

Type 2 DM – Hypertension

First Line

Therapeutic Lifestyle Changes

ACE Inhibitor: Lisinopril / Captopril
ARB (if cough/angioedema on ACEI)

Second

Diuretic
HCTZ

Third/Fourth

β-Blocker
Metoprolol / Atenolol

Calcium Channel Blocker
Diltiazem

May Consider adding

Clonidine

Alpha Blocker
Doxazosin/Terazosin

BP TARGET
<130/80

Treat to Achieve
This Goal

Ref: JNC VII;
www.nhlbi.nih.gov/guidelines/hypertension/index.htm

Type 2 DM – Hypertension

ACE Inhibitors (ACEI)/ARBs

Renal protective in diabetics—consider using if Micral (+), even if BP < 130/80. Can cause ↑ K⁺, ↑ creatinine; cough (not with ARB), rarely angioedema.

Lisinopril (Prinivil@Zestril@) Start 2.5-5mg daily; usually 20-40mg daily

Captopril (Capoten@) Start 12.5 BID-TID; max 150mg TID

Losartan (Cozaar@) Start 25-50mg daily; usually 100mg daily
Consider if unable to tolerate ACEI

Telmisartan (Micardis@) Start 40mg daily; usually 20-80mg daily
Consider if unable to tolerate ACEI

Diuretics

HCTZ Start 12.5-25 mg daily; usually 25mg daily
Can ↓ K⁺. (Problems ↑ with higher doses > 25mg)

Maxzide@ Dose: ½ tab daily (to keep HCTZ dose at 25mg); 1 tab = 50mg HCTZ/75mg triamterene; K⁺ sparing – Caution esp. in CKD

β-blockers (BABA)

Don't use if bradycardia or 2nd/3rd degree block.

Caution in Severe: CHF, Asthma, or Renal dysfunction

Atenolol (Tenormin@) Start 25-50mg daily-BID; usually 50-100mg daily
Eliminated renally (caution Renal Failure)

Metoprolol (Lopressor@) Start 50-100mg BID; usually 100-450mg daily in 1-2 divided doses.
(XR formulation dosed once daily)

Eliminated hepatically (caution in Liver Failure)
Preferred β-Blocker for renal dysfunction or heart failure

Carvedilol (Coreg@) Start 3.125-6.25mg; Usual dose 25mg BID
Consider in patients with heart failure

Calcium Channel Blockers (CCBA)

Diltiazem CD (Cardizem@) Start 120mg daily; usually 120-420mg daily

Amlodipine (Norvasc@) Start 5mg daily; 5-10mg daily
consider in patients with angina or CHF

Nifedipine XL (Adalat/ Procardia@) Consider use if patient cannot tolerate diltiazem; Start 30mg daily; usually 30-120mg daily; Caution edema, CHF, and MI

Nisoldipine (Sular@) Consider use if patient cannot tolerate diltiazem; Start 20mg daily; usually 10-40mg daily; NMT 60mg daily; Caution edema, CHF, and MI

Alpha Blockers

Doxazosin (Cardura@) Start 1mg immediate release HS; Max dose 16mg daily; Can cause dizziness, drowsiness, and weakness; Titrate up slowly

Terazosin (Hytrin@) Start 1mg HS; Max dose 20mg daily; Can cause dizziness, drowsiness, and weakness; Titrate up slowly

Central Acting

Clonidine (Captopres@) Start 0.1mg BID; usually 0.1-0.3mg BID; Can cause ↑ sedation/dizziness/weakness; Titrate ↑ slowly. Do **not** withdraw abruptly

Drugs names in *italics* are not on the IHS National Core Formulary