

# ANGIOTENSIN-CONVERTING ENZYME (ACE) INHIBITORS FOR HYPERTENSION (Part 1 of 2)

Generic & Class	Brand & Company	Strength	Formulations	Usual Adult Dose
<b>ACE INHIBITORS</b>				
benazepril HCl	<b>Lotensin</b> (Novartis)	5mg, 10mg, 20mg, 40mg	tabs	<b>Adults:</b> If not on diuretic: initially 10mg daily. Usual maintenance: 20–40mg daily in 1 or 2 divided doses; usual max 80mg/day. If on diuretic: discontinue diuretic, if possible, 2–3 days before starting; resume diuretic if pressure not controlled with benazepril alone. If diuretic cannot be discontinued: initially 5mg daily. Creatinine clearance <30mL/min/1.73m <sup>2</sup> : initially 5mg daily; max 40mg/day. <b>Children:</b> not recommended.
captopril	<b>Capoten</b> (Par)	12.5mg, 25mg, 50mg, 100mg	scored tabs	<b>Adults:</b> Take 1 hr before meals. Initially 25mg 2–3 times daily. After 1–2 wks may increase to 50mg 2–3 times daily. If control unsatisfactory, see literature. Titrate to usual dose after several days. Monitor closely for 1st 2 wks and if dose increased; max 450mg/day. Renal impairment: see literature. <b>Children:</b> see literature.
enalapril maleate	<b>Vasotec</b> (Biovail)	2.5mg+, 5mg+, 10mg, 20mg	tabs	<b>Adults:</b> If on diuretics or CrCl <30mL/min: suspend diuretic for 2–3 days, if possible: initially 2.5mg daily; max 40mg. Monitor closely for first 2 wks. Others: initially 5mg daily. Usual range: 10–40mg daily in 1–2 divided doses. <b>Children:</b> not recommended.
fosinopril sodium	<b>Monopril</b> (Bristol-Myers Squibb)	10mg+, 20mg, 40mg	tabs	<b>Adults:</b> Initially 10mg once daily. Usual maintenance: 20–40mg daily in single or 2 divided doses; max 80mg/day. If on diuretic: suspend diuretic for 2–3 days before starting if possible; resume diuretic if pressure not controlled with fosinopril alone. If diuretic cannot be discontinued: give 10mg and monitor carefully. <b>Children:</b> <6yrs (≤50kg): not recommended. ≥6yrs (>50kg): 5–10mg once daily.
lisinopril	<b>Prinivil</b> (Merck)	2.5mg, 5mg+, 10mg, 20mg, 40mg	tabs	<b>Adults:</b> Initially and if not on diuretics: 10mg once daily. Usual range: 20–40mg once daily. If on diuretic: suspend diuretic for 2–3 days before starting; resume diuretic if BP not controlled by lisinopril alone. If diuretic cannot be discontinued: initially 5mg daily (supervise 1st dose). CrCl 10–30mL/min: initially 5mg daily; CrCl <10mL/min: initially 2.5mg daily; max 40mg daily. <b>Children:</b> <6yrs or CrCl <30mL/min/1.73m <sup>2</sup> : not recommended. ≥6yrs: initially 0.07mg/kg (max 5mg) once daily; usual max 0.61mg/kg (40mg) once daily.
	<b>Zestril</b> (AstraZeneca)	2.5mg, 5mg, 10mg, 20mg, 30mg, 40mg	tabs	
moexipril	<b>Univasc</b> (UCB)	7.5mg, 15mg	scored tabs	<b>Adults:</b> Take 1 hr before meals. Initially and if not on diuretics: 7.5mg once daily; usual range 15–30mg/day in 1–2 divided doses; max 30mg/day. If on diuretic: suspend diuretic for 2–3 days before starting therapy; resume diuretic if blood pressure not controlled by moexipril alone. If diuretic cannot be discontinued: initially 3.75mg once daily. CrCl <40mL/min per 1.73m <sup>2</sup> : initially 3.75mg once daily; max 15mg/day. <b>Children:</b> not recommended.
perindopril erbumine	<b>Aceon</b> (Solvay)	2mg, 4mg, 8mg	scored tabs	<b>Adults:</b> If not on diuretic: initially 4mg once daily or in 2 divided doses. Titrate; max 16mg/day. Usual maintenance 4–8mg once daily. If on diuretic: suspend diuretic, if possible, 2–3 days before starting therapy. If diuretic cannot be discontinued (monitor closely): initially 2–4mg once daily or in 2 divided doses; max 16mg/day. Renal impairment: CrCl <30mL/min: not recommended; CrCl >30mL/min: initially 2mg/day; max 8mg/day. <b>Children:</b> not recommended.
quinapril HCl	<b>Accupril</b> (Pfizer)	5mg+, 10mg, 20mg, 40mg	tabs	<b>Adults:</b> Monotherapy: initially 10–20mg once daily. Usual maintenance: 20–80mg daily in 1–2 divided doses. Elderly: initially 10mg once daily. Patients on diuretic: suspend diuretic for 2–3 days before starting; resume diuretic if BP not controlled by quinapril alone. If diuretic cannot be discontinued, or if creatinine clearance (CrCl) 30–60mL/min: initially 5mg daily. CrCl 10–30mL/min: initially 2.5mg daily. <b>Children:</b> not recommended.
ramipril	<b>Altace</b> (King)	1.25mg, 2.5mg, 5mg, 10mg	caps, tabs	<b>Adults:</b> May sprinkle contents of caps on 4oz applesauce or mix in 4oz water or apple juice. Hypertension: initially 2.5mg once daily; maintenance: 2.5–20mg daily in single or 2 divided doses. If on diuretic: suspend diuretic, if possible, 2–3 days before starting; resume diuretic if pressure not controlled with ramipril alone. If diuretic cannot be discontinued: initially 1.25mg once daily. Cardiovascular risk reduction: initially 2.5mg once daily for 1 week, then 5mg once daily for 3 weeks; maintenance 10mg once daily or in 2 divided doses. For both: (CrCl <40mL/min): 1.25mg once daily; max 5mg/day. <b>Children:</b> not recommended.

(continued)

# ANGIOTENSIN-CONVERTING ENZYME (ACE) INHIBITORS FOR HYPERTENSION (Part 2 of 2)

Generic & Class	Brand & Company	Strength	Formulations	Usual Adult Dose
<b>ACE INHIBITORS</b> (continued)				
trandolapril	<b>Mavik</b> (Abbott)	1mg+, 2mg, 4mg	tabs	<b>Adults:</b> If not on diuretic: initially 1mg once daily in non-black patients; 2mg in black patients. If on diuretic: suspend diuretic for 2-3 days before starting therapy; resume diuretic if BP not controlled with trandolapril alone. If diuretic cannot be discontinued (supervise closely until stabilized), or in renal impairment (CrCl <30mL/min) or hepatic cirrhosis: initially 0.5mg once daily. For all: adjust at 1-week intervals; usual range 2-4mg once daily; usual max 8mg/day; may give in 2 divided doses. <b>Children:</b> not recommended.
<b>CALCIUM CHANNEL BLOCKER + ACE INHIBITOR</b>				
amlodipine (as besylate)/ benazepril HCl	<b>Lotrel</b> (Novartis)	2.5mg/10mg, 5mg/10mg, 5mg/20mg, 5mg/40mg, 10mg/20mg, 10mg/40mg	caps	<b>Adults:</b> Not for initial therapy. Titrate components (amlodipine or another dihydropyridine calcium channel blocker, or benazepril or another ACEI). CrCl ≤30mL/min per 1.73m <sup>2</sup> : not recommended. Hepatic impairment, or small, elderly, or frail patients: initially 2.5mg/10mg strength. <b>Children:</b> not recommended.
trandolapril/ verapamil HCl (ext-rel)	<b>Tarka</b> (Abbott)	1/240, 2/180, 2/240, 4/240	tabs	<b>≥18yrs:</b> Not for initial therapy. Titrate individual components. Take with food. 1 tab daily. <b>&lt;18yrs:</b> not recommended.
<b>ACE INHIBITOR + DIURETIC</b>				
benazepril HCl/ hydrochlorothiazide	<b>Lotensin HCT</b> (Novartis)	5mg/6.25mg, 10mg/12.5mg, 20mg/12.5mg, 20mg/25mg	scored tabs	<b>Adults:</b> To switch from benazepril monotherapy: see literature. Or, titrate individual components. <b>Children:</b> not recommended.
captopril/ hydrochlorothiazide	<b>Capozide</b> (Par)	25mg/15mg, 25mg/25mg, 50mg/15mg, 50mg/25mg	scored tabs	<b>Adults:</b> Take 1 hr before meals. As initial therapy: one 25/15 tab daily; adjust at 6 wk intervals. Previously titrated: use same doses as individual components. Usual max 150mg captopril, 50mg hydrochlorothiazide daily. <b>Children:</b> see literature.
enalapril maleate/ hydrochlorothiazide	<b>Vaseretic</b> (Biovail)	5mg/12.5mg, 10mg/25mg	tabs	<b>Adults:</b> Switching from monotherapy with either component: start with Vaseretic 5-12.5 or 10-25 once daily, then adjust; max 20mg enalapril/day. Allow 2-3 weeks for titration of HCTZ component. Or, substitute for individually titrated components. <b>Children:</b> not recommended.
lisinopril/ hydrochlorothiazide	<b>Prinzide</b> (Merck)	10mg/12.5mg, 20mg/12.5mg, 20mg/25mg	tabs	<b>Adults:</b> Not for initial therapy. Usual maintenance: 1-2 tabs of 20-12.5 or 20-25 once daily, or 1 tab of 10-12.5 once daily. <b>Children:</b> not recommended.
	<b>Zestoretic</b> (AstraZeneca)			<b>Adults:</b> Switching from monotherapy with either component: start with Zestoretic 10/12.5 or 20/12.5 once daily, then adjust. Allow 2-3 weeks for titration of HCTZ component. If on diuretic: if possible, suspend diuretic for 2-3 days, then adjust. Or, substitute for individually titrated components. <b>Children:</b> not recommended.
moexipril/ hydrochlorothiazide	<b>Uniretic</b> (UCB)	7.5mg/12.5mg, 15mg/12.5mg, 15mg/25mg	scored tabs	<b>Adults:</b> Not for initial therapy. Take 1 hour before a meal. Switching from monotherapy with either component: 1 tab once daily; adjust at 2-3 week intervals; usual max 30mg/50mg per day. Or, substitute for individually-titrated components. <b>Children:</b> not recommended.
quinapril HCl/ hydrochlorothiazide	<b>Accuretic</b> (Pfizer)	10mg/12.5mg, 20mg/12.5mg, 20mg/25mg	scored tabs	<b>Adults:</b> Not for initial therapy. Previously titrated: use same doses as individual components. Switching from quinapril monotherapy: initially one Accuretic 10/12.5 tab or one Accuretic 20/12.5 tab once daily; allow 2-3 weeks before increasing hydrochlorothiazide component. Switching from hydrochlorothiazide 25mg/day monotherapy: initially one Accuretic 10/12.5 tab daily or one Accuretic 20/12.5 tab once daily. Adjust based on response and serum potassium. Renal impairment (CrCl ≤30mL/min): not recommended. <b>Children:</b> not recommended.

**NOTES**

+ = scored

(Created 10/2009)