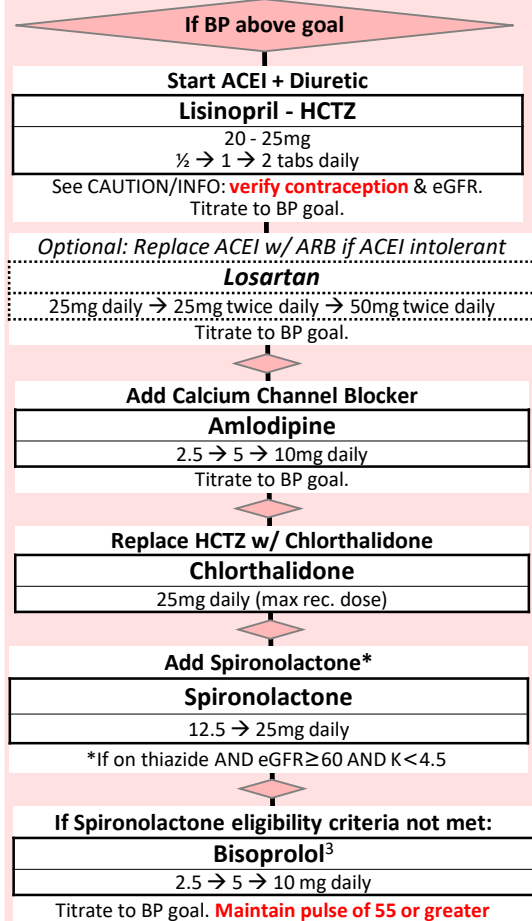


BP Goals ¹ (in mm/ Hg)	Conventional Office	AOBP or Avg ² Home Reading
All Adults Strong Rec.	≤ 139 / 89	≤ 134 / 84
If: ≥ 75 yrs, eGFR 20 – 59 mL/min, ASCVD or ≥10% 10-yr ASCVD risk	Consider ≤ 129/89	Consider ≤ 129 / 84



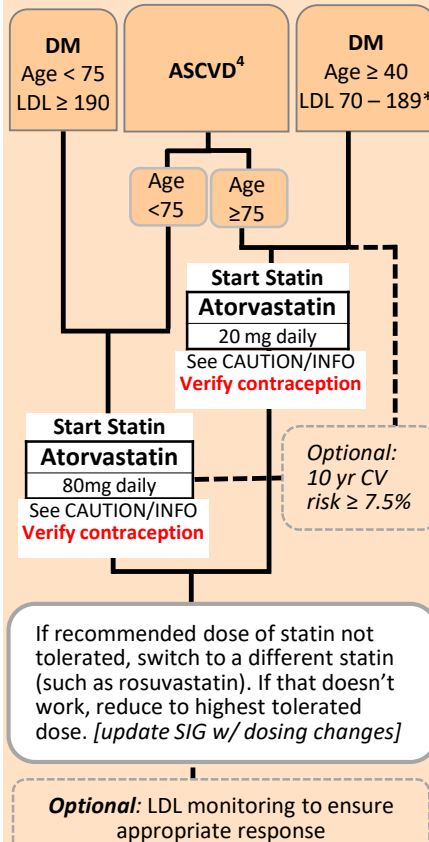
Statin Goals

Atorvastatin 40-80 mg:

- ASCVD⁴ Age < 75 + any LDL
- DM: Age < 75 + LDL ≥ 190

Atorvastatin 10-20 mg:

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



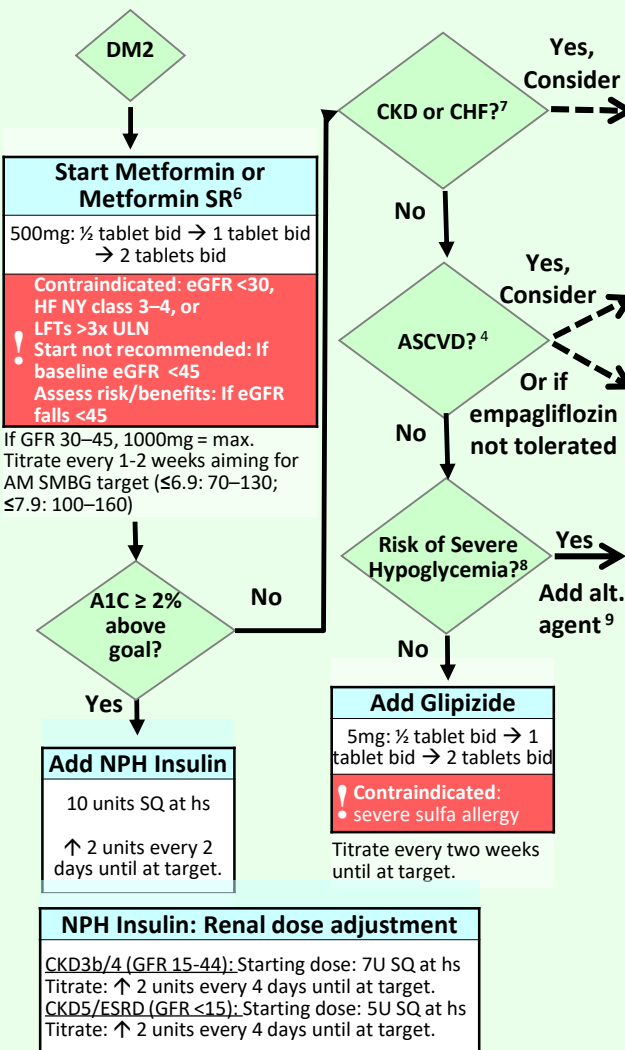
* For DM w/ LDL < 70, see primary prevention guidelines.

³ Beta Blockers, independent of their mild anti-hypertensive effect, are sometimes indicated for secondary cardio-protection

⁴ Atherosclerotic Cardiovascular Disease (ASCVD), including acute coronary syndrome (ACS), myocardial infarction (MI), stable or unstable angina, coronary or other arterial revascularization, ischemic stroke, transient ischemic attack (TIA), or symptomatic peripheral artery disease (PAD), all of atherosclerotic origin.

A1c Goals

- ≤ 7.9%: ≥ 65 yrs or clinical factors⁵
- ≤ 6.9%: < 65 yrs w/o clinical factors



⁵ Individualize A1c goal based on hypoglycemia risk, duration of DM, life expectancy, co-morbidities, vascular complications, member resources and support system.

⁶ If intolerant to immediate release metformin, **strongly** consider sustained release metformin.

⁷ CKD: GFR 30–60 OR ACR > 300 (on ACE-I or ARB); CHF: EF < 40

⁸ **Severe Hypoglycemia** = Hypoglycemia resulting in / likely to result in seizures, loss of consciousness, or needing help from others.

Mild to moderate hypoglycemia = Sxs of neuro-glycopenia such as hunger or sweating that the patient can effectively self-treat.

Alternative Agents⁹

Add Empagliflozin

- Benefit in ASCVD, CHF, CKD
- Oral
- 25 mg, ½ tab daily
- 0.7 – 0.9% ↓ A1c
- Wt: Avg 1-3 kg loss
- Risk: Genital yeast infections, DKA
- Formulary, brand co-pay

Add Tiraglutide

- Benefit in ASCVD
- SQ Injection
- 0.6 → 1.2 → 1.8 mg SQ daily
- 1.1 – 1.3% ↓ A1c
- Wt: Avg 1-3 kg loss
- Risk: Nausea / vomiting
- NF, brand co-pay

Add Pioglitazone

- Oral
- 15 → 30 → 45mg qd
- 1 – 1.25% ↓ A1c
- Wt: Avg 1-3 kg gain
- Risk: CHF, Fx
- Formulary, generic co-pay

Add Linagliptin

- Oral
- 5 mg daily
- 0.6 – 0.8% ↓ A1c
- Wt: Neutral
- NF, brand co-pay

⁹STOPPING PARAMETERS:

If A1C is above goal after 3 months despite non-insulin agents, **strongly** consider discontinuing ineffective medication and starting NPH insulin

¹ BP algorithm applies if eGFR ≥ 20 and if LVEF ≥ 40%.

² Automated Office BP (AOBP) avg. is the avg. of 3 readings measured with the patient unobserved using an AOBP device.

Cardiovascular Risk Management Medications and Lab Chart Rev. 28 (11/19)

PHASE POPULATIONS

CAD	Symptomatic	PAD
CVA/TIA	Ischemic	
DM	ASA: If 10 y CV risk > 10% ages 50-59 ASA recommended; if 10 y CV risk > 10% ages 60-69 consider ASA	

PHASE MEDICATIONS & CAUTIONS

ASA

ASA	81mg daily
CAUTION/INFO If ASA intolerant: Clopidogrel : CAD, Sx PAD	

ACEI

Lisinopril	10mg daily
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.	

STATIN

<ul style="list-style-type: none"> ASCVD³ Age < 75 + any LDL DM: Age < 75 + LDL ≥ 190 	
Atorvastatin	40–80mg daily
<ul style="list-style-type: none"> ASCVD Age ≥ 75 + any LDL DM: Age ≥ 40 + LDL 70-189** 	
Atorvastatin OR	10-20mg daily
Rosuvastatin	10-20mg daily

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

BETA BLOCKER – FOR CAD/Sx PAD

Bisoprolol	25mg daily
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CAUTION / INFO Use with caution: HR <55, asthma, hypotension.

** For DM w/ LDL <70, see primary prevention guidelines.

Drug info site: <http://pharmacy.kp.org>

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BP	Preferred Dosage Forms	Max. Rec. Dose	Optimal Titration Interval	Baseline Labs	Titration
ACE Inhibitor - Diuretic Lisinopril - HCTZ (Prinzide®) F	Tab 20 / 25mg	40 / 50mg daily	2 weeks	K+ and SCr. < 6 months (Na+ optional)	K+ and SCr. 1 week after initiation or dosage change (Na+ optional)
Thiazide Diuretics HCTZ (Hydrodiuril® , Esidrix®) F	Tab 25mg	HCTZ 50mg daily	2 weeks	K+ and SCr. < 6 months (Na+ optional)	K+ and SCr 1 week after initiation or dosage change (Na+ optional)
Chlorthalidone (Hygroton®) F	Tab 25mg	25mg daily	2 weeks	K+ and SCr. < 6 months (Na+ optional)	K+, SCr 1 week after initiation or dosage change (Na+ optional)
ACE Inhibitor Lisinopril (Prinivil®) F	Tab 5, 10, 20mg	40mg daily	1 week	K+ and SCr. < 6 months	K+ and SCr 1 week after initiation. K+ 2 weeks after dosage change
ARB Losartan (Cozaar®) F	Tab 25, 50mg	100mg daily or 50mg BID	1 week	K+ and SCr. < 6 months	K+ and SCr 1 week after initiation. K+ 2 weeks after dosage change
Calcium Channel Blocker Amlodipine (Norvasc®) F	Tab 2.5, 5, 10mg	10mg daily	1 week	None	None
Potassium Sparing Diuretic Spironolactone (Aldactone®) F	Tab 25mg	25mg daily	1 week	K+, SCr. < 1 month	K+ and SCr 1 week after initiation & 2 weeks after dosage change
Beta 1 blocker Bisoprolol (Zebeta®) F	Tab 5, 10mg	10mg daily	1 week	None	Maintain pulse ≥ 55

DM 2 (non-insulin agents)

	Preferred Dosage Forms	Max. Rec. Dose	Optimal Titration Interval	Baseline Labs	Cautions / Contraindications
Biguanide Metformin (Glucophage®) F Metformin SR (Glucophage XR®) F	Tab 500, 1000mg Tab 500, 750mg	1000mg BID	2 weeks	SCr. (CBC optional)	Contraindicated: eGFR <30, HF NY class 3–4, LFTs >3 x ULN
Sulfonylurea Glipizide (Glucotrol®) F Glimepiride (Amaryl®) F	Tab 2.5, 5, 10mg Tab 1, 2, 4 mg	20mg BID ac 8 mg daily	2 weeks	None	Contraindicated: severe sulfa allergy
Thiazolidinedione Pioglitazone (Actos®) F	Tab 15, 30, 45 mg	45 mg daily	2 months	ALT (AlkP, T bili optional)	Contraindicated: CHF stage III or IV
DPP-4 inhibitor Linagliptin (Tradjenta®) NF	Tab 5 mg	5 mg daily	N/A	None	N/A
SGLT2 inhibitor Empagliflozin (Jardiance®) F	Tab 25 mg (1/2 tab)	25 mg daily	2 weeks	SCr.	Contraindicated: eGFR <30
GLP-1 receptor agonists Liraglutide (Victoza®) NF Exenatide ER inj (Bydureon®) NF	SQ Inj 0.6, 1.2, 1.8 mg SQ Inj 2 mg	1.8 mg daily 2 mg weekly	1 week N/A	None SCr.	Contraindicated: personal or FH Medullary thyroid CA or MEN2, eGFR <30 (exenatide ER only)

Statins

	Preferred Dosage Forms	Max. Rec. Dose	Optimal Titration Interval	Baseline Labs*	Titration
Atorvastatin (Lipitor®) F	Tab 40, 80mg	80mg qhs	N/A	ALT, SCr	N/A
Rosuvastatin (Crestor®) F	Tab 10, 20mg	20mg qhs	N/A	ALT, SCr	N/A

F: Formulary
NF: Non-formulary

*Do not routinely measure CK. Consider baseline CK if inc. risk for adverse muscle events (s.a. personal or FH of statin intolerance or muscle disease, clinical presentation, or concomitant drug rx that might inc. the risk for myopathy).

Adapted from KPNC CPG for CAD, DM, Cholesterol, HTN, HF and Stroke. Complete guidelines, including updated guidelines on the Dx of HTN, can be found in the Clinical Library at <http://cl.kp.org>