

**2. Selective CCBs**

**MOA: Block Vascular Ca<sup>2+</sup> Channels – (↑Supply ↓Demand)**  
*Nifedipine, amlodipine, nifedipine, felodipine*  
**Use:** Stable/unstable/Vasospastic Angina, Hypertension  
**SE:** Tachycardia – (MI, Coronary steal → **ADD β-blocker**),  
 Gingival hyperplasia, Peripheral Edema  
**CI:** CYP3A4 inhibitors – Macrolides, cimetidine

**3. Non-Selective CCBs**

**MOA: Block Vascular AND cardiac Ca<sup>2+</sup> channels (AV/SA node inhibition) (↑Supply, ↓Demand)**  
*Verapamil, Diltiazem*  
**Use:** Stable/Unstable/Vasospastic angina, HTN, arrhythmia  
**SE:** AV block, bradycardia, Gingival hyperplasia  
**CI:** β-blockers, Digoxin

**4. β-Blockers**

**MOA: inhibit CO, ↓SNS, ↓BP (↓Demand)**  
*Propranolol – Beta 1&2, Metoprolol – Beta 1, Atenolol – Beta 1, Nebivolol – Beta1 & NO production*  
**Use:** Angina, arrhythmia, CHF  
**SE:** Fatigue, exercise intolerance, Hyperglycemia (β<sub>2</sub>), Hyperkalemia (RAAS, β<sub>1/2</sub>), rebound  
**CI:** Verapamil, diltiazem, asthma, Diabetes, K-sparing Diuretics, ACEI, ARB, Left ventricular failure

**1. Nitrates**

**MOA: NO vasodilation (Veins > arteries), ↓Preload, ↓ Platelet aggregation (↑Supply, ↓Demand)**  
*Nitroglycerin – Sublingual (1<sup>st</sup> pass), ISDN – Sublingual (1<sup>st</sup> Pass), ISMN – No first pass – Oral*  
**Use:** Stable/prinzmetal\_Angina, HTN emergency, Cyanide Poisoning  
**SE:** Tolerance (ADH), reflex tachy, severe headache, flushing, orthostatic hypotension  
**CI:** PDE5 inhibitors (PD), CCBs (PD), elevated ICP, Right sided MI, HCM

**6. pFOX inhibitors**

**MOA: Inhibit late Na<sup>+</sup> channel → ↑Ca<sup>2+</sup>, Switch cardiac fuel from Fats to glucose (↓Demand)**  
*Ranolazine*  
**Use:** Angina, arrhythmia  
**SE:** Dizziness, constipation  
**CI:** QT prolongation (rhythm control drugs), CYP3A4

**5. Ivabradine**

**MOA: Pacemaker (current inhibitor (I<sub>f</sub>) → ↓HR (not contractility) (↓Demand)**  
**Use:** angina, arrhythmia  
**SE:** Visual disturbances, AV block  
**CI:** NS CCBs, β-blockers, Sick sinus syndrome

