

Type	Names	Indications	AEs	Interactions/Notes	Site of Action	MOA	
Diuretics - Prevent renal re-absorption of H₂O							
Thiazide Diuretic	Hydrochlorothiazide	Essential HTN- 1st line , edema	Hypo Na, K , Cl, Dehydration OH, Placenta perfusion Nocturia	Digoxin toxicity (All K losing diuretics). Lithium toxicity (All diuretics). NSAIDs → reduced natriuresis	Early distal tubule	Prevent re-absorption of Na	
High-ceiling (loop)	Furosemide (Lasix ®)	2nd line , edema (82)	Same as Thiazides + Ototoxicity	Same as Thiazides + Nitrates (anti-HTNs), Ototoxic drugs	Loop of Henle	Prevent re-absorption of Na	
K+ Sparing	Non-ald antag	Triamterene (Dyrenium)	Combo w/ thiazide (Dizide = thiazide + triamterene)	Hyper K	K suppl., Avoid K rich diet. NSAIDs blunt effect/renal failure. Take after food in AM	Late Distal /Collecting Duct	Prevent re-absorption of Na
	Ald antag STERIOD-like	Spironlactone (Aldactone)	HTN, edema, combo w/ loop & early distal drugs	Delayed effects, Hyper K Endocrine: Gynecomastia Mestrual Irregularities, Impotence, Hirsutism Voice changes	K suppl & NaCl substitutes (s.a. Kcl), ACE inhibitors &, ARBs → Hyper K., Preg D.		
Osmotic diuretics	Mannitol	Renal failure, Red Intracranial pressure , Inc intra-ocular pressure.	Edema (if leaves circ), Cardiac overload, Dehydration, OH. In bloodstream inc osm pressure → draws fluids into plasma.	Parenteral only. NOT metabolized. No sign. interactions	Proximal tubules.	Prevents re-absorption of water.	
RAAS effectors							
ACEIs	All oral except Enalaprilat (only IV).	HTN (long term). CV mort & renal failure. Diabetic Nephronopathy Post MI. Stroke. Combo w/ thiazide.	Fetal injury, Cough Angioedema, Renal failure (if suscept), Teratogenic HyperK, First does hypotension.	Digoxin & Lithium toxicity. K sparing diuretics & K Suppl → hyper K. Renal impair (contra)	Blocks Ang I → Ang II & ↑ Bradykinins.	ACE Inhibitors	
ARBs		HTN, heart failure & diabetic nephropathy. Post MI, Stroke	Well tolerated Fetal injury Angioedema Renal Failure (if suscept)	Additive w/ other drugs.		Ang II receptor blockers	

Ald Antag	Spironolactone/Eplerone (Inspra)	HTN Heart failure	HyperK	This is a K-sparing diuretic (like others covered)	Collecting tubule & duct (end)	Promote Na & H ₂ O excretion
ReninX	No info					
Sympatholytics						
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Alpha-1 blockers	Doxazosin, Terazosin, Prazosin		Sexual dys. OH	Not first line.	Vasodil → dec venous return.	A-1 Antag
A/B blockers	Not info					
Central A-2 agons	Clonidine, methyl dopa		Dry mouth, sedation, hemolytic anemia, liver disorders. Rebound HPT if stopped.		Within brainstem	A-2 Agon: Suppress sympathetic outflow
Adren. neuron blockers	Not discussed					Inhibit release of NE
Gangl. blockers	Not used, will not cover.					Inhibit post ganglionic transmission
Others						
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Ca 2+ blockers	Dihydropyridines (Nifedipine, Amlodipine)	Dil of art	Angina pectoris, HTN	Indirect Reflex Effect (baroreceptors) → Inc HR & contract (Nif). Plus same as Verapamil AEs. Ging hyperplasia. If angina from reflex tachy, use B-blockers.	Similar to Ver, except SA/AV changes. DO NOT block cardiac Ca channels at thera doses. Former has no cardiosuppressant actions; sustained release. Latter has longer half life.	Ca 2+ blockers
	Nons (Verapamil , Diltazem)	Dil of art. Acts on heart too.	Angina pectoris, HTN, Dysryth	Constipation, dizziness, flushing, headaches, edema, Bradycardia	Dil periph vessels, dil corn art → inc corn perf , block SA (dec HR) & AV node (dec nodal cond), myocardium blockade → dec cont force.	

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Arterial dilators	Hydralazine (Apresoline ®)	W/ Beta & Diuretic for ess HTN. Parenteral for HTN crisis. Also for heart failure.	Ess. HTN, HTN crisis Angina pectoris, heart failure, MI,, Pheochromocytoma , PVD, pulm art HTN	Na/H2O retention. Lupus Erythatosi s like syndrome.	OH, reflex tachy (give w/ beta blocker), expansion of blood volume (low renal perf stim ald release)	Dec afterload → dec card work → inc CO, tissue perf.	Vasodilators
	Minoxidil (severe cases)			Na/H2O retent. Hyperpolarize vascular smooth muscle by metabolite. Hypertrichosis (80%); typically equiv to Rogaine.			
Veinous dilators	Nitroglycerine						
A & V dilators	Nitroprusside (Nitropress ®)	For HTN ER. Pump & BP cuff needed. Discard if old/discolored.		NO reflex tachy like others in group. Cyanide poisoning. Thiocyanate Toxicity (CNS effects).	Does what both art & vein dil do.		

Hyponatremia = low Na
Hypokalemia = low K
Hypochloremia = low Cl
Natriusis = large amounts of Na in urine
(#) There's much more to it; see slide.