

Drug

captopril

generic

Entire Monograph

Black Box Warnings

Pregnancy

fetal/neonatal morbidity/mortality may occur when drugs that act directly on the renin-angiotensin system are used in pregnancy; D/C drug as soon as possible once pregnancy detected

Adult Dosing

Dosage forms: 12.5,25,50,100

HTN

[25-50 mg PO bid-tid]

Start: 12.5-25 mg PO bid-tid, incr. 12.5-25 mg/dose q1-2wk; Max: 450 mg/day; Info: use lower initial dose if on diuretics; consider adding diuretic if suboptimal response to 50 mg PO tid; give 1h before meals; decr. efficacy as monotherapy in black pts

CHF

[12.5-50 mg PO tid]

Start: 6.25-12.5 mg PO tid; Max: 150 mg tid; Info: use lower initial dose if on diuretics; give 1h before meals

nephropathy, diabetic

[25 mg PO tid]

MI, acute

[12.5-50 mg PO tid]

Start: 6.25 mg PO x1 on day 3 post-MI, titrate up as tolerated q3-7 days; Info: give 1h before meals

renal dosing

[adjust dose amount, frequency]

CrCl 10-50: decr. dose 25%, give q12-18h; CrCl <10: decr. dose 50%, give q24h; HD/PD: no supplement

hepatic dosing

[not defined]

Peds Dosing

Dosage forms: 12.5,25,50,100

***HTN**

[premature infants]

Dose: 0.1-0.4 mg/kg/day PO div q6-24h; Start: 0.01 mg/kg/dose; Max: 2 mg/kg/day; Info: decr. efficacy as monotherapy in black pts

[neonates]

Dose: 0.1-0.4 mg/kg/day PO div q6-24h; Start: 0.05-0.1 mg/kg/dose; Max: 2 mg/kg/day; Info: decr. efficacy as monotherapy in black pts

[infants]

Dose: 2.5-6 mg/kg/day PO div q6-12h; Start: 0.15-0.3 mg/kg/dose; Max: 6 mg/kg/day; Info: decr. efficacy as monotherapy in black pts

[children]

Dose: 2.5-6 mg/kg/day PO div q6-12h; Start: 0.3-0.5 mg/kg/dose or 6.25-12.5 mg/dose; Max: 6 mg/kg/day; Info: decr. efficacy as monotherapy in black pts

[adolescents]

Dose: 25-50 mg PO q6-8h; Start: 12.5-25 mg PO q8h, incr. 12.5-25 mg/dose q1-2wk; Max: 450 mg/day; Info: use lower initial dose if on diuretics; consider adding diuretic if suboptimal response to 50 mg PO q8h; decr. efficacy as monotherapy in black pts

***CHF**

[premature infants]

Dose: 0.1-0.4 mg/kg/day PO div q6-24h; Start: 0.01 mg/kg/dose; Max: 2 mg/kg/day

[neonates]

Dose: 0.1-0.4 mg/kg/day PO div q6-24h; Start: 0.05-0.1 mg/kg/dose; Max: 2 mg/kg/day

[infants]

Dose: 2.5-6 mg/kg/day PO div q6-12h; Start: 0.15-0.3 mg/kg/dose; Max: 6 mg/kg/day

[children]

Dose: 2.5-6 mg/kg/day PO div q6-12h; Start: 0.3-0.5 mg/kg/dose or 6.25-12.5 mg/dose; Max: 6 mg/kg/day

[adolescents]

Dose: 25-50 mg PO q6-8h; Start: 12.5-25 mg PO q8h, incr. 12.5-25 mg/dose q1-2wk; Max: 450 mg/day; Info: use lower initial dose if on diuretics; consider adding diuretic if suboptimal response to 50 mg PO q8h

renal dosing

[adjust dose amount]

CrCl 10-50: decr. dose 25%; CrCl <10: decr. dose 50%; HD/PD: no supplement

hepatic dosing

[not defined]

Contraindications/Cautions

hypersens. to drug/class/compon.

ACE inhibitor angioedema hx

- angioedema, hereditary
- angioedema, idiopathic
- pregnancy
- caution if renal artery stenosis
- caution if renal impairment
- caution if volume depletion
- caution if hyponatremia
- caution if hypotension
- caution in elderly pts
- caution in black pts
- caution if severe CHF
- caution if aortic stenosis
- caution if hypertrophic cardiomyopathy
- caution if CAD
- caution if cerebrovascular dz
- caution if collagen vascular dz
- caution if dialysis w/ high-flux membranes
- caution if LDL apheresis w/ dextran
- caution if antigen desensitization tx

Drug Interactions

Contraindicated

aliskiren

contraindicated in diabetic pts; avoid combo in mod-severe renal impairment; monitor BP, potassium, renal fxn: combo may incr. risk of renal impairment, hypotension, hyperkalemia (additive/synergistic effects)

aliskiren/amlodipine

contraindicated in diabetic pts; avoid combo in mod-severe renal impairment; monitor BP, potassium, renal fxn: combo may incr. risk of renal impairment, hypotension, hyperkalemia (additive/synergistic effects)

aliskiren/amlodipine/hydrochlorothiazide

contraindicated in diabetic pts; avoid combo in mod-severe renal impairment; monitor BP, potassium, renal fxn: combo may incr. risk of renal impairment, hypotension, hyperkalemia (additive/synergistic effects)

aliskiren/hydrochlorothiazide

contraindicated in diabetic pts; avoid combo in mod-severe renal impairment; monitor BP, potassium, renal fxn: combo may incr. risk of renal impairment, hypotension, hyperkalemia (additive/synergistic effects)

aliskiren/valsartan

contraindicated in diabetic pts; avoid combo in mod-severe renal impairment; monitor BP, potassium, renal fxn: combo may incr. risk of renal impairment, hypotension, hyperkalemia (additive/synergistic effects)

Avoid/Use Alternative

ACE inhibitor/thiazide combos

avoid duplicate therapy: combo may incr. ACE inhibitor effects (additive effects)

[ACE inhibitor/thiazide combos: benazepril/hydrochlorothiazide, captopril/hydrochlorothiazide, enalapril/hydrochlorothiazide, fosinopril/hydrochlorothiazide, lisinopril/hydrochlorothiazide, moexipril/hydrochlorothiazide, quinapril/hydrochlorothiazide]

allopurinol

caution advised, use alternative: combo may incr. risk of severe hypersensitivity rxn (mechanism unknown)

ARB/thiazide combos

avoid combo of telmisartan and ramipril; monitor BP, potassium, renal fxn w/ other ARBs and ACE inhibitors: combo may incr. risk of

hypotension, hyperkalemia, renal dysfxn; combo of telmisartan and ramipril may incr. ramipril levels, risk of adverse effects (additive effects, dual blockade of renin-angiotensin-aldosterone system; mechanism unknown)
[ARB/thiazide combos: azilsartan/chlorthalidone, candesartan/hydrochlorothiazide, eprosartan/hydrochlorothiazide, irbesartan/hydrochlorothiazide, losartan/hydrochlorothiazide, olmesartan/hydrochlorothiazide, telmisartan/hydrochlorothiazide, valsartan/hydrochlorothiazide]

ARBs

avoid combo of telmisartan and ramipril; monitor BP, potassium, renal fxn w/ other ARBs and ACE inhibitors: combo may incr. risk of hypotension, hyperkalemia, renal dysfxn; combo of telmisartan and ramipril may incr. ramipril levels, risk of adverse effects (additive effects, dual blockade of renin-angiotensin-aldosterone system; mechanism unknown)
[ARBs: azilsartan, candesartan, eprosartan, irbesartan, losartan, olmesartan, telmisartan, valsartan]

azathioprine

use alternative: combo may incr. risk of severe leukopenia, hematologic toxicity (mechanism unknown)

lithium

avoid combo or monitor levels closely: combo may incr. lithium levels, risk of toxicity (renal excretion decreased)

Monitor/Modify Tx

acetaminophen/aspirin

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo w/ aspirin may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

acetaminophen/aspirin/caffeine

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo w/ aspirin may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

acetaminophen/magnesium salicylate/pamabrom

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

amifostine

caution advised, monitor BP: combo may incr. risk of hypotension (additive effects)

amlodipine/ARB combos

avoid combo of telmisartan and ramipril; monitor BP, potassium, renal fxn w/ other ARBs and ACE inhibitors: combo may incr. risk of hypotension, hyperkalemia, renal dysfxn; combo of telmisartan and ramipril may incr. ramipril levels, risk of adverse effects (additive effects, dual blockade of renin-angiotensin-aldosterone system; mechanism unknown)
[amlodipine/ARB combos: amlodipine/olmesartan, amlodipine/valsartan, telmisartan/amlodipine]

amlodipine/ARB/thiazide combos

monitor BP, potassium, renal fxn: combo may incr. risk of hypotension, hyperkalemia, renal dysfxn (additive effects, dual blockade of renin-angiotensin-aldosterone system)
[amlodipine/ARB/thiazide combos: amlodipine/valsartan/hydrochlorothiazide, olmesartan/amlodipine/hydrochlorothiazide]

antacids

give captopril 1h before or 4h after: combo may decr. captopril levels, efficacy (absorption decreased)
[antacids: aluminum hydroxide, aluminum hydroxide/magnesium carbonate, aluminum hydroxide/magnesium hydroxide, aluminum hydroxide/magnesium hydroxide/simethicone, aluminum hydroxide/magnesium trisilicate, magnesium hydroxide]

antipsychotics

monitor BP: combo may incr. risk of hypotension (additive effects)
[antipsychotics: aripiprazole, asenapine, clozapine, haloperidol, haloperidol decanoate, haloperidol lactate, iloperidone, loxapine, lurasidone, olanzapine, paliperidone, paliperidone palmitate, quetiapine, risperidone, thiothixene, ziprasidone]

aprofinin

monitor BP: combo may decr. ACE inhibitor efficacy (mechanism unknown, possible antagonistic effects)

aspirin/caffeine

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo w/ aspirin may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

aspirin/chlorpheniramine/dextromethorphan

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

aspirin/chlorpheniramine/dextromethorphan/phenylephrine

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

aspirin/chlorpheniramine/phenylephrine

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

aspirin/diphenhydramine

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

aspirin/doxylamine/dextromethorphan/phenylephrine

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

aspirin/phenylephrine

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

beta blocker/thiazide combos

monitor BP, use for therapeutic advantage: combo may incr. risk of hypotension (synergistic effects)

[beta blocker/thiazide combos: atenolol/chlorthalidone, bisoprolol/hydrochlorothiazide, metoprolol succinate/hydrochlorothiazide, metoprolol tartrate/hydrochlorothiazide, nadolol/bendroflumethiazide, propranolol/hydrochlorothiazide]

bismuth subsalicylate

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

bismuth subsalicylate/metronidazole/tetracycline

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo may decr. antihypertensive efficacy (antagonistic effects; salicylate-induced inhibition of renal prostaglandins, sodium and fluid retention)

CNS depressant/aspirin/caffeine combos

caution advised w/ high-dose aspirin or salicylates; monitor BP, renal fxn: combo may decr. antihypertensive, diuretic, and natriuretic efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

[CNS depressant/aspirin/caffeine combos: butalbital/aspirin/caffeine, butalbital/aspirin/caffeine/codeine, dihydrocodeine/aspirin/caffeine]

COX 2 inhibitors

monitor BP, renal fxn: combo may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects, additive effects)

[COX 2 inhibitors: celecoxib]

cyclosporine

monitor potassium, renal fxn: combo may incr. risk of hyperkalemia, nephrotoxicity (additive effects)

[cyclosporine: cyclosporine modified, cyclosporine non-modified]

diclofenac topical

monitor BP, renal fxn: combo may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects, additive effects; up to 10% systemic absorption of diclofenac topical; minimal absorption w/ patch)

[diclofenac topical: diclofenac epolamine topical, diclofenac topical]

didanosine

give captopril 1h before or 4h after antacid-buffered didanosine: combo may decr. captopril levels, efficacy (absorption decreased at higher gastric pH)

digoxin

decr. digoxin dose 15-30% and monitor levels, toxicity: combo may incr. digoxin levels, risk of toxicity (P-glycoprotein inhibited)

diuretics, loop

monitor BP, use for therapeutic advantage: combo may incr. risk of hypotension (synergistic effects)

[diuretics, loop: bumetanide, ethacrynic acid, furosemide, torsemide]

diuretics, potassium-sparing

monitor potassium: combo may incr. risk of hyperkalemia (additive effects)

[diuretics, potassium-sparing: amiloride, spironolactone, triamterene]

diuretics, potassium-sparing/thiazide combos

monitor BP, potassium, use for therapeutic advantage: combo may incr. risk of hypotension, hyperkalemia (additive/synergistic effects)

[diuretics, potassium-sparing/thiazide combos: amiloride/hydrochlorothiazide, spironolactone/hydrochlorothiazide, triamterene/hydrochlorothiazide]

diuretics, thiazide

monitor BP, use for therapeutic advantage: combo may incr. risk of hypotension (synergistic effects)

[diuretics, thiazide: chlorothiazide, chlorthalidone, clonidine/chlorthalidone, hydralazine/hydrochlorothiazide, hydrochlorothiazide, indapamide, methyclothiazide, metolazone]

drospirenone

monitor potassium: combo w/ drospirenone may incr. risk of hyperkalemia (additive effects)

[drospirenone: drospirenone/estradiol, drospirenone/ethinyl estradiol, drospirenone/ethinyl estradiol/levomefolate]

eplerenone

caution advised, monitor BP, potassium: combo may incr. risk of hypotension, hyperkalemia (additive effects)

exenatide

caution advised, monitor renal fxn: combo may incr. risk of nephrotoxicity (additive toxicity)

heparin

monitor potassium: combo may incr. risk of hyperkalemia, risk may be greater w/ chronic heparin tx (additive effects)

hydrocodone/ibuprofen

monitor BP, renal fxn: combo may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects, additive effects)

ibuprofen/famotidine

monitor BP, renal fxn: combo w/ ibuprofen may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects, additive effects)

insulins

monitor glucose: combo may potentiate insulin effects, incr. risk of hypoglycemia (mechanism unknown)

[insulins: insulin aspart, insulin aspart protamine/insulin aspart, insulin detemir, insulin glargine, insulin glulisine, insulin lispro, insulin lispro protamine/insulin lispro, insulin NPH, insulin NPH/regular, insulin regular]

liraglutide

caution advised, monitor renal fxn: combo may incr. risk of nephrotoxicity (additive toxicity)

magnesium hydroxide/mineral oil

give captopril 1h before or 4h after: combo w/ antacids may decr. captopril levels, efficacy (absorption decreased)

magnesium salts

give captopril 1h before or 4h after: combo may decr. captopril levels, efficacy (absorption decreased)

[magnesium salts: magnesium citrate, magnesium gluconate, magnesium oxide, magnesium sulfate]

metformin/sulfonylurea combos

monitor glucose: combo may incr. risk of hypoglycemia (mechanism unknown, possibly incr. insulin sensitivity)

[metformin/sulfonylurea combos: glipizide/metformin, glyburide/metformin]

naproxen/esomeprazole

monitor BP, renal fxn: combo w/ NSAIDs may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects, additive effects)

nesiritide

monitor BP: combo may incr. risk of hypotension (additive/synergistic effects)

NSAID/chlorpheniramine/pseudoephedrine combos

monitor BP, renal fxn: combo may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects, additive effects)

[NSAID/chlorpheniramine/pseudoephedrine combos: ibuprofen/chlorpheniramine/pseudoephedrine]

NSAID/diphenhydramine combos

monitor BP, renal fxn: combo may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects, additive effects)

[NSAID/diphenhydramine combos: ibuprofen/diphenhydramine]

NSAID/phenylephrine combos

monitor BP, renal fxn: combo may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects, additive effects)

[NSAID/phenylephrine combos: ibuprofen/phenylephrine]

NSAID/pseudoephedrine combos

monitor BP, renal fxn: combo may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects, additive effects)

[NSAID/pseudoephedrine combos: ibuprofen/pseudoephedrine, naproxen sodium/pseudoephedrine]

NSAIDs

monitor BP, renal fxn: combo may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects, additive effects)

[NSAIDs: diclofenac potassium, diclofenac sodium, diclofenac/misoprostol, diflunisal, etodolac, fenoprofen, flurbiprofen, ibuprofen, ibuprofen lysine, indomethacin, ketoprofen, ketorolac, ketorolac nasal, meclofenamate, mefenamic acid, meloxicam, nabumetone, naproxen, naproxen sodium, oxaprozin, piroxicam, sulindac, tolmetin]

oxycodone/ibuprofen

monitor BP, renal fxn: combo may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects due to NSAID-induced inhibition of renal prostaglandins, sodium and fluid retention; additive effects)

peginterferon alfa 2a

caution advised, monitor CBC: combo w/ ACE inhibitor may incr. risk of granulocytopenia, thrombocytopenia (mechanism unknown, possible autoimmune destruction of myeloid precursors)

polyethylene glycol/electrolytes

monitor electrolytes: combo may incr. risk of seizures (additive effects)

[polyethylene glycol/electrolytes: polyethylene glycol/electrolytes, polyethylene glycol/electrolytes and bisacodyl, polyethylene glycol/electrolytes/sodium ascorbate/ascorbic acid]

potassium bicarbonate/potassium citrate

monitor potassium, check potassium content of supplement: combo may incr. risk of hyperkalemia (additive effects)

potassium salts

monitor potassium, check potassium content of supplement: combo may incr. risk of hyperkalemia (additive effects)

[potassium salts: potassium acid phosphate, potassium acid phosphate/sodium acid phosphate, potassium chloride, potassium citrate, potassium iodide, sodium phosphate/potassium phosphate]

pramlintide

monitor glucose: combo may incr. risk of hypoglycemia (additive/synergistic effects)

probenecid

monitor BP: combo may incr. ACE inhibitor duration of action, adverse effects (renal excretion decreased)

salicylates

caution advised w/ high-dose aspirin or salicylates; monitor BP: combo may decr. antihypertensive efficacy (inhibition of renal prostaglandins, sodium and fluid retention)

[salicylates: aspirin, aspirin/dipyridamole, carisoprodol/aspirin, choline magnesium trisalicylate, magnesium salicylate, oxycodone/aspirin, salsalate]

sodium phosphates

monitor renal fxn: combo may incr. risk of nephrotoxicity (overlapping toxicity)

[sodium phosphates: sodium phosphate, sodium phosphate rectal]

sodium sulfate/potassium sulfate/magnesium sulfate

monitor renal fxn, electrolytes: combo may incr. risk of nephrotoxicity, seizures (additive effects, electrolyte abnormalities)

sulfonylureas

monitor glucose: combo may incr. risk of hypoglycemia (mechanism unknown, possibly incr. insulin sensitivity)

[sulfonylureas: chlorpropamide, glimepiride, glipizide, glyburide, glyburide micronized, tolazamide, tolbutamide]

sumatriptan/naproxen sodium

monitor BP, renal fxn: combo w/ NSAIDs may decr. antihypertensive efficacy, incr. risk of nephrotoxicity (antagonistic effects, additive effects)

tacrolimus

monitor potassium: combo may incr. risk of hyperkalemia (additive effects)

telavancin

monitor renal fxn: combo may incr. risk of nephrotoxicity (additive effects)

tizanidine

caution advised, monitor BP: combo may incr. risk of hypotension (additive effects)

tolvaptan

monitor potassium: combo may incr. risk of hyperkalemia (additive effects)

trandolapril/verapamil

avoid duplicate tx, monitor BP, potassium, renal fxn: combo may incr. risk of hypotension, hyperkalemia, renal dysfxn (additive effects, dual blockade of renin-angiotensin-aldosterone system)

trimethoprim

monitor potassium: combo may incr. risk of hyperkalemia (additive effects)

trimethoprim/sulfamethoxazole

monitor potassium: combo may incr. risk of hyperkalemia (additive effects)

Caution Advised

aldesleukin

caution advised: combo may incr. risk of hypotension (additive effects)

apomorphine

caution advised: combo may incr. risk of orthostatic hypotension, MI, pneumonia, falls, other apomorphine adverse effects (additive effects)

black cohosh

caution advised: combo may incr. risk of hepatotoxicity (additive toxicity)

[black cohosh: Actaea racemosa, baneberry, black cohosh (Actaea racemosa), black snakeroot, bugbane, bugwort, Cimicifuga racemosa, macrotys, rattle root, rattlesnake root, rattletop, rattleweed, squawroot]

capsicum

caution advised w/ topical capsicum: combo may incr. risk of cough (additive effects)
[capsicum: African chilies, capsaicin, capsicum (Capsicum annuum), Capsicum annuum, cayenne, chili pepper, green chili pepper, Louisiana long pepper, Mexican chilies, paprika, pimento, red pepper, tabasco pepper]

gold sodium thiomalate

caution advised: combo may incr. risk of nitritoid rxn (synergistic effects)

icatibant

caution advised: combo may decr. ACE inhibitor efficacy (antagonistic effects)

iloprost inhaled

caution advised: combo may incr. risk of hypotension (additive/synergistic effects)

kava

caution advised: combo may incr. risk of hepatotoxicity (additive toxicity)
[kava: ava pepper, awa, intoxicating pepper, kao, kava (Piper methysticum), kawa, kew, Piper methysticum, sakau, tonga, yagona]

MAOIs, non-selective

caution advised: combo may incr. risk of hypotension (additive effects)
[MAOIs, non-selective: isocarboxazid, phenelzine, procarbazine, selegiline transdermal, tranylcypromine]

maraviroc

caution advised: combo may incr. risk of orthostatic hypotension (additive effects)

nitrites/sodium thiosulfate

caution advised: combo w/ nitrites may incr. risk of hypotension (additive effects)
[nitrites/sodium thiosulfate: amyl nitrite/sodium nitrite/sodium thiosulfate, sodium nitrite/sodium thiosulfate]

PDE5 inhibitors

caution advised: combo may incr. risk of symptomatic hypotension (additive effects)
[PDE5 inhibitors: sildenafil, tadalafil, vardenafil]

treprostinil

caution advised: combo may incr. risk of symptomatic hypotension (additive effects)
[treprostinil: treprostinil, treprostinil inhaled]

Adverse Reactions

Serious Reactions

- anaphylactoid rxns
- angioedema, head/neck
- angioedema, intestinal
- hypotension, severe
- hyperkalemia
- renal impairment/failure
- hepatotoxicity
- neutropenia
- agranulocytosis
- pancreatitis
- Stevens-Johnson syndrome
- oligohydramnios (in utero exposure)
- fetal/neonatal harm or death (in utero exposure)
- congenital malformations, major (1st trimester use)

Common Reactions

- rash
- pruritus

- taste changes
- hypotension
- dizziness
- fatigue
- cough
- hyperkalemia
- proteinuria
- nausea/vomiting
- BUN, Cr elevated
- eosinophilia
- positive ANA titers
- myalgia
- photosensitivity

Safety/Monitoring

Pregnancy: D (Positive evidence of human fetal risk; maternal benefit may outweigh fetal risk in serious or life-threatening situations; see pkg insert for drug-specific recs)

Lactation: Probably Safe (Limited information in animals and/or humans demonstrates no risk/minimal risk of adverse effects to infant/breast milk production; caution advised)

Monitoring Parameters
BUN/Cr at baseline, then periodically, or more frequently if CHF, renal artery stenosis; electrolytes; BP; WBC w/ diff at baseline if renal impairment, then q2wk x3mo, then periodically

Look/Sound-Alike Drug Names
[from www.usp.org]

captopril confused with: calcitriol; carvedilol; Cytomel; enalapril

Pharmacology

Metabolism: liver; CYP450: unknown

Excretion: urine >95% (40-50% unchanged); Half-life: less than 3h

Subclass: ACE Inhibitors

Mechanism of Action
inhibits angiotensin converting enzyme, interfering w/ conversion of angiotensin I to angiotensin II

Manufacturer/Pricing

Manufacturer: generic

DEA/FDA: Rx: (Requires prescription; not a controlled substance)

Approximate Retail Price
from www.drugstore.com

tablet:

12.5 mg (100 ea): \$12.99

25 mg (90 ea): \$13.99

50 mg (100 ea): \$16.99

100 mg (90 ea): \$19.99

Patient Education

Generic Name: captopril

Pronounced: KAP toe pril

Brand Name: Capoten

What is the most important information I should know about captopril?



Do not use captopril if you are pregnant. Captopril can cause injury or death to the unborn baby if you take the medicine during your second or third trimester.



Drinking alcohol can further lower your blood pressure and may increase certain side effects of captopril.



Do not use salt substitutes or potassium supplements while taking captopril, unless your doctor has told you to.

Conditions that may cause very low blood pressure include: vomiting, diarrhea, heavy sweating, heart disease, dialysis, a low salt diet, or taking diuretics (water pills). Follow your doctor's instructions about the type and amount of liquids you should drink while taking captopril. Tell your doctor if you have a prolonged illness that causes diarrhea or vomiting.

What is captopril?

Captopril is an ACE inhibitor. ACE stands for angiotensin converting enzyme.

Captopril is used to treat high blood pressure (hypertension), congestive heart failure, kidney problems caused by diabetes, and to improve survival after a heart attack.

Captopril may also be used for purposes not listed in this medication guide.

What should I discuss with my healthcare provider before taking captopril?



You should not use this medication if you are allergic to captopril or to any other ACE inhibitor, such as benazepril (Lotensin), fosinopril (Monopril), enalapril (Vasotec), lisinopril (Prinivil, Zestril), moexipril (Univasc), perindopril (Aceon), quinapril (Accupril), ramipril (Altace), ortrandolapril (Mavik).

To make sure you can safely take captopril, tell your doctor if you have any of these other conditions:

kidney disease (or if you are on dialysis);

liver disease;

heart disease or congestive heart failure;

diabetes; or

a connective tissue disease such as Marfan syndrome, Sjogren's syndrome, lupus, scleroderma, or rheumatoid arthritis.



FDA pregnancy category D. Do not use captopril if you are pregnant. Stop using this medication and tell your doctor right away if you become pregnant. Captopril can cause injury or death to the unborn baby if you take the medicine during your second or third trimester. Use effective birth control while taking captopril.



Captopril can pass into breast milk and may harm a nursing baby. You should not breast-feed while you are using captopril.

How should I take captopril?

Take exactly as prescribed by your doctor. Do not take in larger or smaller amounts or for longer than recommended. Follow the directions on your prescription label.

Your doctor may occasionally change your dose to make sure you get the best results.

Captopril is usually taken 1 hour before meals. Follow your doctor's instructions.



Conditions that may cause very low blood pressure include: vomiting, diarrhea, heavy sweating, heart disease, dialysis, a low salt diet, or taking diuretics (water pills). Follow your doctor's instructions about the type and amount of liquids you should drink while taking captopril. Tell your doctor if you have a prolonged illness that causes diarrhea or vomiting.

Your blood pressure will need to be checked often. Your kidney or liver function may also need to be tested. Visit your doctor regularly.



If you need surgery, tell the surgeon ahead of time that you are using captopril. You may need to stop using the medicine for a short time.

If you are being treated for high blood pressure, keep using this medication even if you feel well. High blood pressure often has no symptoms. You may need to use blood pressure medication for the rest of your life.



Store at room temperature away from moisture and heat. Keep the bottle tightly closed when not in use.

What happens if I miss a dose?

Take the missed dose as soon as you remember. Skip the missed dose if it is almost time for your next scheduled dose. *Do not* take extra medicine to make up the missed dose.

What happens if I overdose?



Seek emergency medical attention or call the Poison Help line at 1-800-222-1222.

Overdose symptoms may include feeling extremely dizzy or light-headed, or fainting.

What should I avoid while taking captopril?



Drinking alcohol can further lower your blood pressure and may increase certain side effects of captopril.



Do not use salt substitutes or potassium supplements while taking captopril, unless your doctor has told you to.

What are the possible side effects of captopril?



Get emergency medical help if you have any of these *signs of an allergic reaction*: hives; severe stomach pain; difficulty breathing; swelling of your face, lips, tongue, or throat.



Call your doctor at once if you have a serious side effect such as:

feeling light-headed, fainting;

urinating more or less than usual, or not at all;

fever, chills, body aches, flu symptoms;

pale skin, feeling light-headed or short of breath, rapid heart rate, trouble concentrating;

easy bruising, unusual bleeding (nose, mouth, vagina, or rectum), purple or red pinpoint spots under your skin;

fast, pounding, or uneven heartbeats;

chest pain; or

swelling, rapid weight gain.

Less serious side effects may include:

cough;

loss of taste sensation, loss of appetite;

dizziness, drowsiness, headache;

sleep problems (insomnia);

dry mouth, sores inside your mouth or on your lips;

nausea, diarrhea, constipation; or

mild skin itching or rash.

This is not a complete list of side effects and others may occur. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

What other drugs will affect captopril?

Tell your doctor about all other medicines you use, especially:

gold injections to treat arthritis;

lithium (Lithobid, Eskalith);

a potassium supplement such as K-Dur, Klor-Con;

salt substitutes that contain potassium;

drugs that can dilate blood vessels, such as alprostadil (Caverject, Edex), nitroglycerin (Nitro Dur, Nitrolingual, Nitrostat, Transderm Nitro, and others), nitroprusside (Nitropress), nesiritide (Natrecor), minoxidil (Loniten), or isosorbide dinitrate (Imdur, Isordil);

aspirin or other NSAIDs (non-steroidal anti-inflammatory drugs) such as ibuprofen (Advil, Motrin), naproxen (Aleve, Naprosyn, Naprelan, Treximet), celecoxib (Celebrex), diclofenac (Arthrotec, Cambia, Cataflam, Voltaren, Flector Patch, Pennsaid, Solareze), indomethacin (Indocin), meloxicam (Mobic), and others; or

a diuretic (water pill).

This list is not complete and other drugs may interact with captopril. Tell your doctor about all medications you use. This includes prescription, over-the-counter, vitamin, and herbal products. Do not start a new medication without telling your doctor.

Where can I get more information?

Your pharmacist can provide more information about captopril.

Remember, keep this and all other medicines out of the reach of children, never share your medicines with others, and use this medication only for the indication prescribed.

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Pill Pictures



captopril (generic) 25 mg



captopril (generic) 25 mg



captopril (generic) 50 mg



captopril (generic) 50 mg



captopril (generic) 25 mg



captopril (generic) 12.5 mg



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