effects produced by alpha-blockers. Monitor blood pressure and heart rate.
Doxepin: (Major) Avoid use of pseudoephedrine and tricyclic antidepressants as tricyclic antidepressants may potentiate the effects of catecholamines.
droNABinol: (Moderate) Concurrent use of dronabinol, THC with sympathomimetics may result in additive hypertension, tachycardia, and possibly cardiotoxicity. Dronabinol, THC has been associated with occasional hypotension, hypertension, syncope, and tachycardia. In a study of 7 adult males, combinations of IV cocaine and smoked marijuana, 1 g marijuana cigarette, 0 to 2.7% delta-9-THC, increased the heart rate above levels seen with either agent alone, with increases plateauing at 50 bpm.
Droxidopa: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Dulaglutide: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking incretin mimetics. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Empagliflozin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Empagliflozin; Linagliptin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients

taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Empagliflozin; Linagliptin; metFORMIN: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Empagliflozin; metFORMIN: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold

symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Enalapril, Enalaprilat: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Enalapril; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
ePHEDrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
ePHEDrine; guaiFENesin: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
EPINEPHrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Epoprostenol: (Major) Avoid use of sympathomimetic agents with epoprostenol. Sympathomimetics counteract the medications used to stabilize pulmonary hypertension, including epoprostenol. Sympathomimetics can increase blood pressure, increase heart rate, and may cause vasoconstriction resulting in chest pain and shortness of breath in these patients. Patients should be advised to avoid amphetamine drugs, decongestants (including nasal decongestants) and sympathomimetic anorexiants for weight loss, including dietary supplements. Intravenous vasopressors may be used in the emergency management of pulmonary hypertension patients when needed, but hemodynamic monitoring and careful monitoring of cardiac status are

needed to avoid ischemia and other complications.
Ergotamine: (Contraindicated) Concomitant use of ergotamine with pseudoephedrine is contraindicated due to the risk for a synergistic increase in blood pressure. Coadministration may also increase the risk for vasospasm which may lead to cerebral or peripheral ischemia.
Ergotamine; Caffeine: (Contraindicated) Concomitant use of ergotamine with pseudoephedrine is contraindicated due to the risk for a synergistic increase in blood pressure. Coadministration may also increase the risk for vasospasm which may lead to cerebral or peripheral ischemia. (Moderate) CNS-stimulating actions of caffeine can be additive with other CNS stimulants or psychostimulants; caffeine should be avoided or used cautiously. Excessive caffeine ingestion (via medicines, supplements or beverages including coffee, green tea, other teas, guarana, colas) may contribute to side effects like nervousness, irritability, insomnia, or tremor.
Ertugliflozin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Ertugliflozin; metFORMIN: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Ertugliflozin; SITagliptin: (Moderate) Sympathomimetic agents tend to increase blood

glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Esmolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Ethacrynic Acid: (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially systolic hypertension) has been reported in some patients.
Exenatide: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking incretin mimetics. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Felodipine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Fenoldopam: (Moderate) Use sympathomimetic agents with caution in patients receiving therapy for hypertension. Patients should be monitored to confirm that the desired antihypertensive effect is achieved. Sympathomimetics can increase blood pressure and heart rate, and antagonize the antihypertensive effects of vasodilators when

administered concomitantly. Anginal pain may be induced when coronary insufficiency is present.
Fluticasone; Salmeterol: (Moderate) Monitor blood pressure and heart rate during concomitant salmeterol and pseudoephedrine use. Concomitant use may potentiate sympathetic effects.
Fluticasone; Umeclidinium; Vilanterol: (Moderate) Administer sympathomimetics with caution with beta-agonists such as vilanterol. The cardiovascular effects of beta-2 agonists may be potentiated by concomitant use. Monitor the patient for tremors, nervousness, increased heart rate, or other additive side effects.
Fluticasone; Vilanterol: (Moderate) Administer sympathomimetics with caution with beta-agonists such as vilanterol. The cardiovascular effects of beta-2 agonists may be potentiated by concomitant use. Monitor the patient for tremors, nervousness, increased heart rate, or other additive side effects.
Formoterol: (Moderate) Monitor blood pressure and heart rate during concomitant pseudoephedrine and formoterol use. Concomitant use may potentiate sympathetic effects.
Formoterol; Mometasone: (Moderate) Monitor blood pressure and heart rate during concomitant pseudoephedrine and formoterol use. Concomitant use may potentiate sympathetic effects.
Fosinopril: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Fosinopril; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Furosemide: (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially systolic hypertension) has been reported in some patients.
Ginger, Zingiber officinale: (Minor) In vitro studies have demonstrated the positive inotropic effects of certain gingerol constituents of ginger; but it is unclear if whole ginger root exhibits these effects clinically in humans. It is theoretically possible that excessive doses of ginger could affect the action of vasopressors like pseudoephedrine; however, no clinical data are available.
Glimepiride: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking sulfonylureas.

Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
glipiZIDE: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking sulfonylureas. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
glipiZIDE; metFORMIN: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking sulfonylureas. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
glyBURIDE: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking sulfonylureas. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for

diabetes.
glyBURIDE; metFORMIN: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking sulfonylureas. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Glycopyrrolate; Formoterol: (Moderate) Monitor blood pressure and heart rate during concomitant pseudoephedrine and formoterol use. Concomitant use may potentiate sympathetic effects.
guaiFENesin; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Halogenated Anesthetics: (Major) Avoid administration of pseudoephedrine products to patients who have recently undergone, or will soon undergo, a procedure or treatment that requires general anesthesia. Specifically, halogenated anesthetics may sensitize the myocardium to the effects of sympathomimetics, including pseudoephedrine.
Haloperidol: (Moderate) Non-cardiovascular drugs with alpha-blocking activity such as haloperidol directly counteract the effects of pseudoephedrine and can counter the desired pharmacologic effect. They also can be used to treat excessive pseudoephedrine-induced hypertension.
hydrALAZINE: (Moderate) Use sympathomimetic agents with caution in patients receiving therapy for hypertension. Patients should be monitored to confirm that the desired antihypertensive effect is achieved. Sympathomimetics can increase blood pressure and heart rate, and antagonize the antihypertensive effects of vasodilators when administered concomitantly. Anginal pain may be induced when coronary insufficiency is present.
hydrALAZINE; Isosorbide Dinitrate, ISDN: (Moderate) Sympathomimetics can antagonize

the antianginal effects of nitrates, and can increase blood pressure and/or heart rate. Anginal pain may be induced when coronary insufficiency is present. (Moderate) Use sympathomimetic agents with caution in patients receiving therapy for hypertension. Patients should be monitored to confirm that the desired antihypertensive effect is achieved. Sympathomimetics can increase blood pressure and heart rate, and antagonize the antihypertensive effects of vasodilators when administered concomitantly. Anginal pain may be induced when coronary insufficiency is present.
hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly.
hydroCHLOROthiazide, HCTZ; Moexipril: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Ibritumomab Tiuxetan: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Iloprost: (Major) Avoid use of sympathomimetic agents with iloprost. Sympathomimetics counteract the medications used to stabilize pulmonary hypertension, including iloprost. Sympathomimetics can increase blood pressure, increase heart rate, and may cause vasoconstriction resulting in chest pain and shortness of breath in these patients. Patients should be advised to avoid amphetamine drugs, decongestants (including nasal decongestants) and sympathomimetic anorexiants for weight loss, including dietary supplements. Intravenous vasopressors may be used in the emergency management of pulmonary hypertension patients when needed, but hemodynamic monitoring and careful monitoring of cardiac status are needed to avoid ischemia and other complications.
Imipramine: (Major) Avoid use of pseudoephedrine and tricyclic antidepressants as tricyclic antidepressants may potentiate the effects of catecholamines.
Incretin Mimetics: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking incretin mimetics. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Indacaterol; Glycopyrrolate: (Moderate) Administer sympathomimetics with caution with

beta-agonists such as indacaterol. The cardiovascular effects of beta-2 agonists may be potentiated by concomitant use. Monitor the patient for tremors, nervousness, increased heart rate, or other additive side effects.
Indapamide: (Moderate) Sympathomimetics can antagonize the antihypertensive effects of vasodilators when administered concomitantly. Patients should be monitored to confirm that the desired antihypertensive effect is achieved.
Insulin Aspart: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Insulin Aspart; Insulin Aspart Protamine: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Insulin Degludec: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Insulin Degludec; Liraglutide: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking incretin mimetics. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term,

limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Insulin Detemir: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Insulin Glargine: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Insulin Glargine; Lixisenatide: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking incretin mimetics. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic

glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Insulin Glulisine: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Insulin Lispro: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Insulin Lispro; Insulin Lispro Protamine: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Insulin, Inhaled: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for

diabetes.
Insulins: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Iobenguane I 123: (Major) Discontinue medications that decrease norepinephrine uptake, such as pseudoephedrine, for at least 5 biological half-lives prior to iobenguane I 123 administration. Consider medication tapering or additional supportive therapy as appropriate to minimize the risk for precipitating pseudoephedrine withdrawal symptoms. Medications that decrease the uptake of norepinephrine can cause false negative imaging results. Increasing the dose of iobenguane I 123 will not overcome any potential uptake limiting effect of this medication.
Iobenguane I 131: (Major) Discontinue sympathomimetics for at least 5 half-lives before the administration of the dosimetry dose or a therapeutic dose of iobenguane I-131. Do not restart sympathomimetics until at least 7 days after each iobenguane I-131 dose. Drugs that reduce catecholamine uptake or deplete catecholamine stores, such as sympathomimetics, may interfere with iobenguane I-131 uptake into cells and interfere with dosimetry calculations resulting in altered iobenguane I-131 efficacy.
Ipratropium; Albuterol: (Moderate) Monitor blood pressure and heart rate during concomitant albuterol and pseudoephedrine use. Concomitant use may potentiate sympathetic effects.
Irbesartan: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Irbesartan; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Isocarboxazid: (Contraindicated) In general, sympathomimetics should be avoided in patients receiving MAOIs due to an increased risk of hypertensive crisis. This applies to sympathomimetics including stimulants for ADHD, narcolepsy or weight loss, nasal, oral, and ophthalmic decongestants and cold products, and respiratory sympathomimetics (e.g., beta agonist drugs). Some local anesthetics also contain a sympathomimetic (e.g., epinephrine). In general, medicines containing sympathomimetic agents should not be used concurrently with MAOIs or within 14 days before or after their use.

Isoflurane: (Major) Avoid administration of pseudoephedrine products to patients who have recently undergone, or will soon undergo, a procedure or treatment that requires general anesthesia. Specifically, halogenated anesthetics may sensitize the myocardium to the effects of sympathomimetics, including pseudoephedrine.
Isophane Insulin (NPH): (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Isosorbide Dinitrate, ISDN: (Moderate) Sympathomimetics can antagonize the antianginal effects of nitrates, and can increase blood pressure and/or heart rate. Anginal pain may be induced when coronary insufficiency is present.
Isosorbide Mononitrate: (Moderate) Sympathomimetics can antagonize the antianginal effects of nitrates, and can increase blood pressure and/or heart rate. Anginal pain may be induced when coronary insufficiency is present.
Isradipine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Ketamine: (Moderate) Closely monitor vital signs when ketamine and pseudoephedrine are coadministered; consider dose adjustment individualized to the patient's clinical situation. Pseudoephedrine may enhance the sympathomimetic effects of ketamine.
Labetalol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Landiolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Levalbuterol: (Moderate) Monitor blood pressure and heart rate during concomitant albuterol and pseudoephedrine use. Concomitant use may potentiate sympathetic effects.
Levamlodipine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Levobunolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either

drug.
Levothyroxine: (Moderate) Monitor hemodynamic parameters during concomitant sympathomimetic agent and thyroid hormone use; dosage adjustments may be necessary. Concomitant use may increase the effects of sympathomimetics or thyroid hormone.
Levothyroxine; Liothyronine (Porcine): (Moderate) Monitor hemodynamic parameters during concomitant sympathomimetic agent and thyroid hormone use; dosage adjustments may be necessary. Concomitant use may increase the effects of sympathomimetics or thyroid hormone.
Lidocaine; EPINEPHrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Linagliptin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta-receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Linagliptin; metFORMIN: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta-receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Linezolid: (Moderate) Linezolid may enhance the hypertensive effect of

pseudoephedrine. Closely monitor for increased blood pressure during coadministration. Linezolid is an antibiotic that is also a weak, reversible nonselective inhibitor of monoamine oxidase (MAO). Therefore, linezolid has the potential for interaction with adrenergic agents, such as pseudoephedrine.
Liothyronine: (Moderate) Monitor hemodynamic parameters during concomitant sympathomimetic agent and thyroid hormone use; dosage adjustments may be necessary. Concomitant use may increase the effects of sympathomimetics or thyroid hormone.
Liraglutide: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking incretin mimetics. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Lisinopril: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Lisinopril; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Lixisenatide: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking incretin mimetics. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Loop diuretics: (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially systolic hypertension) has been reported in some patients.
Losartan: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the

antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Losartan; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Macitentan: (Major) Avoid use of sympathomimetic agents with macitentan. Sympathomimetics counteract the medications used to stabilize pulmonary hypertension, including macitentan. Sympathomimetics can increase blood pressure, increase heart rate, and may cause vasoconstriction resulting in chest pain and shortness of breath in these patients. Patients should be advised to avoid amphetamine drugs, decongestants (including nasal decongestants) and sympathomimetic anorexiants for weight loss, including dietary supplements. Intravenous vasopressors may be used in the emergency management of pulmonary hypertension patients when needed, but hemodynamic monitoring and careful monitoring of cardiac status are needed to avoid ischemia and other complications.
Macitentan; Tadalafil: (Major) Avoid use of sympathomimetic agents with macitentan. Sympathomimetics counteract the medications used to stabilize pulmonary hypertension, including macitentan. Sympathomimetics can increase blood pressure, increase heart rate, and may cause vasoconstriction resulting in chest pain and shortness of breath in these patients. Patients should be advised to avoid amphetamine drugs, decongestants (including nasal decongestants) and sympathomimetic anorexiants for weight loss, including dietary supplements. Intravenous vasopressors may be used in the emergency management of pulmonary hypertension patients when needed, but hemodynamic monitoring and careful monitoring of cardiac status are needed to avoid ischemia and other complications.
Maprotiline: (Moderate) Use maprotiline and sympathomimetics together with caution and close clinical monitoring. Regularly assess blood pressure, heart rate, the efficacy of treatment, and the emergence of sympathomimetic/adrenergic adverse events. Carefully adjust dosages as clinically indicated. Maprotiline has pharmacologic activity similar to tricyclic antidepressant agents and may cause additive sympathomimetic effects when combined with agents with adrenergic/sympathomimetic activity.
Mecamylamine: (Major) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by mecamylamine. Close monitoring of blood pressure or the selection of alternative therapeutic agents may be needed.
Meglitinides: (Moderate) Sympathomimetic agents and adrenergic agonists tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine, phenylephrine, and other sympathomimetics are administered to patients taking antidiabetic agents. Epinephrine and other sympathomimetics, through stimulation of alpha- and beta- receptors,

increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Metaproterenol: (Major) Caution and close observation should also be used when metaproterenol is used concurrently with other adrenergic sympathomimetics, administered by any route, to avoid potential for increased cardiovascular effects.
metFORMIN: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
metFORMIN; sAXagliptin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta-receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
metFORMIN; SITagliptin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold

symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta-receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
methazolAMIDE: (Moderate) Methazolamide can decrease the urinary excretion and enhance the clinical effects of pseudoephedrine. Use caution if methazolamide is coadministered; monitor for excessive pseudoephedrine-related adverse effects.
Methyldopa: (Major) Sympathomimetics, such as pseudoephedrine, can antagonize the antihypertensive effects of methyldopa when administered concomitantly. Blood pressure should be monitored closely to confirm that the desired antihypertensive effect is achieved.
Methylergonovine: (Moderate) Monitor for adverse effects if concomitant use of methylergonovine and vasoconstrictors, such as pseudoephedrine, is necessary. Concomitant use may produce a synergistic increase in blood pressure and may also increase the risk for vasospasm which may lead to cerebral or peripheral ischemia.
metOLazone: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly.
Metoprolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Metoprolol; hydroCHLOROthiazide, HCTZ: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug. (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly.
Midodrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Miglitol: (Moderate) Sympathomimetic agents and adrenergic agonists tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine, phenylephrine, and other sympathomimetics

are administered to patients taking antidiabetic agents. Epinephrine and other sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Minoxidil: (Moderate) Use sympathomimetic agents with caution in patients receiving therapy for hypertension. Patients should be monitored to confirm that the desired antihypertensive effect is achieved. Sympathomimetics can increase blood pressure and heart rate, and antagonize the antihypertensive effects of vasodilators when administered concomitantly. Anginal pain may be induced when coronary insufficiency is present.
Moexipril: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Monoamine oxidase inhibitors: (Contraindicated) In general, sympathomimetics should be avoided in patients receiving MAOIs due to an increased risk of hypertensive crisis. This applies to sympathomimetics including stimulants for ADHD, narcolepsy or weight loss, nasal, oral, and ophthalmic decongestants and cold products, and respiratory sympathomimetics (e.g., beta agonist drugs). Some local anesthetics also contain a sympathomimetic (e.g., epinephrine). In general, medicines containing sympathomimetic agents should not be used concurrently with MAOIs or within 14 days before or after their use.
Nadolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Nateglinide: (Moderate) Sympathomimetic agents and adrenergic agonists tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine, phenylephrine, and other sympathomimetics are administered to patients taking antidiabetic agents. Epinephrine and other sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Nebivolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.

NiCARdipine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Nicotine: (Minor) Vasoconstricting nasal decongestants such as oxymetazoline, phenylephrine, pseudoephedrine, and tetrahydrozoline prolong the time to peak effect of nasally administered nicotine (i.e., nicotine nasal spray); however, no dosage adjustments are recommended.
NIFEdipine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
niMODipine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Nisoldipine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Nitrates: (Moderate) Sympathomimetics can antagonize the antianginal effects of nitrates, and can increase blood pressure and/or heart rate. Anginal pain may be induced when coronary insufficiency is present.
Nitroglycerin: (Moderate) Sympathomimetics can antagonize the antianginal effects of nitrates, and can increase blood pressure and/or heart rate. Anginal pain may be induced when coronary insufficiency is present.
Nitroprusside: (Moderate) Use sympathomimetic agents with caution in patients receiving therapy for hypertension. Patients should be monitored to confirm that the desired antihypertensive effect is achieved. Sympathomimetics can increase blood pressure and heart rate, and antagonize the antihypertensive effects of vasodilators when administered concomitantly. Anginal pain may be induced when coronary insufficiency is present.
Norepinephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Nortriptyline: (Major) Avoid use of pseudoephedrine and tricyclic antidepressants as tricyclic antidepressants may potentiate the effects of catecholamines.
Olmesartan: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Olmesartan; amLODIPine; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the

antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Olmesartan; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Omeprazole; Sodium Bicarbonate: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Perindopril: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Perindopril; amLODIPine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Perphenazine; Amitriptyline: (Major) Avoid use of pseudoephedrine and tricyclic antidepressants as tricyclic antidepressants may potentiate the effects of catecholamines.
Phenelzine: (Contraindicated) In general, sympathomimetics should be avoided in patients receiving MAOIs due to an increased risk of hypertensive crisis. This applies to sympathomimetics including stimulants for ADHD, narcolepsy or weight loss, nasal, oral, and ophthalmic decongestants and cold products, and respiratory sympathomimetics (e.g., beta agonist drugs). Some local anesthetics also contain a sympathomimetic (e.g., epinephrine). In general, medicines containing sympathomimetic agents should not be used concurrently with MAOIs or within 14 days before or after their use.
PHENobarbital; Hyoscyamine; Atropine; Scopolamine: (Major) Atropine blocks the vagal reflex bradycardia caused by pseudoephedrine, and increases its pressor effect. Patients need to be asked whether they have taken pseudoephedrine before receiving atropine.
Phenoxybenzamine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by alpha-blockers. Monitor blood pressure and heart rate.
Phentolamine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by alpha-blockers. Monitor blood pressure and

heart rate.
Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Pindolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Pioglitazone: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking thiazolidinediones. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Pioglitazone; Glimepiride: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking sulfonylureas. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking thiazolidinediones. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Pioglitazone; metFORMIN: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine is administered to patients taking metformin. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold

symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes. (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking thiazolidinediones. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Potassium Bicarbonate: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Potassium Citrate: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Potassium Citrate; Citric Acid: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Potassium-sparing diuretics: (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially systolic hypertension) has been reported in some patients.
Pramlintide: (Moderate) Sympathomimetic agents and adrenergic agonists tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine, phenylephrine, and other sympathomimetics are administered to patients taking antidiabetic agents. Epinephrine and other sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Prazosin: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by alpha-blockers. Monitor blood pressure and heart

rate.
Prilocaine; EPINEPHrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Procarbazine: (Major) Because procarbazine exhibits some monoamine oxidase inhibitory (MAOI) activity, sympathomimetic drugs should be avoided. As with MAOIs, the use of a sympathomimetic drug with procarbazine may precipitate hypertensive crisis or other serious side effects. In the presence of MAOIs, drugs that cause release of norepinephrine induce severe cardiovascular and cerebrovascular responses. In general, do not use a sympathomimetic drug unless clinically necessary (e.g., medical emergencies, agents like dopamine) within the 14 days prior, during or 14 days after procarbazine therapy. If use is necessary within 2 weeks of the MAOI drug, in general the initial dose of the sympathomimetic agent must be greatly reduced. Patients should be counseled to avoid non-prescription (OTC) decongestants and other drug products, weight loss products, and energy supplements that contain sympathomimetic agents.
Promethazine; Phenylephrine: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Propranolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Protriptyline: (Major) Avoid use of pseudoephedrine and tricyclic antidepressants as tricyclic antidepressants may potentiate the effects of catecholamines.
Quinapril: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Quinapril; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Racepinephrine: (Major) Racepinephrine is a sympathomimetic drug with agonist actions at both the alpha and beta receptors. Patients using racepinephrine inhalation are advised to avoid other non-prescription products containing sympathomimetics since additive adverse effects on the cardiovascular and nervous system are possible, some which may be undesirable. Side effects such as nausea, tremor, nervousness, difficulty with sleep, and increased heart rate or blood pressure may be additive. Patients should

avoid use of non-prescription decongestants, such as phenylephrine and pseudoephedrine, while using racepinephrine inhalations. Patients should avoid dietary supplements containing ingredients that are reported or claimed to have a stimulant or weight-loss effect, such as ephedrine and ephedra, Ma huang, and phenylpropanolamine. Patients taking prescription sympathomimetic or stimulant medications (including amphetamines, methylphenidate, dexmethylphenidate, isometheptane, epinephrine) should seek health care professional advice prior to the use of racepinephrine inhalations; consider therapeutic alternatives to racepinephrine for these patients.
Ramipril: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Rasagiline: (Moderate) The concomitant use of rasagiline and sympathomimetics was not allowed in clinical studies; therefore, caution is advised during concurrent use of rasagiline and sympathomimetics including stimulants for ADHD and weight loss, non-prescription nasal, oral, and ophthalmic decongestants, and weight loss dietary supplements containing Ephedra. Although sympathomimetics are contraindicated for use with other non-selective monoamine oxidase inhibitors (MAOIs), hypertensive reactions generally are not expected to occur during concurrent use with rasagiline because of the selective monoamine oxidase-B (MAO-B) inhibition of rasagiline at manufacturer recommended doses. One case of elevated blood pressure has been reported in a patient during concurrent use of the recommended dose of rasagiline and ophthalmic tetrahydrozoline. One case of hypertensive crisis has been reported in a patient taking the recommended dose of another MAO-B inhibitor, selegiline, in combination with ephedrine. It should be noted that the MAO-B selectivity of rasagiline decreases in a dose-related manner as increases are made above the recommended daily dose and interactions with sympathomimetics may be more likely to occur at these higher doses.
Regular Insulin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin.
Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Regular Insulin; Isophane Insulin (NPH): (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking insulin.

Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Repaglinide: (Moderate) Sympathomimetic agents and adrenergic agonists tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when pseudoephedrine, phenylephrine, and other sympathomimetics are administered to patients taking antidiabetic agents. Epinephrine and other sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Riociguat: (Major) Avoid use of sympathomimetic agents with riociguat. Sympathomimetics counteract the medications used to stabilize pulmonary hypertension, including riociguat. Sympathomimetics can increase blood pressure, increase heart rate, and may cause vasoconstriction resulting in chest pain and shortness of breath in these patients. Patients should be advised to avoid amphetamine drugs, decongestants (including nasal decongestants) and sympathomimetic anorexiants for weight loss, including dietary supplements. Intravenous vasopressors may be used in the emergency management of pulmonary hypertension patients when needed, but hemodynamic monitoring and careful monitoring of cardiac status are needed to avoid ischemia and other complications.
Rosiglitazone: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking thiazolidinediones. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Sacubitril; Valsartan: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Safinamide: (Moderate) Severe hypertensive reactions, including hypertensive crisis, have been reported in patients taking monoamine oxidase inhibitors (MAOIs), such as

safinamide concurrently with sympathomimetic medications, such as pseudoephedrine. If concomitant use of safinamide and pseudoephedrine is necessary, monitor for hypertension and hypertensive crisis.
Salmeterol: (Moderate) Monitor blood pressure and heart rate during concomitant salmeterol and pseudoephedrine use. Concomitant use may potentiate sympathetic effects.
sAXagliptin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta-receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Selegiline: (Contraindicated) The product label for pseudoephedrine contraindicates use with monoamine oxidase inhibitors (MAOIs) due to the risk of hypertensive crisis. Pseudoephedrine should generally not be used concurrently with MAOIs or within 14 days before or after their use. Uncontrolled hypertension has been reported when taking the recommended dose of oral selegiline and a sympathomimetic medication. The manufacturers of selegiline products recommend caution and monitoring of blood pressure during concurrent use with sympathomimetics.
Selexipag: (Major) Avoid use of sympathomimetic agents with selexipag. Sympathomimetics counteract the medications used to stabilize pulmonary hypertension, including selexipag. Sympathomimetics can increase blood pressure, increase heart rate, and may cause vasoconstriction resulting in chest pain and shortness of breath in these patients. Patients should be advised to avoid amphetamine drugs, decongestants (including nasal decongestants) and sympathomimetic anorexiants for weight loss, including dietary supplements. Intravenous vasopressors may be used in the emergency management of pulmonary hypertension patients when needed, but hemodynamic monitoring and careful monitoring of cardiac status are needed to avoid ischemia and other complications.
Semaglutide: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking incretin mimetics. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for

diabetes.
Sevoflurane: (Major) Avoid administration of pseudoephedrine products to patients who have recently undergone, or will soon undergo, a procedure or treatment that requires general anesthesia. Specifically, halogenated anesthetics may sensitize the myocardium to the effects of sympathomimetics, including pseudoephedrine.
SGLT2 Inhibitors: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
SITagliptin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking dipeptidyl peptidase-4 (DPP-4) inhibitors. Sympathomimetics, through stimulation of alpha- and beta-receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Sodium Acetate: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Sodium Bicarbonate: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Sodium Citrate; Citric Acid: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Sodium Lactate: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Solriamfetol: (Moderate) Monitor blood pressure and heart rate during routine

coadministration of solriamfetol, a norepinephrine and dopamine reuptake inhibitor, and pseudoephedrine, a CNS stimulant. Concurrent use of solriamfetol and other medications that increase blood pressure and/or heart rate may increase the risk of such effects. Coadministration of solriamfetol with other drugs that increase blood pressure or heart rate has not been evaluated.
Sotagliflozin: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking SGLT2 inhibitors. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Sotalol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Spironolactone: (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially systolic hypertension) has been reported in some patients.
Spironolactone; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially systolic hypertension) has been reported in some patients.
St. John's Wort, Hypericum perforatum: (Moderate) Monitor blood pressure during concomitant use of pseudoephedrine and St. John's Wort. St. John's Wort has been shown to weakly inhibit monoamine oxidase and may potentiate the effects of pseudoephedrine on blood pressure.
Sulfacetamide; Sulfur: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Sulfonylureas: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking sulfonylureas.

Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Telmisartan: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Telmisartan; amLODIPine: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Telmisartan; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Terazosin: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by alpha-blockers. Monitor blood pressure and heart rate.
Terbutaline: (Major) Concomitant use of sympathomimetics with beta-agonists might result in additive cardiovascular effects such as increased blood pressure and heart rate.
Theophylline, Aminophylline: (Moderate) Concurrent administration of theophylline or aminophylline with some sympathomimetics can produce excessive stimulation and effects such as nervousness, irritability, or insomnia. Seizures or cardiac arrhythmias are also possible. (Moderate) Concurrent administration of theophylline or aminophylline with sympathomimetics can produce excessive stimulation manifested by skeletal muscle activity, agitation, and hyperactivity.
Thiazide diuretics: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly.
Thiazolidinediones: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking thiazolidinediones.
Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for

diabetes.
Thyroid hormones: (Moderate) Monitor hemodynamic parameters during concomitant sympathomimetic agent and thyroid hormone use; dosage adjustments may be necessary. Concomitant use may increase the effects of sympathomimetics or thyroid hormone.
Timolol: (Moderate) Monitor hemodynamic parameters and for loss of efficacy during concomitant sympathomimetic agent and beta-blocker use; dosage adjustments may be necessary. Concomitant use may antagonize the cardiovascular effects of either drug.
Tirzepatide: (Moderate) Sympathomimetic agents tend to increase blood glucose concentrations when administered systemically. Monitor for loss of glycemic control when sympathomimetics are administered to patients taking incretin mimetics. Sympathomimetics, through stimulation of alpha- and beta- receptors, increase hepatic glucose production and glycogenolysis and inhibit insulin secretion. Also, adrenergic medications may decrease glucose uptake by muscle cells. For treatment of cold symptoms, nasal decongestants may be preferable for short term, limited use (1 to 3 days) as an alternative to systemic decongestants in patients taking medications for diabetes.
Torsemide: (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially systolic hypertension) has been reported in some patients.
Trandolapril: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure.
Trandolapril; Verapamil: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin-converting enzyme inhibitors. Monitor heart rate and blood pressure. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.
Tranylcypromine: (Contraindicated) In general, sympathomimetics should be avoided in patients receiving MAOIs due to an increased risk of hypertensive crisis. This applies to sympathomimetics including stimulants for ADHD, narcolepsy or weight loss, nasal, oral, and ophthalmic decongestants and cold products, and respiratory sympathomimetics (e.g., beta agonist drugs). Some local anesthetics also contain a sympathomimetic (e.g., epinephrine). In general, medicines containing sympathomimetic agents should not be used concurrently with MAOIs or within 14 days before or after their use.
Treprostinil: (Major) Avoid use of sympathomimetic agents with treprostinil. Sympathomimetics counteract the medications used to stabilize pulmonary hypertension, including treprostinil. Sympathomimetics can increase blood pressure,

increase heart rate, and may cause vasoconstriction resulting in chest pain and shortness of breath in these patients. Patients should be advised to avoid amphetamine drugs, decongestants (including nasal decongestants) and sympathomimetic anorexiants for weight loss, including dietary supplements. Intravenous vasopressors may be used in the emergency management of pulmonary hypertension patients when needed, but hemodynamic monitoring and careful monitoring of cardiac status are needed to avoid ischemia and other complications.
Triamterene: (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially systolic hypertension) has been reported in some patients.
Triamterene; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of sympathomimetics may reduce the antihypertensive effects produced by diuretics. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure; however, increased blood pressure (especially systolic hypertension) has been reported in some patients.
Tricyclic antidepressants: (Major) Avoid use of pseudoephedrine and tricyclic antidepressants as tricyclic antidepressants may potentiate the effects of catecholamines.
Trimipramine: (Major) Avoid use of pseudoephedrine and tricyclic antidepressants as tricyclic antidepressants may potentiate the effects of catecholamines.
Tromethamine: (Minor) Pseudoephedrine renal elimination is susceptible to changes in urinary pH. Urinary alkalinizers allow for increased tubular reabsorption of pseudoephedrine. Concomitant administration of pseudoephedrine with urinary alkalinizers may increase the likelihood of pseudoephedrine adverse reactions.
Umeclidinium; Vilanterol: (Moderate) Administer sympathomimetics with caution with beta-agonists such as vilanterol. The cardiovascular effects of beta-2 agonists may be potentiated by concomitant use. Monitor the patient for tremors, nervousness, increased heart rate, or other additive side effects.
Valsartan: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Valsartan; hydroCHLOROthiazide, HCTZ: (Moderate) Sympathomimetics can antagonize the effects of antihypertensives when administered concomitantly. (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by angiotensin II receptor antagonists. Monitor heart rate and blood pressure.
Vasodilators: (Moderate) Use sympathomimetic agents with caution in patients receiving

therapy for hypertension. Patients should be monitored to confirm that the desired antihypertensive effect is achieved. Sympathomimetics can increase blood pressure and heart rate, and antagonize the antihypertensive effects of vasodilators when administered concomitantly. Anginal pain may be induced when coronary insufficiency is present.
Vasopressin, ADH: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Vasopressors: (Major) Pseudoephedrine can potentiate the effects and increase the toxicity of other sympathomimetics by adding to their sympathomimetic activity. Although no data are available, pseudoephedrine should be used cautiously in patients using significant quantities of other sympathomimetics.
Verapamil: (Moderate) The cardiovascular effects of pseudoephedrine may reduce the antihypertensive effects produced by calcium-channel blockers. Monitor blood pressure and heart rate.

Adverse Reaction

anxiety, dizziness, excitability, hallucinations, headache, insomnia, psychosis, restlessness, seizures

Central nervous system (CNS) effects such as restlessness, headache, dizziness, and insomnia have been infrequently reported during therapy with pseudoephedrine at usual doses. If nervousness, dizziness, or sleeplessness occur, the individual should discontinue pseudoephedrine use. Rare CNS effects include anxiety and severe psychological disturbances including hallucinations and psychosis. Geriatric adults appear to be more sensitive to CNS adverse effects of pseudoephedrine. Toddlers and infants are also more likely to experience CNS-related adverse events, including excitability. Seizures may occur, but have more commonly occurred with excessive dosage, overdosage, or in people with renal failure receiving the maximum dosage (without dosage adjustment).

angina, arrhythmia exacerbation, hypertension, myocardial infarction, palpitations, premature ventricular contractions (PVCs), sinus tachycardia, stroke, supraventricular tachycardia (SVT)

As with other sympathomimetics, cardiovascular adverse effects due to pseudoephedrine therapy may include increased heart rate (sinus tachycardia) or hypertension. However, these effects generally occur at excessive dosages or in people at higher risk, such as those with pre-existing heart disease or high blood pressure.

Adults with well-controlled hypertension receiving pseudoephedrine at recommended doses (240 mg/day PO) do not appear at high risk for significant elevations in blood pressure. Increased blood pressure (especially systolic hypertension) has been reported in some cases. Although infrequent, changes in heart rhythm secondary to pseudoephedrine may occur in the general population at therapeutic doses and include palpitations, premature ventricular contractions (PVCs), supraventricular tachycardia (SVT), and sinus tachycardia. Pseudoephedrine and phenylephrine appear to have a lower propensity to cause hypertension and potential sequelae (e.g., hemorrhagic stroke, hypertensive crisis) compared to ephedrine or phenylpropanolamine. Angina, cardiac arrhythmias (or arrhythmia exacerbation) and myocardial infarction are also rare, but are more likely in people with risk factors for such events. The cardiovascular adverse effects of sympathomimetics such as pseudoephedrine can be severe in infants and toddlers.

ocular hypertension, photophobia

Ocular effects can occur with pseudoephedrine products. Adrenergic agonists can cause pupillary dilation that may cause increased intraocular pressure (ocular hypertension) and photophobia. In some patients, these actions may result in acute angle-closure attacks.

abdominal pain, bowel ischemia, colitis, nausea

Pseudoephedrine may produce infrequent gastrointestinal (GI) effects such as nausea and reduced appetite. Ischemic colitis (bowel ischemia) has been associated with the use of pseudoephedrine and other oral decongestants and may present with symptoms of abdominal pain and bloody diarrhea. Colitis may result from reversible splanchnic arterial vasoconstriction and may occur with acute or chronic use; the ischemic symptoms usually resolve upon discontinuation of pseudoephedrine.

acute generalized exanthematous pustulosis (AGEP), anaphylactoid reactions, blepharedema, contact dermatitis, fixed drug eruption, rash, urticaria

Significant allergic and/or dermatological reactions are not common with pseudoephedrine use. Immediate hypersensitivity, such as anaphylactoid reactions or angioedema of the eyelids (blepharedema), has rarely been reported. Skin reactions that have been reported include: fixed drug eruption or nonpigmenting fixed exanthema, eczematous dermatitis, vacuolar interface dermatitis, urticaria, acute generalized exanthematous pustulosis (AGEP), and other generalized rash. Contact dermatitis due to

sympathomimetics has also been reported, but is usually due to other sympathomimetic agents applied as eye drops or topical formulations.

urinary retention

Urinary retention may occur with pseudoephedrine or other sympathomimetic agents that have alpha-adrenergic actions. The alpha-adrenergic stimulation causes internal bladder sphincter contraction, thus reducing or preventing voiding.

Description

Pseudoephedrine is an orally administered sympathomimetic agent with structural similarity to ephedrine. Compared to ephedrine, pseudoephedrine has practically no bronchodilatory properties and is ineffective in relieving bronchospasm. Pseudoephedrine is most commonly used to relieve nasal and sinus congestion in adults and pediatric patients 4 years of age and older. Oral decongestant use produces little or no rebound congestion, unlike topically applied sympathomimetics. Pseudoephedrine is effective in reducing air-travel-related otalgia in adults; however, children and infants do not appear to benefit. Pseudoephedrine and phenylephrine appear to have a lower propensity to cause hypertension and potential sequelae (e.g., hemorrhagic stroke, hypertensive crisis) than ephedrine or phenylpropanolamine. Well-controlled hypertensive patients receiving pseudoephedrine at recommended doses do not appear at high risk for significant elevations in blood pressure. However, increased blood pressure (especially systolic hypertension) has been reported in some patients. Pseudoephedrine is commonly diverted for use as a substrate for the illegal synthesis of amphetamine and methamphetamine. The U.S. Comprehensive Methamphetamine Control Act of 1996 requires retailers to report bulk sales (more than 24 grams) of pseudoephedrine, as well as all distributions of pseudoephedrine to non-regulated parties by postal, private, or commercial carrier to the DEA on a monthly basis (regardless of the size of the shipment). The Combat Methamphetamine Epidemic Act (CMEA) of 2005 governs the sale and purchase of single-ingredient products containing pseudoephedrine, ephedrine, or phenylpropanolamine in the U.S. Retailers must keep these products in locked cabinets or behind counters prior to purchase, enter individual product purchases and amounts into a log and maintain it for at least 2 years following each sale, require photo identification and verify customer-required entries into the log, and ensure daily and monthly allowable limits on purchases are not exceeded. Pseudoephedrine was approved by the FDA in June 1959.

Mechanism Of Action

Pseudoephedrine acts directly on both alpha- and, to a lesser degree, beta-adrenergic receptors. Like ephedrine, pseudoephedrine also has an indirect effect by releasing norepinephrine from its storage sites. By acting directly on alpha-adrenergic receptors in the mucosa of the respiratory tract, pseudoephedrine produces vasoconstriction, which shrinks swollen nasal mucous membranes; reduces tissue hyperemia, edema, and nasal congestion; and increases nasal airway patency. Also, drainage of sinus secretions is increased, and obstructed eustachian ostia may be opened. Pseudoephedrine can relax bronchial smooth muscle by stimulating beta-2 adrenergic receptors; however, bronchodilation has not been consistently demonstrated upon oral administration. Pseudoephedrine has been used to treat urinary incontinence due to its alpha adrenergic agonist effects. Pseudoephedrine produced minimal changes in pulse and blood pressure after a single dose of 60 mg. Higher single doses of 180 mg produced minor elevations in systolic blood pressure (about 7 mmHg), minor increases in heart rate (about 9 beats/minute), and no changes in diastolic blood pressure in normal subjects.

Pharmacokinetics

Pseudoephedrine is administered orally. Pseudoephedrine is extensively distributed into extravascular sites (apparent volume of distribution between 2.6 and 3.5 L/kg). It is estimated that less than 1% of an oral dose is metabolized in the liver, with the major metabolite, norpseudoephedrine, being active. Most of an oral dose of pseudoephedrine (43% to 96%) is excreted unchanged in the urine. Pseudoephedrine (immediate-release) has been shown to have a mean elimination half-life of 4 to 6 hours. Pseudoephedine is a weak base (pKa 9.4), so urinary elimination is dependent on urine pH. The elimination half-life is increased to up to 16 hours at urine pH greater than 8.

Affected cytochrome P450 isoenzymes and drug transporters: None

Route-Specific Pharmacokinetics

- **Oral Route**

Pseudoephedrine is well absorbed orally. After oral administration of a 60 mg dose of pseudoephedrine immediate-release tablets or oral solution, peak concentrations of 180 ng/mL usually occur within 1.4 hours after dosing. The time to maximum concentration occurred 3.8 to 6.1 hours after dosing with the 12-hour extended-release dosage form and 11.87 hours following dosing with a once-daily (24-hour) formulation. Food can delay the absorption rate from the oral solution, but does not affect the extent of absorption. Food does not appear to affect the rate of absorption for extended-release products.

- **Hepatic Impairment**

Pharmacokinetic data are not available for subjects with hepatic impairment. However, liver metabolism is not a significant elimination route for pseudoephedrine.

- **Renal Impairment**

Renal impairment is expected to reduce pseudoephedrine clearance. Pseudoephedrine accumulation has been reported in people with severe renal impairment and renal failure. Reduced pseudoephedrine clearance has also been reported in a patient with renal tubular acidosis. The renal clearance of pseudoephedrine is dependent both on renal function (creatinine clearance) and urinary pH. Hemodialysis is only minimally effective at removing pseudoephedrine.

Administration

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

Oral Administration

Pseudoephedrine products may be administered without regard to meals.

Oral Solid Formulations

Immediate-release tablets or liquid-filled capsules:
Administer last dose 2 hours before bedtime to minimize insomnia.

12-hour or 24-hour extended-release products:
Administer whole; do not crush, break, or chew.
Extended-release 24-hour preparations: The empty tablet shell may be found in the stool and is not cause for concern.

Oral Liquid Formulations

Oral solutions or syrups:
Use a calibrated oral dosing device to ensure accurate dosage.
Administer last dose 2 hours before bedtime to minimize insomnia.

Maximum Dosage Limits

- **Adults**
  240 mg/day PO.
- **Geriatric**
  240 mg/day PO.
- **Adolescents**

240 mg/day PO.

- **Children**
  12 years: 240 mg/day PO.
  6 to 11 years: 120 mg/day PO; do not use extended-release dosage forms.
  4 to 5 years: 60 mg/day PO; do not use extended-release dosage forms.
  2 to 3 years: Safety and efficacy have not been established for nonprescription (OTC) use. Consult care team prior to use. Suggested off-label prescription max: 4 mg/kg/day (not to exceed 60 mg/day) PO; do not use extended-release dosage forms.
  1 year: Safety and efficacy have not been established.
- **Infants**
  Safety and efficacy have not been established.

Dosage Forms

- Allergy Relief & Nasal Decongestant 24 Hour Non-Drowsy 10mg-240mg Extended-Release Tablet
- Allergy Relief-D 24 Hour 10mg-240mg Extended-Release Tablet
- Allergy-D 24 Hour Non-Drowsy 10mg-240mg Extended-Release Tablet
- Aprodine 60mg-2.5mg Tablet
- Claritin-D 24 Hour 10mg-240mg Extended-Release Tablet
- Claritin-D 24 Hour 10mg-240mg Extended-Release Tablet
- CVS 12 Hour Nasal Decongestant 120mg Extended-Release Caplet
- CVS Allergy Relief-D 24 Hour 10mg-240mg Extended-Release Tablet
- CVS Nasal Decongestant 30mg Maximum Strength Softgel
- CVS Nasal Decongestant Maximum Strength 30mg Tablet
- ED A-HIST PSE 60mg-2.5mg Tablet
- ElixSure Cold 15mg/5ml Solution
- Equate Allergy Relief and Nasal Decongestant 10mg-240mg 24 Hour Extended-Release Tablet
- Equate Non-Drowsy Sinus & Congestion Maximum Strength 30mg Tablet
- Equate Non-Drowsy Sinus 12 Hour Maximum Strength 120mg Extended-Release Caplet
- Foster & Thrive Nasal Decongestant 12 Hour Maximum Strength 120mg Extended-Release Tablet
- Foster & Thrive Nasal Decongestant Maximum Strength 30mg Tablet
- Genac Tablet
- Genaphed Tablet
- GNP Allergy & Congestion Relief 24 Hour Extended-Release Tablet

- GNP Allergy & Congestion Relief Non-Drowsy 10mg-240mg 24 Hour Extended-Release Tablet
- GNP Nasal Decongestant 30mg Tablet
- GNP Nasal Decongestant Maximum Strength 120mg Caplet
- GNP Nasal Decongestant Maximum Strength 30mg Tablet
- GNP Pseudoephedrine Hydrochloride 120mg Tablet
- GNP Suphedrin 15mg/5ml Liquid (Grape)
- GoodSense 12 Hour Decongestant Maximum Strength 120mg Caplet
- GoodSense Nasal Decongestant 30mg Tablet
- GoodSense Nasal Decongestant Maximum Strength 30mg Tablet
- HEB 12 Hour Decongestant 120mg Extended-Release Caplet
- HEB Allergy Relief-D 24 Hour 10mg-240mg Extended-Release Tablet
- HEB Nasal Decongestant 30mg Tablet
- Kirkland AllerClear D-24 Hour 10mg-240mg Extended-Release Tablet
- Kirkland AllerClear-D 24 Hour 10mg-240mg Extended-Release Tablet
- Leader 12 Hour Nasal Decongestant Maximum Strength 120mg Caplet
- Leader 12-Hour Nasal Decongestant 120mg Extended-Release Caplet
- Leader Allergy Relief D-24 Non-Drowsy Extended-Release Tablet
- Leader Nasal Decongestant Maximum Strength 30mg Tablet
- Leader Pseudoephedrine Hydrochloride Maximum Strength 120mg Extended-Release Tablet
- Meijer Allergy Relief-D 24 Hour 10mg-240mg Extended-Release Tablet
- NASAL Decongestant 30mg Tablet
- Nasal Decongestant 30mg/5mL Liquid
- Nasal Decongestant Maximum Strength 30mg Tablet
- Nasal Decongestant Maximum Strength 30mg Tablet
- Nexafed 30mg Tablet
- Nexafed Sinus Pressure + Pain Tablet
- Ornex 325mg-30mg Caplet
- Premier Value Allergy Relief and Nasal Congestant 24 Hour Extended-Release Tablet
- Premier Value Allergy Relief and Nasal Decongestant 10mg-240mg 24 Hour Extended-Release Tablet
- Premier Value Nasal Decongestant 30mg Tablet
- Premier Value Nasal Decongestant Maximum Strength 30mg Tablet
- Premier Value Sinus & Allergy 120mg Tablet
- Pseudo-Time 30mg Tablet
- Pseudoephedrine Hydrochloride 120mg Oral tablet, extended release 12 hour
- Pseudoephedrine Hydrochloride 30mg Oral tablet
- Pseudoephedrine Hydrochloride 60mg Oral tablet
- Pseudoephedrine Hydrochloride 60mg Tablet

- Pseudoephedrine Hydrochloride 60mg, Guaifenesin 375mg Oral tablet
- Pseudoephedrine Hydrochloride Bulk powder
- Pseudoephedrine Sulfate 240mg, Loratadine 10mg Oral tablet, extended release 24 hour
- Publix Allergy Relief D 24 Hour Extended-Release Tablet
- Publix Nasal Decongestant 12 Hour 120mg Tablet
- Publix Nasal Decongestant Maximum Strength 30mg Tablet
- Quality Choice Allergy Relief and Nasal Decongestant 24 Hour 10mg-240mg Extended-Release Tablet
- Quality Choice Nasal Decongestant Maximum Strength 30mg Tablet
- RITE AID Sinus Pressure & Congestion Relief Maximum Strength 12-Hour Caplet
- RITE AID Sinus Pressure & Congestion Relief Maximum Strength Tablet
- Sinus 12 Hour Maximum Strength 120mg Extended-Release Caplet
- Sinus Congestion Maximum Strength 30mg Tablet
- Sudafed Children's Nasal Decongestant 15mg/5ml Solution
- Sudafed Sinus Congestion 12 Hour 120mg Extended-Release Caplet
- Sudafed Sinus Congestion 12 Hour 120mg Extended-Release Caplet
- Sudafed Sinus Congestion 24 Hour 240mg Maximum Strength Tablet
- Sudafed Sinus Congestion Maximum Strength 30mg Tablet
- SudoGest 12 Hour Maximum Strength 120mg Extended-Release Caplet
- Sudogest 30mg Tablet
- SudoGest 30mg Tablet
- SudoGest 30mg Tablet
- SudoGest 30mg Tablet
- Sudogest 60mg Tablet
- Sudogest 60mg Tablet
- Sunmark Nasal Decongestant Maximum Strength 30mg Tablet
- Today's Health 12 Hour Decongestant 120mg Caplet
- Today's Health Congestion Nasal Decongestant 30mg Tablet
- Today's Health Loratadine-D 24 Hour 10mg-240mg Extended-Release Tablet
- Top Care 12 Hour Decongestant Maximum Strength 120mg Caplet
- Top Care Nasal Decongestant 30mg Tablet
- Wal-Act D Cold & Allergy 60mg-2.5mg Tablet
- Wal-itin D 24 Hour Allergy & Congestion Extended-Release Tablet
- Wal-phed 30mg Tablet
- Wal-Phed D 12 Hour Non-Drowsy Maximum Strength 120mg Caplet
- Wal-Phed D Maximum Strength 120mg Extended-Release Tablet
- Wal-phed Extended-Release Tablet
- Walgreens Cold & Allergy D Maximum Strength 60mg-2.5mg Tablet

- Walgreens Nasal Decongestant D 12 Hour Maximum Strength 120mg Extended-Release Caplet
- Walgreens Non-Drowsy Allergy Relief D 24 Hour Allergy & Congestion 10mg-240mg Extended-Release Tablet
- Walgreens Non-Drowsy Allergy Relief D 24 Hour Nasal Decongestant 10mg-240mg Extended-Release Tablet
- Walgreens Non-Drowsy Nasal Decongestant D Maximum Strength 120mg Caplet
- Zephrex-D 30mg Tablet
- Zephrex-D Congestion 30mg Maximum Strength Softgel

Dosage Adjustment Guidelines

Hepatic Impairment

Specific guidelines for dosage adjustments in hepatic impairment are not available; it appears that no dosage adjustments are needed. Pseudoephedrine is minimally metabolized in the liver.

Renal Impairment

Use pseudoephedrine with caution in people with severe renal impairment (CrCl less than 30 mL/minute) and dosage reduction has been suggested for these individuals. Accumulation is expected in people with renal failure and an increased risk for pseudoephedrine toxicity. Many experts recommend against pseudoephedrine use in severe acute or chronic kidney disease (CKD) or renal failure.
26183

Intermittent hemodialysis
Hemodialysis is only minimally effective at removing pseudoephedrine from the circulation. Do not give supplemental doses.