

PHASE POPULATIONS

Repaired	Symptomatic
AAA	CAD PAD

CVA/TIA Ischemic, Embolic

DM ASA: HTN/Smoking: M ≥ 50 yrs, F ≥ 60 yrs, ACEI: ≥ 55 yrs or microalbuminuria

PHASE MEDICATIONS & CAUTIONS
INDEPENDENT of BP control or Statin Use

ASA

ASA	81mg daily
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CAUTION/INFO If ASA intolerant: Clopidogrel : CAD, Sx PAD
Warfarin: Embolic CVA/TIA

ACEI

Lisinopril	10mg daily
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CAUTION/INFO Verify effective contraception in women of childbearing potential: Use Chlorthalidone or HCTZ.
Use ACEI with caution: eGFR <30, K >5.5
ARB may be inappropriate : Hx of Angioedema, renal failure or hyperkalemia on ACEI.

ACEI+Thiazide: HX ISCHEMIC & EMBOLIC CVA
HX INTRACRANIAL HEMORRHAGE

Lisinopril - HCTZ	10–12.5mg daily
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STATIN

- Clinical ASCVD³ Age < 75 + any LDL

Atorvastatin	40–80mg daily
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- Clinical ASCVD Age ≥ 75 + any LDL
- DM: Age ≥ 40 + LDL 70-189

Simvastatin OR	20-40mg daily
Atorvastatin	10-20mg daily

CAUTION/INFO Verify effective contraception in women of childbearing potential.

BETA BLOCKER – FOR CAD/Sx PAD/AAA

Atenolol	25mg daily
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CAUTION/INFO Use with caution: HR <55, asthma, hypotension.
HF or LVEF <40%: Use 1) Carvedilol or 2) Bisoprolol.
eGFR <30: Use Metoprolol ER.

BP Goals¹

≤ 139/89: < 60 yrs and/or DM, and/or CKD²:
≤ 149/89: ≥ 60 yrs, no DM, no CKD/microalb.

START βBlocker+ACEI

Atenolol+Lisinopril
Atenolol 25mg + Lisinopril 10mg daily

See CAUTION/INFO re: verify contraception & eGFR. Titrate to BP goal.

REPLACE Lisinopril with Lisinopril - HCTZ

Lisinopril - HCTZ
20 - 25mg ½ → 1 → 2 tabs daily

Titrate to BP goal.

OPTIMIZE βBlocker

Atenolol
25 → 50mg daily

Titrate to BP; HR 55–70.

Optional: REPLACE ACEI w/ ARB if ACEI intolerant

Losartan
25mg daily → 25mg twice daily → 50mg twice daily

Titrate to BP goal.

ADD Calcium Ch. Blocker

Amlodipine
2.5 → 5 → 10mg daily

Titrate to BP goal.

REPLACE HCTZ w/ Chlorthalidone

Chlorthalidone
25mg daily

Titrate to BP goal.

ADD/ADVANCE Spironolactone OR βBlocker

OR	Spironolactone⁵
	12.5 → 25mg daily
	Atenolol⁶
	25 → 50mg daily

START ACEI+Diuretic

Lisinopril - HCTZ
20 - 25mg ½ → 1 → 2 tabs daily

See CAUTION/INFO re: verify contraception & eGFR. Titrate to BP goal.

Statin Goals

Atorvastatin 40-80 mg:

- Clinical ASCVD³ Age < 75 + any LDL

Simva 20-40 mg or Atorva 10-20 mg:

- Clinical ASCVD Age ≥ 75 + any LDL
- DM: Age ≥ 40 + LDL 70-189

Clinical ASCVD

Age < 75 Any LDL → **START Statin** **Atorvastatin** 80mg daily
See CAUTION/INFO Verify contraception.

Age ≥ 75 Any LDL → **START Statin** **Simvastatin** 40 mg daily
See CAUTION/INFO Verify contraception

DM

Age ≥ 40 LDL 70-189 → **START Statin** **Atorvastatin** 80mg daily
See CAUTION/INFO Verify contraception.

Optional: 10 yr CV risk >7.5%

If recommended dose of statin not tolerated, reduce to lowest tolerated dose or switch to other statin (such as simvastatin or lovastatin)

Optional LDL monitoring to assist with adherence assessment; consider lower statin dose if LDL < 40 x 2

A1c Goals

Rev. 20.17 (04/14)

≤ 7.9%: > 65 yrs or clinical factors⁴
≤ 6.9%: < 65 yrs w/o clinical factors

A1C ≥ 8.5
Metformin + Glipizide or NPH

START

Metformin
500mg: ½ tablet bid → 1 tablet bid → 2 tablets bid

Contraindicated: eGFR <30; HF NY class 3–4; LFTs >3 x ULN

If GFR 30–60, 1000mg = max recommended. Titrate every 1-2 weeks to reach AM SMBG target [≤6.9: 70–130; ≤ 7.9: 100–160]

Above target after 6 wks *OR*

START / ADD

Glipizide
5mg: ½ tablet bid → 1 tablet bid → 2 tablets bid

Contraindicated: severe sulfa allergy

Titrate every two weeks until at target.

Above target after 6 wks

ADD

NPH Insulin
10 units SQ at hs

↑ 2 units every 2 days until at target.

³Clinical ASCVD (atherosclerotic cardiovascular disease): CAD, TIA/CVA, Symptomatic PAD, Repaired AAA

⁴Individualize A1c goal based on Risk of hypoglycemia, Duration of DM, Life expectancy, Co-morbidities, Vascular complications, member resources, and support system.

⁵If on thiazide AND eGFR ≥ 60 AND K < 4.5

⁶Titrate to BP; HR 55–70.

Adapted from KPNC CPG for: CAD, DM, Cholesterol, HTN, HF and Stroke

Complete guidelines can be found in the Clinical Library at <http://cl.kp.org>

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¹ BP algorithm applies to eGFR ≥ 30 and LVEF ≥ 40%.

² CKD: Microalbuminuria or [(age/2) + eGFR] < 85

BP	Preferred Dosage Forms	Max. Rec. Dose	Optimal Titration Interval	Baseline Labs	Titration	Lab Monitoring
ACE Inhibitor - Diuretic Lisinopril - HCTZ (Prinzide®)	Tab 20 - 25mg	40 - 50mg daily	2 weeks	K+ and SCr. within last 6 months (Na+ optional)	K+ and SCr. 1 week after initiation or dosage change (Na+ optional)	K+ and SCr. every 12 months
Thiazide Diuretics HCTZ (Hydrodiuril®, Esidrix®)	Tab 25mg	HCTZ 50mg daily	2 weeks	K+ and SCr. within last 6 months (Na+ optional)	K+ and SCr 1 week after initiation or dosage change (Na+ optional)	K+ and SCr. every 12 months
Chlorthalidone (Hygroton®)	Tab 25mg	25mg daily	2 weeks	K+ and SCr. within last 6 months (Na+ optional)	K+, SCr 1 week after initiation or dosage change (Na+ optional)	K+ and SCr. every 12 months
ACE Inhibitor Lisinopril (Prinivil®)	Tab 5, 10, 20mg	40mg daily	1 week	K+ and SCr. within last 6 months	K+ and SCr 1 week after initiation. K+ 2 weeks after dosage change	K+ and SCr. every 12 months
ARB Losartan (Cozaar®)	Tab 25, 50mg	100mg daily or 50mg twice daily	1 week	K+ and SCr. within last 6 months	K+ and SCr 1 week after initiation. K+ 2 weeks after dosage change	K+ and SCr. every 12 months
Calcium Channel Blocker Amlodipine (Norvasc®)	Tab 2.5, 5, 10mg	10mg daily	1 week	None	None	None
Potassium Sparing Diuretic Spironolactone (Aldactone®)	Tab 25mg	25mg daily	1 week	K+, SCr. within last month	K+ and SCr 1 week after initiation & 2 weeks after dosage change	K+ and SCr. every 12 months
B1 blockade Atenolol (Tenormin®)	Tab 25, 50, 100mg	100mg daily	1 week	None	Titrate to pulse 55-70	None
Metoprolol (Lopressor®)	Tab 25, 50, 100mg	100mg twice daily	1 week	None	Titrate to pulse 55-70	None
Metoprolol ER (Toprol®)	Tab 25, 50, 100mg	200mg daily	1 week (2 weeks for heart failure)	None	Titrate to pulse 55-70	None
Bisoprolol (Zebeta®)	Tab 5, 10mg	10mg daily	1 week (2 weeks for heart failure)	None	Titrate to pulse 55-70	None
Carvedilol (Coreg®)	Tab 3.125, 6.25, 12.5, 25mg	25mg twice daily	1 week (2 weeks for heart failure)	None	Titrate to pulse 55-70	None
DM 2	Preferred Dosage Forms	Max. Rec. Dose	Optimal Titration Interval	Baseline Labs	Titration	Lab Monitoring
Oral agents for DM 2 Metformin (Glucophage®)	Tab 500, 850, 1000mg	850mg 3x daily or 1000mg twice daily	2 months	SCr. (CBC optional)	Do not use if eGFR<30. Not recommended in HF	SCr. every 12 months
Glipizide (Glucotrol®)	Tab 2.5, 5, 10mg	20mg twice daily	2 months	None	None	None
LDL	Preferred Dosage Forms	Max. Rec. Dose	Optimal Titration Interval	Baseline Labs	Titration	Lab Monitoring
Antilipemics Simvastatin (Zocor®)	Tab 40mg	40mg daily at bedtime	4 weeks	ALT, CK, SCr	None	SCr. every 12 months ALT if clinically indicated
Atorvastatin (Lipitor®)	Tab 40, 80mg	80mg daily	4 weeks	ALT, CK, SCr	None	SCr. every 12 months ALT if clinically indicated