

COMPARISON OF APPROVED ACE INHIBITORS

	Captopril	Enalapril	Enalaprilat	Lisinopril	Benazepril	Fosinopril	Quinapril	Moexipril	Trandolapril	Ramipril
Trade Name	Capoten	Vasotec	Vasotec I.V.	(1) Prinivil (2) Zestril 1987	Lotensin	Monopril	Accupril	Univasc	Mavik	Altace
Manufacturer	Squibb	Merck	Merck	(1) Merck (2) Stuart	Ciba	Mead Johnson	Parke-Davis	Schwarz Pharma	Knoll	Hoechst Upjohn
Prodrug	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Active Moeity	captopril	enalaprilat	enalaprilat	lisinopril	benazeprilat	fosinoprilat	quinaprilat	moexiprilat	trandolaprilat	ramiprilat
Classification	sulfhydryl	carboxyl	NA	carboxyl	carboxyl	phosphoryl	carboxyl	non-sulfhydryl	non-sulfhydryl	carboxyl
FDA Indications	HTN, CHF, Asymptomatic LV dysfunction, and diabetic nephropathy	HTN, CHF, and Asymptomatic LV dysfunction	HTN	HTN CHF	HTN	HTN CHF	HTN CHF	HTN	HTN, Maintenance for LV dysfunction post-MI	HTN CHF
Dosage Forms (mg)	12.5 25 50 100	2.5 5 10 20	1.25 mg/ml 1-2ml amps	5 10 20 40	5 10 20 40	10 20	5 10 20 40	7.5 15	1 2 4	1.25 2.5 5 10
Low Dose	6.25mg tid 12.5mg tid 25mg bid-tid	2.5mg qd-bid 5mg qd-bid 10mg qd	0.625mg q6h	2.5 - 10mg qd	5 - 10mg qd	10mg qd	2.5 - 10mg qd	3.75-7.5mg qd	1-2mg qd	1.25 - 2.5mg qd
Moderate Dose	50mg bid-tid 100mg bid-tid	10mg bid 20mg qd	1.25 - 2.5mg q6h	20 - 40mg qd	20 - 40mg qd	20 - 40mg qd	20 - 40mg qd	15 - 30mg qd	2-4mg qd	5 - 10mg qd
Maximum Dose	150mg tid	20mg bid	5mg q6h	80mg qd	80mg qd	80mg qd	80mg qd	60mg qd	8mg qd	20mg qd
Dosing Comments	CHF: begin low and dose TID	CHF: begin low and dose BID	Intravenous over 5 min	may divide dose	may divide dose	may divide dose	may divide dose	may divide dose	may divide dose	may divide dose
Absorption	60-75% (decr 30% by food)	55-75% (food-no effect)	NA	25% (varies 10-60%, food-no effect)	32% (food-no effect)	36% (decr by antacids)	60% (decr by high fat meals)	13% (decr 40-80% by food)	70% (food-no effect)	60% (food-no effect)
Protein Binding	25 - 30%	50%		negligible	95%	95%	97%	50%	80%	56%
Onset of Action (hours)	0.25 - 0.5	1	0.25	1	1	1	1	1	1	1 - 2
Peak Effect (hours)	1 - 2	4 - 6	2 - 4	6 - 8	2 - 4	3	2 - 4	3 - 6	4-10	3 - 6
Duration of Action (hours)	6 - 10 (dose-related)	12 - 24	6	24	24	24	24	24	24	24
Half-life (hours)	< 2	11	11	12	10 - 11	12	25	2 - 9	16-24	13 - 17

Elimination	50% renal 50% hepatic	94% renal	94% renal	100% renal	60% renal 40% biliary	50% renal 50% biliary	96% renal	13% renal 53% feces 34% hepatic	33% renal 66% feces	60% renal 40% feces
Adjust for Renal Failure	CRCL<30ml/mn	CRCL<30ml/mn	CRCL<30ml/mn	CRCL<30ml/mn	CrCL<30ml/mn	CrCL<10ml/mn	CrCL<30ml/mn	CrCL<40ml/mn	CrCl<30ml/min	CrCL<30ml/mn
Removed by Hemodialysis	Yes	Yes	Yes	Yes	No	No	No	unknown	Yes	Yes

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