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CLASSES

Iodine Therapy

DEA CLASS

OTC, Rx

DESCRIPTION

Oral antithyroid agent containing roughly 76% iodine and 23% potassium by weight
Used as an adjunct to other antithyroid agents in the treatment of hyperthyroidism and thyrotoxicosis and preoperatively to induce thyroid involution
Certain formulations are approved only for thyroid protection against radioactive iodine (I-131) exposure during radiation emergencies

COMMON BRAND NAMES

SSKI

HOW SUPPLIED

Potassium Iodide/SSKI Oral Sol: 1mL, 1g, 65mg

DOSAGE & INDICATIONS

For emergency use as a thyroid protectant in a radiation exposure involving radioactive iodine.

Oral dosage (65 mg and 130 mg tablet or 65 mg/mL oral solution)

Adults

130 mg PO once daily, taken as soon as possible after exposure. The effectiveness of potassium iodide as a specific blocker of thyroid radioiodine uptake is well established, with the benefits of each dose lasting approximately 24 hours. Daily treatment should continue until public officials have determined it is safe to discontinue therapy. In general, daily dosing should continue until the risk of exposure has passed or until other adjunctive measures (e.g., evacuation, sheltering, and control of the food and milk supply) have been successfully implemented. The FDA emphasizes that the overall benefits of potassium iodide far exceed the risk of overdosing in this situation.

Pregnant or Lactating females

130 mg PO once, taken as soon as possible after exposure. Women who are pregnant or breast-feeding should consult with a healthcare provider before taking repeated doses. Particular attention should be paid to the dose and duration of treatment for women who are pregnant. The FDA has specifically recommended that pregnant women be given priority with regard to adjunctive measures like evacuation in order to obviate the need for repeat dosing with potassium iodide. The protective effects of a single dose lasts approximately 24 hours.

Adolescents who weigh at least 70 kg (150 pounds)

130 mg PO once daily, taken as soon as possible after exposure. The effectiveness of potassium iodide as a specific blocker of thyroid radioiodine uptake is well established, with the benefits of each dose lasting approximately 24 hours. Daily treatment should continue until public officials have determined it is safe to discontinue therapy. In general, daily dosing should continue until the risk of exposure has passed or until other adjunctive measures (e.g., evacuation, sheltering, and control of the food and milk supply) have been successfully implemented. The FDA emphasizes that the overall benefits of potassium iodide far exceed the risk of overdosing in this situation.

Adolescents weighing less than 70 kg (150 pounds)

65 mg PO once daily, taken as soon as possible after exposure. The effectiveness of potassium iodide as a specific blocker of thyroid radioiodine uptake is well established, with the benefits of each dose lasting approximately 24 hours. Daily treatment should continue until public officials have determined it is safe to discontinue therapy. In general, daily dosing should continue until the risk of exposure has passed or until other adjunctive measures (e.g., evacuation, sheltering, and control of the food and milk supply) have been successfully implemented. The FDA emphasizes that the overall benefits of potassium iodide far exceed the risk of overdosing in this situation.

Children 4 to 12 years

65 mg PO once daily, taken as soon as possible after exposure. The effectiveness of potassium iodide as a specific blocker of thyroid radioiodine uptake is well established, with the benefits of each dose lasting approximately 24 hours. Daily treatment should continue until public officials have determined it is safe to discontinue therapy. In general, daily dosing should continue until the risk of exposure has passed or until other adjunctive measures (e.g., evacuation, sheltering, and control of the food and milk supply) have been successfully implemented. The FDA emphasizes that the overall benefits of potassium iodide far exceed the risk of overdosing in this situation.

Infants and Children age 2 months to 3 years

32.5 mg PO once daily, taken as soon as possible after exposure. The effectiveness of potassium iodide as a specific blocker of thyroid radioiodine uptake is well established, with the benefits of each dose lasting approximately 24 hours. Daily treatment should continue until public officials have determined it is safe to discontinue therapy. In general, daily dosing should continue until the risk of exposure has

passed or until other adjunctive measures (e.g., evacuation, sheltering, and control of the food and milk supply) have been successfully implemented. The FDA emphasizes that the overall benefits of potassium iodide far exceed the risk of overdosing in this situation.

Neonates and Infants through 1 month of age

16.25 mg PO once, taken as soon as possible after exposure. Consult with a healthcare provider before administering repeated doses. The FDA has specifically recommended that newborns be given priority with regard to adjunctive measures (like evacuation) in order to obviate the need for repeat dosing with potassium iodide. The protective effects of a single dose lasts approximately 24 hours.

For short-term use as an expectorant in the symptomatic treatment of chronic pulmonary diseases where tenacious mucus complicates the problem, such as chronic bronchitis and pulmonary emphysema.

Oral dosage (saturated oral solution of potassium iodide containing 1 gram per mL, e.g., SSKI)

Adults

0.3 mL (300 mg) or 0.6 mL (600 mg) PO 3 to 4 times daily, diluted in a glassful of water, fruit juice, or milk. Use no longer than necessary to produce the desired effect. Although this recommendation is found in the manufacturer label, this drug has not been found by FDA to be safe and effective for this purpose has not been approved by the FDA's drug approval process. Due to the potential for adverse effects and lack of evidence of proven efficacy, guidelines do not recommend the use of iodinated products for the treatment of cough or expectoration.

For the treatment of thyroid storm† or thyrotoxicosis†.

Oral dosage (saturated oral solution of potassium iodide containing 1 gram per mL, e.g., SSKI)

Adults

0.25 mL (250 mg) of saturated solution of potassium iodide (SSKI) PO every 6 hours. Do not start until 1 hour after antithyroid drugs. The role of SSKI in treatment is to block new hormone synthesis and block thyroid hormone release. Guidelines recommend a multimodal approach to treatment, including iodide therapy with SSKI, beta-adrenergic blockade (e.g., propranolol), antithyroid drug therapy (methimazole or propylthiouracil), corticosteroid therapy (hydrocortisone), aggressive cooling with acetaminophen and cooling blankets, volume resuscitation, respiratory support and monitoring in an ICU.

For the preparation (thyroid involution induction†) of patients with Graves' disease† prior to thyroidectomy.

Oral dosage (saturated oral solution of potassium iodide containing 1 gram per mL, e.g., SSKI)

Adults

0.05 to 0.1 mL (50 to 100 mg) saturated solution of potassium iodide (SSKI) orally 3 times daily mixed in water or juice for 10 days before surgery is recommended in management guidelines of the American Thyroid Association and American Association of Clinical Endocrinologists.

For the treatment of cutaneous or lymphocutaneous sporotrichosis†.

Oral dosage (saturated oral solution of potassium iodide, 1 g/mL, e.g., SSKI)

Adults

5 drops PO 3 times daily, initially. Increase as tolerated to 40 to 50 drops PO 3 times daily for 2 to 4 weeks after all lesions have resolved, usually for a total of 3 to 6 months in patients who do not respond to itraconazole.[50784]

Infants, Children, and Adolescents

1 drop PO 3 times daily, initially. Increase as tolerated to 1 drop/kg/dose (Max: 40 to 50 drops/dose) PO 3 times daily, whichever is lower, for 2 to 4 weeks after all lesions have resolved, usually for a total of 3 to 6 months in patients who do not respond to itraconazole.[50784] [63245]

†Indicates off-label use

MAXIMUM DOSAGE

Dosage must be individualized to the indication for use, patient age, and clinical response.

DOSING CONSIDERATIONS

Hepatic Impairment

Specific information is not available; however, it appears no dosage adjustment is needed.

Renal Impairment

Dosage should be modified depending on clinical response and degree of renal impairment.

ADMINISTRATION

NOTE: Enteric-coated potassium iodide tablets have been associated with severe complications which have resulted in death and are not recommended for use.

Oral Administration

All dosage forms: To minimize GI irritation, administer after meals or with milk.

Oral Solid Formulations

Oral tablets:
Potassium iodide tablets are used only for the treatment of radiation emergencies.

Oral Liquid Formulations

Saturated Solution of Potassium Iodide (SSKI) oral solution 1 gram/mL:
Administer using a calibrated measuring device (e.g., the provided dropper) to ensure accurate dosing.
Mix dose in 240 mL of water, fruit juice, or milk prior to administration.
To minimize gastric irritation, administer with food or milk.
SSKI solution is normally clear and colorless. A slightly darkened solution does not indicate loss of potency. If the solution turns brownish-yellow in color, it should be discarded. The saturated solutions may crystallize on exposure to cold temperatures; allowing to warm to room temperature with shaking may redissolve crystals.

Potassium Iodide oral solutions or syrups (65 mg/mL):
Administer using a calibrated measuring device (e.g., the provided dropper) to ensure accurate dosing.
When used for radiation emergencies: Administer once every day (every 24 hours) as directed by public officials. Do not administer more than 1 dose in 24 hours.

Extemporaneous compounding instructions for potassium iodide liquid mixture (8.125 mg/5 mL or 16.25 mg/5 mL):
Put either one 65 mg or one 130 mg potassium iodide tablet into a small bowl and grind it into a fine powder using the back of a metal teaspoon against the inside of the bowl. The powder should not have any large pieces.
Add 4 teaspoonfuls of water to the crushed powder in the bowl and mix until the potassium iodide powder is dissolved in the water.
Mix the potassium iodide water solution with 4 teaspoonfuls of low fat white or chocolate milk, orange juice, flat soda, raspberry syrup, or infant formula.
NOTE: If a 65 mg tablet was used, the concentration is 8.125 mg potassium iodide/5 mL. If a 130 mg tablet was used, the concentration is 16.25 mg potassium iodide/5 mL.
Storage: May be stored for up to 7 days in the refrigerator. Discard any unused portions.

STORAGE

Generic:
- Protect from light
- Store at 77 degrees F; excursions permitted to 59-86 degrees F
- Store in carton

Pima:
- Avoid excessive heat (above 104 degrees F)
- Protect from moisture
- Store at 77 degrees F; excursions permitted to 59-86 degrees F

SSKI:
- Protect from light
- Store between 68 to 77 degrees F, excursions permitted 59 to 86 degrees F

CONTRAINDICATIONS / PRECAUTIONS

Goiter, iodine hypersensitivity, thyroid disease, vasculitis

If possible, use of potassium iodide should be avoided in patients with iodine hypersensitivity. Patients at an increased risk of developing adverse effects caused by iodine include those with dermatitis herpetiformis, hypocomplementemic vasculitis, goiter, or autoimmune thyroid disease.

Pregnancy

Potassium iodide, KI crosses the placenta in amounts sufficient enough to cause fetal harm, fetal goiter and abnormal thyroid function during human pregnancy. Because of the possible development of fetal goiter, if the drug is used during pregnancy or if a female of childbearing potential becomes pregnant during therapy, apprise the patient of the potential hazard. The use of iodides as expectorant agents during pregnancy is contraindicated, due to the non-essential indication for use in the mother compared to the fetal thyroid risk. Prolonged use for thyroid disease during pregnancy is not advised, however, potassium iodide has been used short term (e.g., 10 days) to manage labor-induced thyrotoxic crisis and as treatment prior to thyroidectomy in pregnant women. Pregnant women may also take potassium iodide if they are contaminated with radioactive iodine or if they receive inadvertent exposure to radioiodine (radioactive iodine, I-131) and are advised to do so by their healthcare professional or governmental agencies, according to current guidelines for radiation emergencies. Women should not self-supplement with potassium iodide during pregnancy.

Breast-feeding

Potassium iodide, KI is excreted into breast milk. Rash or thyroid suppression can possibly occur in the nursing infant. Potassium iodide therapy would only be used in a lactating woman when medically necessary for thyroid protection or hyperthyroid emergencies; use as an expectorant is not advised. Breast-feeding women should take potassium iodide if they are contaminated with radioactive iodine and advised to do so by their governmental agencies, according to current guidelines for radiation emergencies. The normal amount of potassium iodide present in human breast milk is not sufficient to protect an infant who has been exposed to radioactive Iodine-131. Thus, in an environmental exposure, the breast-feeding infant must receive supplemental potassium iodide to block uptake of radiation in the infant's thyroid gland.

Asthma, bronchitis, sulfite hypersensitivity

Potassium iodide should be used with caution in patients with sulfite hypersensitivity and/or asthma because some formulations of this drug contain sodium bisulfite. A higher frequency of sensitivity reactions occur in asthmatic patients compared to nonasthmatic patients. Potassium iodide should be used cautiously in patients with acute bronchitis.

Adrenal insufficiency, cardiac disease, dehydration, hyperkalemia, muscle cramps, renal impairment, Thomsen's disease

Potassium iodide should be used cautiously in patients with renal impairment. Due to impaired renal filtering of electrolytes, an increase in serum potassium can occur. Potassium iodide can also exacerbate pre-existing hyperkalemia or myotonia congenita (Thomsen's disease). Serum potassium and potential signs and symptoms of potassium toxicity should be monitored. Potassium iodide should also be used with extreme caution in the following circumstances: acute dehydration, muscle cramps, adrenal insufficiency, and cardiac disease.

Tuberculosis

Potassium iodide should be used with extreme caution in patients with tuberculosis because pulmonary irritation and increased secretions may ensue. If possible, potassium iodide should be avoided in this patient population.

Acne vulgaris

Potassium iodide should be used with caution in patients with acne vulgaris. The product can produce an acneiform rash or aggravate existing acne.

ADVERSE REACTIONS

Severe

GI bleeding / Delayed / Incidence not known
iodine toxicity / Delayed / Incidence not known
angioedema / Rapid / Incidence not known
serum sickness / Delayed / Incidence not known

Moderate

sialadenitis / Delayed / Incidence not known
thyroid adenoma / Delayed / Incidence not known
goiter / Delayed / Incidence not known
hypothyroidism / Delayed / Incidence not known
dysphagia / Delayed / Incidence not known
lymphadenopathy / Delayed / Incidence not known
eosinophilia / Delayed / Incidence not known
wheezing / Rapid / Incidence not known

Mild

vomiting / Early / Incidence not known
nausea / Early / Incidence not known
diarrhea / Early / Incidence not known
acneiform rash / Delayed / Incidence not known
ocular irritation / Rapid / Incidence not known
blepharedema / Early / Incidence not known
sneezing / Early / Incidence not known
metallic taste / Early / Incidence not known
rhinitis / Early / Incidence not known
headache / Early / Incidence not known
arthralgia / Delayed / Incidence not known
fever / Early / Incidence not known

DRUG INTERACTIONS

Aliskiren: (Moderate) Due to the risk of hyperkalemia, drugs that increase serum potassium concentration, such as potassium salts or salt substitutes containing potassium should be used cautiously in patients taking aliskiren. Electrolytes should be routinely monitored in patients receiving aliskiren.
Aliskiren; Amlodipine: (Moderate) Due to the risk of hyperkalemia, drugs that increase serum potassium concentration, such as potassium salts or salt substitutes containing potassium should be used cautiously in patients taking aliskiren. Electrolytes should be routinely monitored in patients receiving aliskiren.
Aliskiren; Amlodipine; Hydrochlorothiazide, HCTZ: (Moderate) Due to the risk of hyperkalemia, drugs that increase serum potassium concentration, such as potassium salts or salt substitutes containing potassium should be used cautiously in patients taking aliskiren. Electrolytes should be routinely monitored in patients receiving aliskiren.
Aliskiren; Hydrochlorothiazide, HCTZ: (Moderate) Due to the risk of hyperkalemia, drugs that increase serum potassium concentration, such as potassium salts or salt substitutes containing potassium should be used cautiously in patients taking aliskiren. Electrolytes should be routinely monitored in patients receiving aliskiren.
Aliskiren; Valsartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists. (Moderate) Due to the risk of hyperkalemia, drugs that increase serum potassium concentration, such as potassium salts or salt substitutes containing potassium should be used cautiously in patients taking aliskiren. Electrolytes should be routinely monitored in patients receiving aliskiren.
Amiloride: (Severe) Concomitant use of potassium supplements and amiloride is contraindicated. Coadministration may result in severe hyperkalemia.
Amiloride; Hydrochlorothiazide, HCTZ: (Severe) Concomitant use of potassium supplements and amiloride is contraindicated. Coadministration may result in severe hyperkalemia.
Amlodipine; Benazepril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).
Amlodipine; Hydrochlorothiazide, HCTZ; Olmesartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.
Amlodipine; Hydrochlorothiazide, HCTZ; Valsartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.
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Amlodipine; Telmisartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.
Amlodipine; Valsartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal

function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.
Ammonium Chloride: (Major) It would be illogical to administer potassium salts, a systemic alkalinizer, concurrently with ammonium chloride, an acidifying agent.
Angiotensin II receptor antagonists: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.
Angiotensin-converting enzyme inhibitors: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).
Anticholinergics: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Atropine: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Atropine; Benzoic Acid; Hyoscyamine; Methenamine; Methylene Blue; Phenyl Salicylate: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Atropine; Difenoxin: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids. (Moderate) Drugs that decrease GI motility, like diphenoxylate/difenoxin, may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. Immediate release potassium formulations may be preferred in patients requiring diphenoxylate/difenoxin therapy.
Atropine; Diphenoxylate: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids. (Moderate) Drugs that decrease GI motility, like diphenoxylate/difenoxin, may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. Immediate release potassium formulations may be preferred in patients requiring diphenoxylate/difenoxin therapy.
Atropine; Edrophonium: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Atropine; Hyoscyamine; Phenobarbital; Scopolamine: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Azelastine; Fluticasone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Azilsartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function.

Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.
Azilsartan; Chlorthalidone: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.
Beclomethasone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Belladonna Alkaloids; Ergotamine; Phenobarbital: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Belladonna; Opium: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Benazepril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).
Benazepril; Hydrochlorothiazide, HCTZ: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).
Benzoic Acid; Hyoscyamine; Methenamine; Methylene Blue; Phenyl Salicylate: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Benztropine: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Betamethasone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Budesonide: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Budesonide; Formoterol: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Candesartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.
Candesartan; Hydrochlorothiazide, HCTZ: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.
Captopril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).
Captopril; Hydrochlorothiazide, HCTZ: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Celecoxib: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Chlordiazepoxide; Clidinium: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Ciclesonide: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Corticosteroids: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Corticotropin, ACTH: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Cortisone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Cyclosporine: (Moderate) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium concentrations, such as cyclosporine. Concurrent use can cause severe and potentially fatal hyperkalemia, especially in patients with other risk factors for hyperkalemia (i.e., severe renal impairment). Monitor potassium concentrations during concurrent therapy.
Deflazacort: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Dexamethasone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Diclofenac: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Diclofenac; Misoprostol: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Dicyclomine: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Diflunisal: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Digoxin: (Minor) Potassium levels should be monitored closely in patients receiving digoxin and potassium supplementation. Both hypokalemia and hyperkalemia increase the risk of digoxin toxicity. Some patients at increased risk are patients with renal impairment, patients on diuretics, and patients who are on potassium-sparing medications concurrently. Monitor renal function, potassium concentrations, and digoxin concentrations and clinical response during concurrent treatment.
Diphenhydramine; Ibuprofen: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Diphenhydramine; Naproxen: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Drospirenone: (Moderate) Drospirenone has antimineralocorticoid effects; the progestin may increase serum potassium. The concurrent use of potassium-containing products may increase the risk of hyperkalemia, especially in the presence of renal impairment. Monitor serum potassium if potassium is used concurrently with drospirenone, particularly during the 1st month of treatment.
Drospirenone; Estradiol: (Moderate) Drospirenone has antimineralocorticoid effects; the progestin may increase serum potassium. The concurrent use of potassium-containing products may increase the risk of hyperkalemia, especially in the presence of renal impairment. Monitor serum potassium if potassium is used concurrently with drospirenone, particularly during the 1st month of treatment.
Drospirenone; Ethinyl Estradiol: (Moderate) Drospirenone has antimineralocorticoid effects; the progestin may increase serum potassium. The concurrent use of potassium-containing products may increase the risk of hyperkalemia, especially in the presence of renal impairment. Monitor serum potassium if potassium is used concurrently with drospirenone, particularly during the 1st month of treatment.
Drospirenone; Ethinyl Estradiol; Levomefolate: (Moderate) Drospirenone has antimineralocorticoid effects; the progestin may increase serum potassium. The concurrent use of potassium-containing products may increase the risk of hyperkalemia, especially in the presence of renal impairment. Monitor serum potassium if potassium is used concurrently with drospirenone, particularly during the 1st month of treatment.
Enalapril, Enalaprilat: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as

angiotensin-converting enzyme inhibitors (ACE inhibitors).
Enalapril; Felodipine: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).
Enalapril; Hydrochlorothiazide, HCTZ: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).
Eplerenone: (Severe) Eplerenone should not be used concomitantly with potassium salts or supplements (including dietary salt substitutes containing potassium) because of the increased risk of developing hyperkalemia. The use of eplerenone in hypertensive patients treated with these medications is contraindicated. When potassium use for replacement purposes is medically necessary, use together with extreme caution, as both drugs increase serum potassium concentrations. Patients at risk for hyperkalemia include elderly patients or patients with impaired renal function. Patients should have serum potassium and other electrolyte concentration determinations at periodic intervals.
Eprosartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.
Eprosartan; Hydrochlorothiazide, HCTZ: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.
Esomeprazole; Naproxen: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Etodolac: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Famotidine; Ibuprofen: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Fenoprofen: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Flavoxate: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Fludrocortisone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Flunisolide: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Flurbiprofen: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Fluticasone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Fluticasone; Salmeterol: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Fluticasone; Umeclidinium; Vilanterol: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Fluticasone; Vilanterol: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Food: (Severe) Foods, seasonings, or medicines containing high potassium or sodium content, such as dietary salt substitutes, 'low salt' milk products (which contain potassium), or tomato juice (which has high sodium content), could increase the risk of complications of hyperkalemia or sodium excess. Regularly monitor the serum potassium and/or sodium concentration in patients taking food or medications with high potassium and/or sodium content. Muscle weakness, chest pain, or an abnormal heart rhythm can indicate hyperkalemia. Abdominal pain, diarrhea, metabolic alkalosis, nausea, vomiting, and seizures can indicate sodium excess.
Formoterol; Mometasone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.
Fosinopril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such

as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Fosinopril; Hydrochlorothiazide, HCTZ: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Glycopyrrolate: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Glycopyrrolate; Formoterol: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Heparin: (Moderate) In some cases, heparin can cause hyperkalemia. Chronic heparin therapy may predispose a patient to develop hyperkalemia, especially patients with renal impairment and those receiving potassium-containing medications, such a potassium salts. Monitoring of serum potassium is recommended as indicated.

Homatropine; Hydrocodone: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Hydrochlorothiazide, HCTZ; Irbesartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

Hydrochlorothiazide, HCTZ; Lisinopril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Hydrochlorothiazide, HCTZ; Losartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

Hydrochlorothiazide, HCTZ; Moexipril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Hydrochlorothiazide, HCTZ; Olmesartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

Hydrochlorothiazide, HCTZ; Quinapril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Hydrochlorothiazide, HCTZ; Spironolactone: (Major) Use potassium supplements with caution in patients taking drugs that may increase serum potassium levels, such as spironolactone. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Closely monitor serum potassium concentrations during coadministration.

Hydrochlorothiazide, HCTZ; Telmisartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

Hydrochlorothiazide, HCTZ; Triamterene: (Severe) Concomitant use of potassium supplements and triamterene is contraindicated. Coadministration may result in severe hyperkalemia.

Hydrochlorothiazide, HCTZ; Valsartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

Hydrocodone; Ibuprofen: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Hydrocortisone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.

Hyoscyamine: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of

potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Hyoscyamine; Methenamine; Methylene Blue; Phenyl Salicylate; Sodium Biphosphate: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Ibuprofen: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Ibuprofen; Oxycodone: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Ibuprofen; Pseudoephedrine: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Indacaterol; Glycopyrrolate: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Indomethacin: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Iodoquinol: (Moderate) Iodoquinol should be used with caution in patients treated with thyroid agents. Iodine-containing compounds like iodoquinol may result in overt thyroid disease.

Irbesartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

Ketoprofen: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Ketorolac: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Lansoprazole; Naproxen: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Lisinopril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Lithium: (Moderate) Lithium can precipitate goiter and/or hypothyroidism. Concomitant use of lithium and potassium iodide, KI can increase the likelihood of this adverse reaction.

Loperamide: (Minor) Drugs that decrease GI motility, like loperamide, may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts.

Loperamide; Simethicone: (Minor) Drugs that decrease GI motility, like loperamide, may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts.

Losartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

Meclofenamate Sodium: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Mefenamic Acid: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Meloxicam: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Mepenzolate: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Methenamine; Sodium Acid Phosphate; Methylene Blue; Hyoscyamine: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is

contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Methimazole: (Moderate) Potassium iodide should not be used concurrently with other antithyroid agents. Agents such as methimazole and propylthiouracil, PTU can increase the likelihood of hypothyroidism when used in combination with potassium iodide.

Methscopolamine: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Methylprednisolone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.

Moexipril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Mometasone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.

Nabumetone: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Naproxen: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Naproxen; Pseudoephedrine: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Naproxen; Sumatriptan: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Nebivolol; Valsartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

Nonsteroidal antiinflammatory drugs: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Olmesartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

Oxaprozin: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Oxybutynin: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Penicillin G: (Minor) Concomitant use of high doses of parenteral penicillin G potassium with potassium salts can cause hyperkalemia.

Perindopril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Perindopril; Amlodipine: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Piroxicam: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Prednisolone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.

Prednisone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium

sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.

Propantheline: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Propylthiouracil, PTU: (Severe) Potassium iodide should not be used concurrently with other antithyroid agents. Agents such as methimazole and propylthiouracil, PTU can increase the likelihood of hypothyroidism when used in combination with potassium iodide.

Quinapril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Ramipril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Rofecoxib: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Sacubitril; Valsartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

Scopolamine: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.

Sodium Iodide: (Severe) The recent intake of antithyroid agents will affect the uptake of radioiodide from sodium iodide, I-131; patients must discontinue all medications and supplements that may interfere with iodide uptake into thyroid tissue prior to therapy with sodium iodide I-131. Various protocols are used. Many manufacturers state that concurrent antithyroid agents should be discontinued at least 3 to 4 days before administration of radioiodide. The following withdrawal timing recommendations were set forth in a procedure guideline published by the Society of Nuclear Medicine in February 2002. Antithyroid agents may affect iodide protein binding for an average of 5 days after administration; allow a 3 day wash out period for the antithyroid agent prior to sodium iodide I-131 administration. The antithyroid agent may be resumed 2 to 3 days after treatment.

Sodium Polystyrene Sulfonate: (Severe) Sodium polystyrene sulfonate is indicated for the treatment of hyperkalemia. Administration of all potassium salts should be discontinued whenever therapy with sodium polystyrene sulfonate is indicated.

Spironolactone: (Major) Use potassium supplements with caution in patients taking drugs that may increase serum potassium levels, such as spironolactone. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Closely monitor serum potassium concentrations during coadministration.

Sulfamethoxazole; Trimethoprim, SMX-TMP, Cotrimoxazole: (Moderate) Trimethoprim has a potassium-sparing effect on the distal nephron and may induce hyperkalemia. Trimethoprim should also be used with caution with other drugs known to cause significant hyperkalemia such as potassium salts.

Sulindac: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Tacrolimus: (Moderate) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium concentrations, such as tacrolimus. Concurrent use can cause severe and potentially fatal hyperkalemia, especially in patients with other risk factors for hyperkalemia (i.e., severe renal impairment). Monitor potassium concentrations during concurrent therapy.

Telmisartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

Thyroid hormones: (Moderate) Antithyroid agents should generally not be administered with the thyroid hormones due to their opposing effects. However, in selected cases some clinicians coadminister T4 (e.g., levothyroxine) to circumvent drug-induced hypothyroidism when large suppressive doses of antithyroid agents are administered for long periods of time. However, clinical and biochemical euthyroid status may usually be maintained with careful titration of the antithyroid agent dosage alone.

Tolmetin: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.

Trandolapril: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Trandolapril; Verapamil: (Major) Potassium supplements should be used with caution in patients taking drugs that may increase serum potassium levels, such as ACE inhibitors. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin-converting enzyme inhibitors (ACE inhibitors).

Triamcinolone: (Moderate) Corticotropin can cause alterations in serum potassium levels. The use of potassium salts or supplements would be expected to alter the effects of corticotropin on serum potassium levels. Also, there have been reports of generalized tonic-clonic seizures and/or loss of consciousness associated with use of bowel preparation products in patients with no prior history of seizure disorder. Therefore, magnesium sulfate; potassium sulfate; sodium sulfate should be administered with caution during concurrent use of medications that lower the seizure threshold such as systemic corticosteroids.

Triamterene: (Severe) Concomitant use of potassium supplements and triamterene is contraindicated. Coadministration may result in severe hyperkalemia.

Trihexyphenidyl: (Major) Drugs that decrease GI motility may increase the risk of GI irritation from sustained-release solid oral dosage forms of potassium salts. The use of solid oral dosage forms of potassium chloride is contraindicated in patients taking glycopyrrolate oral solution. In one study, healthy subjects were examined for GI irritation following the administration of oral potassium for at least 7 days. Glycopyrrolate was coadministered to some subjects in order to study the additional effects of delayed gastric emptying. Results indicated that subjects administered

wax-matrix tablets had the highest incidence of erosions (43%) and ulcers (11%). Evidence of GI irritation was less frequent among subjects receiving liquid (0%) and microencapsulated (10.5% erosions, 1.2% ulcers) formulations. Therefore, if oral potassium supplementation is necessary in a patient taking antimuscarinics, a liquid formulation should be considered. If a solid formulation is being prescribed, the patient should be counseled on strategies that can be used to avoid GI irritation such as taking potassium products only while seated or standing, remaining upright for 10 minutes after each dose, and ingesting each dose with plenty of fluids.
Trimethoprim: (Moderate) Trimethoprim has a potassium-sparing effect on the distal nephron and may induce hyperkalemia. Trimethoprim should also be used with caution with other drugs known to cause significant hyperkalemia such as potassium salts.
Valdecoxib: (Moderate) Closely monitor serum potassium in patients receiving potassium supplements and concomitant nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may cause potassium retention by reducing renal synthesis of prostaglandin E and impairing the renin-angiotensin system.
Valsartan: (Major) Potassium salts should be used with caution in patients taking drugs that may increase serum potassium levels such as angiotensin II receptor antagonists. Concurrent use can cause hyperkalemia, especially in elderly patients or patients with impaired renal function. Coadministration may also result in increases in serum creatinine in heart failure patients. Also, use caution when prescribing sulfate salt bowel preparation in patients taking concomitant medications that may affect renal function such as angiotensin II receptor antagonists.

PREGNANCY AND LACTATION

Pregnancy

Potassium iodide, KI crosses the placenta in amounts sufficient enough to cause fetal harm, fetal goiter and abnormal thyroid function during human pregnancy. Because of the possible development of fetal goiter, if the drug is used during pregnancy or if a female of childbearing potential becomes pregnant during therapy, apprise the patient of the potential hazard. The use of iodides as expectorant agents during pregnancy is contraindicated, due to the non-essential indication for use in the mother compared to the fetal thyroid risk. Prolonged use for thyroid disease during pregnancy is not advised, however, potassium iodide has been used short term (e.g., 10 days) to manage labor-induced thyrotoxic crisis and as treatment prior to thyroidectomy in pregnant women. Pregnant women may also take potassium iodide if they are contaminated with radioactive iodine or if they receive inadvertent exposure to radioiodine (radioactive iodine, I-131) and are advised to do so by their healthcare professional or governmental agencies, according to current guidelines for radiation emergencies. Women should not self-supplement with potassium iodide during pregnancy.

Potassium iodide, KI is excreted into breast milk. Rash or thyroid suppression can possibly occur in the nursing infant. Potassium iodide therapy would only be used in a lactating woman when medically necessary for thyroid protection or hyperthyroid emergencies; use as an expectorant is not advised. Breast-feeding women should take potassium iodide if they are contaminated with radioactive iodine and advised to do so by their governmental agencies, according to current guidelines for radiation emergencies. The normal amount of potassium iodide present in human breast milk is not sufficient to protect an infant who has been exposed to radioactive Iodine-131. Thus, in an environmental exposure, the breast-feeding infant must receive supplemental potassium iodide to block uptake of radiation in the infant's thyroid gland.

MECHANISM OF ACTION

Mechanism of Action: Potassium iodide (KI) supplies iodine systemically. The pharmacology of potassium iodide is not completely understood, despite years of use in clinical medicine for various medical conditions.
•Effects on the thyroid gland: Iodides are usually used in the treatment of hyperthyroidism to prepare patients for thyroidectomy. Iodides are also used along with antithyroid drugs and symptomatic treatments for the acute treatment of thyrotoxic crisis. By inhibiting thyroid hormone synthesis and release, thyroid gland vascularity is reduced, thyroid gland tissue becomes firmer, thyroid cell proliferation is reduced, follicular colloid reaccumulates, and bound iodine levels increase. The response of the hyperthyroid patient to iodide treatment is usually rapid, with symptomatic changes noted within 24 hours, although maximal effects may not be apparent until 2 weeks later. Although the effects may be noted for several weeks, iodides do not usually control the disease indefinitely, which is the reason why patients often need other measures (e.g., thyroidectomy) for treatment. The effects of iodides on the thyroid gland are complex, and can be dependent on the baseline thyroid status of the patient. Euthyroid patients or patients with certain underlying thyroid disorders may be at risk for iodine-induced hypothyroidism if they are exposed to large amounts of iodine systemically.
•Effects as a thyroid protectant prior to/following exposure to radioiodines: During a nuclear accident, various iodine isotopes are produced, including 131I, a radioactive iodine that concentrates in the thyroid gland. 131I has an 8-day half-life, which means that 99% of the radioactivity will decay in roughly 56 days. Potassium iodide (KI) is considered a safe and effective means by which to prevent radioiodine uptake by the thyroid gland and to minimize the risk of radiation-induced thyroid cancer. The administration of KI saturates the thyroid gland with iodine, minimizing the uptake of the radioactive isotope. For optimal protection against inhaled radioiodines following a radiation emergency, KI should be administered immediately coincident with the passage of the radioactive cloud, although KI may still have a substantial protective effect if taken 3 to 4 hours after the exposure.
•Effects in inflammatory dermatoses: The precise actions by which potassium iodide is therapeutically beneficial for various dermatologic conditions are not known. It appears that the drug may have some effects on inhibiting neutrophil chemotaxis, actions which might be beneficial in certain inflammatory dermatoses that display increased neutrophil activation in early stages of the disease. In dermatoses caused by yeast and fungi, potassium iodide appears to act as an antifungal, although it is not clear if the drug is directly fungicidal or works by enhancing the tissue and immune response to the infection.

PHARMACOKINETICS

Potassium iodide is administered orally. It demonstrates significant extracellular distribution, with most of the drug accumulating in the thyroid gland. Potassium iodide distributes into breast milk and crosses the placenta in amounts sufficient enough to cause fetal harm (see Contraindications). Therapeutic effects from KI usually are observed within 24 hours after administration, with maximum effectiveness occurring after 10—15 days of therapy. Potassium iodide is excreted renally.

Oral Route

Potassium iodide is absorbed from the GI tract as iodinated amino acids.