

Hypertension – Initiation and Titration Considerations

When to Initiate Pharmacologic Therapy Lifestyle first for all; drugs for Stage 2 ($\geq 140/90$) or Stage 1 with CVD/CKD/ASCVD risk $\geq 10\%$ (Framingham). In pregnancy, diabetes, HF: Treat Stage 1. Goal: $< 130/80$ mmHg for most.

Common First-Line Drug Classes

- Thiazide diuretics: Low-dose (HCTZ 12.5-25 mg); volume reduction.
- ACE inhibitors/ARBs: RAAS blockade (e.g., lisinopril); renal/CV protection.
- Calcium channel blockers (CCB): Vasodilation (dihydropyridine like amlodipine). Combinations (e.g., ACEI + CCB) for most starters.

Simple Stepwise Titration Concepts

- Start low: Monotherapy or low-dose combo; titrate q2-4 weeks based on home/office BP.
- Step 1: Single agent to max.
- Step 2: Add second class.
- Step 3: Add third (e.g., mineralocorticoid antagonist like spironolactone for resistant HTN). Target $< 130/80$; reassess if side effects.

Monitoring and Follow-up Principles

- Baseline: Labs (K+, Cr, lipids), ECG if high risk.
- Follow-up: q1 month until controlled, then q3-6 months; annual labs. Home BP monitoring encouraged. Address barriers (adherence 50%).

References

- Whelton PK, et al. ACC/AHA 2017 Guideline, 2025 update.
- Muntner P, et al. Hypertension. 2024.