

2. Selective CCBs

MOA: Block Vascular Ca²⁺ Channels – (↑Supply ↓Demand)

Nifedipine, amlodipine, nicardipine, felodipine

Use: 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 Ca²⁺ channels (AV/SA node inhibition)

(↑Supply, ↓Demand)

Verapamil

Diltiazem

Use: 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, Diastolic CHF

SE: Fatigue, exercise intolerance, Hyperglycemia (β₂), Hyperkalemia (RAAS, β_{1/2}), 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 (1st pass)

ISDN – Sublingual (1st Pass)

ISMN – No first pass – Oral

Use: Stable/prinzmetal_Angina, HTN emergency

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⁺ channel → ↑Ca²⁺, 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_f) → ↓HR (not contractility) (↓Demand)

Use: angina, arrhythmia

SE: Visual disturbances, AV block

CI: NS CCBs, β-blockers, Sick sinus syndrome

