

Nitrodilators

Nitroglycerin	Isosorbide dinitrate	Amyl nitrite (Isopentyl nitrite)
Sublingual in emergencies with rapid action but very short half life.	Better oral bioavailability and longer half life (1hr)	Inhaled volatile liq.
Photosensitive and tolerance is possible		Not recommended due to flushing.
Adverse effects:		
1. Vasodilation: headache, hypotension		
2. Tolerance		
3. Large doses= methemoglobinemia & cyanosis		

CCB

Dihydropyridines	Aralkyl amine deri.	Benzothiazepine
-Nifedipine-	-Verapamil-	-Diltiazem-
the prototype; potent VD	ttt of angina, <i>arrhythmia</i> , HTN	Less potent for <i>arrhythmia</i>
for HTN, angina.	chiral molecule with levorotatory as most potent form	for variant angina
NOT for <i>arrhythmia</i> due to no or little effect on heart nodes.		
NO₂ (nitro gp) essential for activity.		
Amlodipine		
Longer t _{1/2} but lesser -ve inotropy due to more vascular selectivity.		
-Felodipine, Nicardipine-		
Block L-type/slow Ca channels for coronary VD or spasm relief.		

Antithrombotic & anti-platelet

Aspirin	Dipyridamole	Thienopyridine deriv.
	Non-nitrate	Purine-receptor blockers on platelets to stop aggregation activation
	Potentiates PGI ₂ (prostacyclin)	-Ticlopidine-
	Essentially, increases presence of the VD adenosine.	SE: neutropenia
	prophylaxis for chronic angina pectoris .	-Clopidogrel-
		reduced neutropenia

K channel agonist

-Nicorandil-
Chemical class: Nicotinamide nitrate ester
Direct vasodilator for both normal and diseased coronary arteries.