LOUISIANA DEPARTMENT OF HEALTH

Hypertension and Hyperlipidemia Management for Patients with Diabetes

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Objectives

- Identify various stages of hypertension (HTN) and hyperlipidemia (HLD).
- Describe the current ADA and AHA/ACC guideline targets for blood pressure and lipid management in adults with type 2 diabetes.
- Develop a patient-centered plan that combines lifestyle modification, pharmacotherapy, and monitoring to optimize blood pressure and lipid control in patients with type 2 diabetes.

Speakers

Name

Title

Email Address

Phone Number

From: **10. Cardiovascular Disease and Risk Management: Standards of Medical Care in Diabetes—2022**

Diabetes Care. 2021;45(Supplement_1):S144-S174. doi:10.2337/dc22-S010

American Diabetes Association®

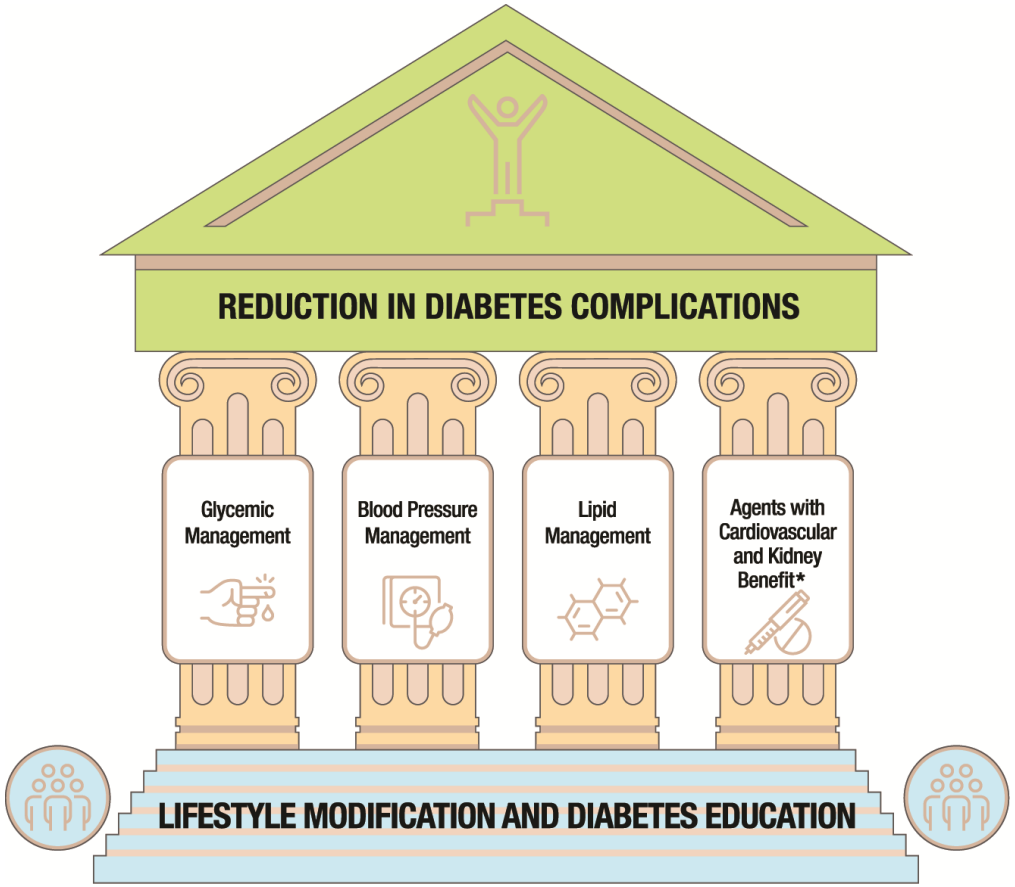

Figure Legend:

Multifactorial approach to reduction in risk of diabetes complications. *Risk reduction interventions to be applied as individually appropriate.

Hypertension

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Hypertension Impact

Hypertension is the most prevalent modifiable CVD risk factor and is the leading cause of death and disability worldwide, with an increasing burden over the last several decades.[15]

From 2017 to 2020, the prevalence of hypertension (defined as BP ≥130/80 mm Hg or receiving antihypertensive therapy) among adults in the United States was 46.7%, with the prevalence varying by age, sex, and race/ethnicity.[15]

Several studies have indicated that antihypertensive therapy does reduce ASCVD events, heart failure and microvascular complications.[1]

Definition and Classification of Blood Pressure

Blood Pressure Category	SBP		DBP
Normal	< 120 mmHg	and	< 80 mmHg
Elevated	120 to 129 mmHg	and	< 80 mmHg
Hypertension			
Stage 1 Hypertension	130 to 139 mmHg	or	80 to 89 mmHg
Stage 2 Hypertension	≥ 140 mmHg	or	≥ 90 mmHg

COR	RECOMMENDATIONS
1	In adults, BP should be categorized as normal, elevated, or stage 1 or stage 2 hypertension to prevent and treat high BP.

Abbreviations: BP indicates blood pressure; DBP, diastolic blood pressure; and SBP, systolic blood pressure.

BLOOD PRESSURE CATEGORIES

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (top/upper number)	and/or	DIASTOLIC mm Hg (bottom/lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
STAGE 1 HYPERTENSION (High Blood Pressure)	130 – 139	or	80 – 89
STAGE 2 HYPERTENSION (High Blood Pressure)	140 OR HIGHER	or	90 OR HIGHER
SEVERE HYPERTENSION (If you don't have symptoms*, call your health care professional)	HIGHER THAN 180	and/or	HIGHER THAN 120
HYPERTENSIVE EMERGENCY (If you have any of these symptoms*, call 911)	HIGHER THAN 180	and/or	HIGHER THAN 120

*symptoms: chest pain, shortness of breath, back pain, numbness, weakness, change in vision, or difficulty speaking

Blood Pressure Measurement

- Patients with blood pressure ≥180/110 mmHg and CVD could be diagnosed with hypertension at a single visit.[13]

From Clinic to Home: Blood Pressure Monitoring

COR	RECOMMENDATIONS
1	In adults with suspected hypertension, out-of-office BP measurements by either ABPM or HBPM are recommended to confirm the diagnosis of hypertension.
1	In adults who are taking antihypertensive medication, HBPM is recommended for monitoring the titration of BP-lowering medication, along with co-interventions such as patient education, telehealth counseling, and clinical interventions.
3: No Benefit	In adults, the use of cuffless BP devices is not recommended for the diagnosis or management of high BP.

Corresponding Ambulatory and Home Blood Values Measurement to Office Values

Office (mmHg)	HBPM (mmHg)	Daytime ABPM (mmHg)	Nightime ABPM (mmHg)	24-Hour ABPM (mmHg)
120/80	120/80	120/80	100/65	115/75
130/80	130/80	130/80	110/65	125/75
140/90	135/85	135/85	120/70	130/80
160/100	145/90	145/90	140/85	145/90

Abbreviations: ABPM indicates ambulatory blood pressure monitoring; BP, blood pressure; and HBPM, home blood pressure monitoring.

American Heart Association.

Jones, D.W., et al. (2025). 2025 AHA/ACC/AANP/AAPA/ABC/ACCP/ACPM/AGS/AMA/ASPC/NMA/PCNA/SGIM Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults. *Circulation*

How to measure blood pressure

- Have patient avoid caffeine, exercise and smoking for at least 30 minutes before taking blood pressure[5]
- Ask them to empty their bladder
- Have your patient relax in a chair (feet on floor, back supported) for > 5 minutes. Don't take readings while your patient is sitting on lying on an exam table[5]
- No conversations or talking while measuring BP
- Arm should be bare when cuff is placed
- Use the correct cuff size, the bladder should go around 80% of the arm[5]
- Be sure the patient's arm is supported on a surface at the correct height (heart level)
- Wrist and finger monitors aren't recommended because they yield less accurate and reliable readings[5]
- Measure at the same time every day
- List of validated blood pressure monitors: https://www.validatebp.org/

Bladder Cuff Size

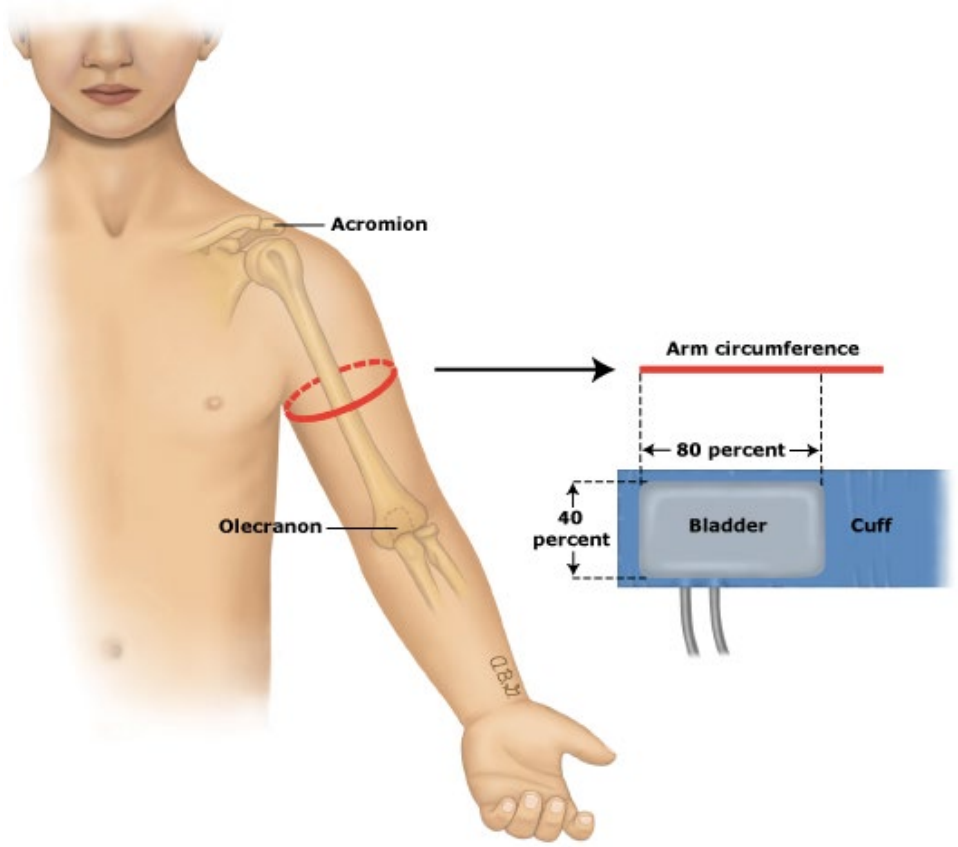


Figure 9: https://www.uptodate.com/contents/image?imageKey=PEDS%2F73414

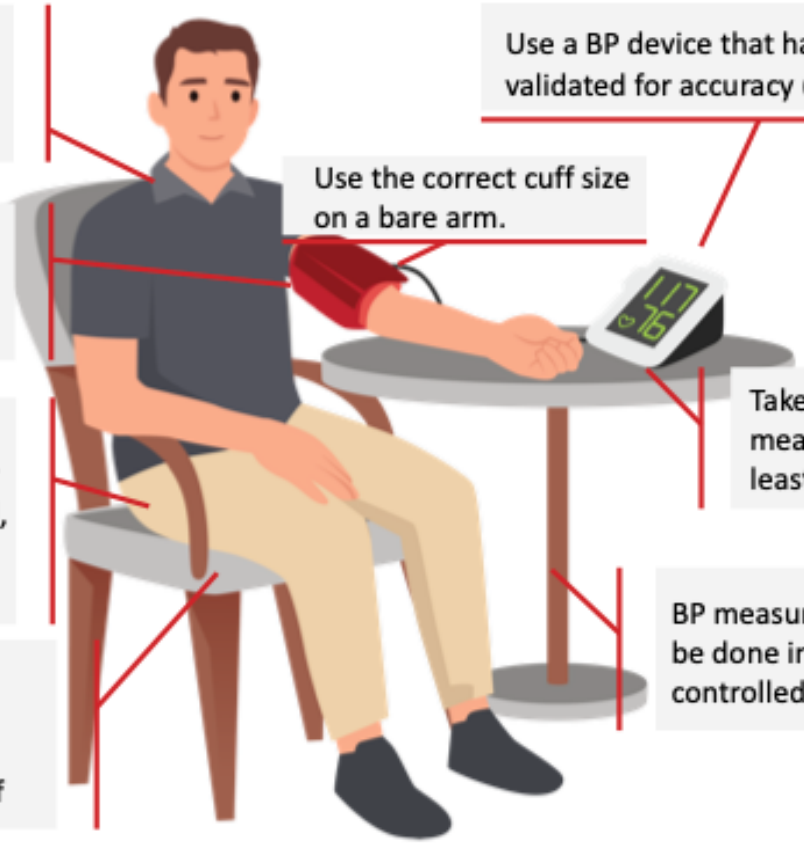
Best Practices for Accurate In-Office Blood Pressure Measurement

Avoid caffeine, exercise, and smoking for at least 30 minutes before.

The patient's arm should be supported at heart level.

Patient should be relaxed, sitting in a chair (feet flat, legs uncrossed, and back supported) for at least 5 minutes.

Neither patient nor clinician should talk during the rest or measurement. No use of phones.



Use a BP device that has been validated for accuracy (validatebp.org).

Use the correct cuff size on a bare arm.

Take 2 or more BP measurements at least 1-minute apart.

BP measurement should be done in a temperature-controlled room.

COR	RECOMMENDATIONS
1	When diagnosing and managing high BP in adults, standardized methods are recommended for the accurate measurement and documentation of in-office BP.
2a	When measuring in-office BP in adults, it is reasonable to use the oscillometric method with an automated device over the auscultatory method.

Abbreviation: BP indicates blood pressure.

American Heart Association.

Jones, D.W., et al. (2025). 2025 AHA/ACC/AANP/AAPA/ABC/ACCP/ACPM/AGS/AMA/ASPC/NMA/PCNA/SGIM Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults. *Circulation*.

Blood pressure goals

The American Diabetes Association recommends treating to systolic and diastolic blood pressure of <130 mmHg and <80 mmHg respectively[8]

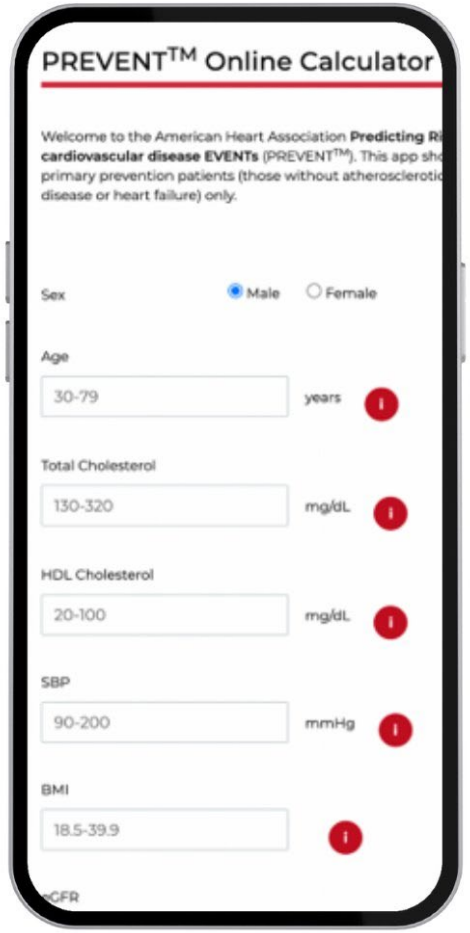
"The recommendation to support a blood pressure goal of <130/80 mmHg in people with diabetes is consistent with guidelines from the American College of Cardiology and American Heart Association, the International Society of Hypertension, and the European Society of Cardiology."[12]

Blood pressure goals

- Initiation of medication therapy to lower blood pressure in addition to lifestyle interventions is recommended for all adults with average blood pressure ≥140/90 mm Hg and/or for selected adults with average blood pressure ≥130/80 mm Hg who have clinical cardiovascular disease, previous stroke, diabetes, chronic kidney disease, or increased 10-year predicted cardiovascular risk of ≥7.5% defined by PREVENT™ (Predicting Risk of CVD EVENTs).
    - 7.
- In adults with average blood pressure ≥130/80 mm Hg and at lower 10-year cardiovascular disease risk defined by PREVENT of <7.5%, initiation of medication therapy to lower blood pressure is recommended if average blood pressure remains ≥130/80 mm Hg after an initial 3- to 6-month trial of lifestyle modification.

The American Heart Association PREVENT™ Online Calculator

- Developed by the American Heart Association in 2023, the Predicting Risk of Cardiovascular Disease EVENTs (PREVENT) equations estimate 10-year and 30-year risk for total cardiovascular disease (CVD), including atherosclerotic CVD (ASCVD) and heart failure (HF). It is the first risk tool to combine cardiovascular, kidney, and metabolic health measures to guide primary prevention-focused treatment decisions.[16]
- The equations were derived and validated using data from over 6.5 million U.S. adults across multiple datasets, and they are validated for adults ages 30–79 years without known CVD.[16]
- The PREVENT calculator, based on the PREVENT equations, uses required clinical information to estimate CVD risk. Three optional predictors, urine albumin-creatinine ratio (UACR), hemoglobin A1c (HbA1c), and social deprivation index (SDI), can further personalize risk estimates.[16]
- The PREVENT calculator provide separate 10-year and 30-year estimates for total CVD (PREVENT-CVD), ASCVD (PREVENT-ASCVD), and HF (PREVENT-HF). The default display is PREVENT-CVD, but each outcome can be selected individually. Because ASCVD and HF are modeled independently, their combined risk may exceed the total CVD estimate.[16]



professional.heart.org/prevent

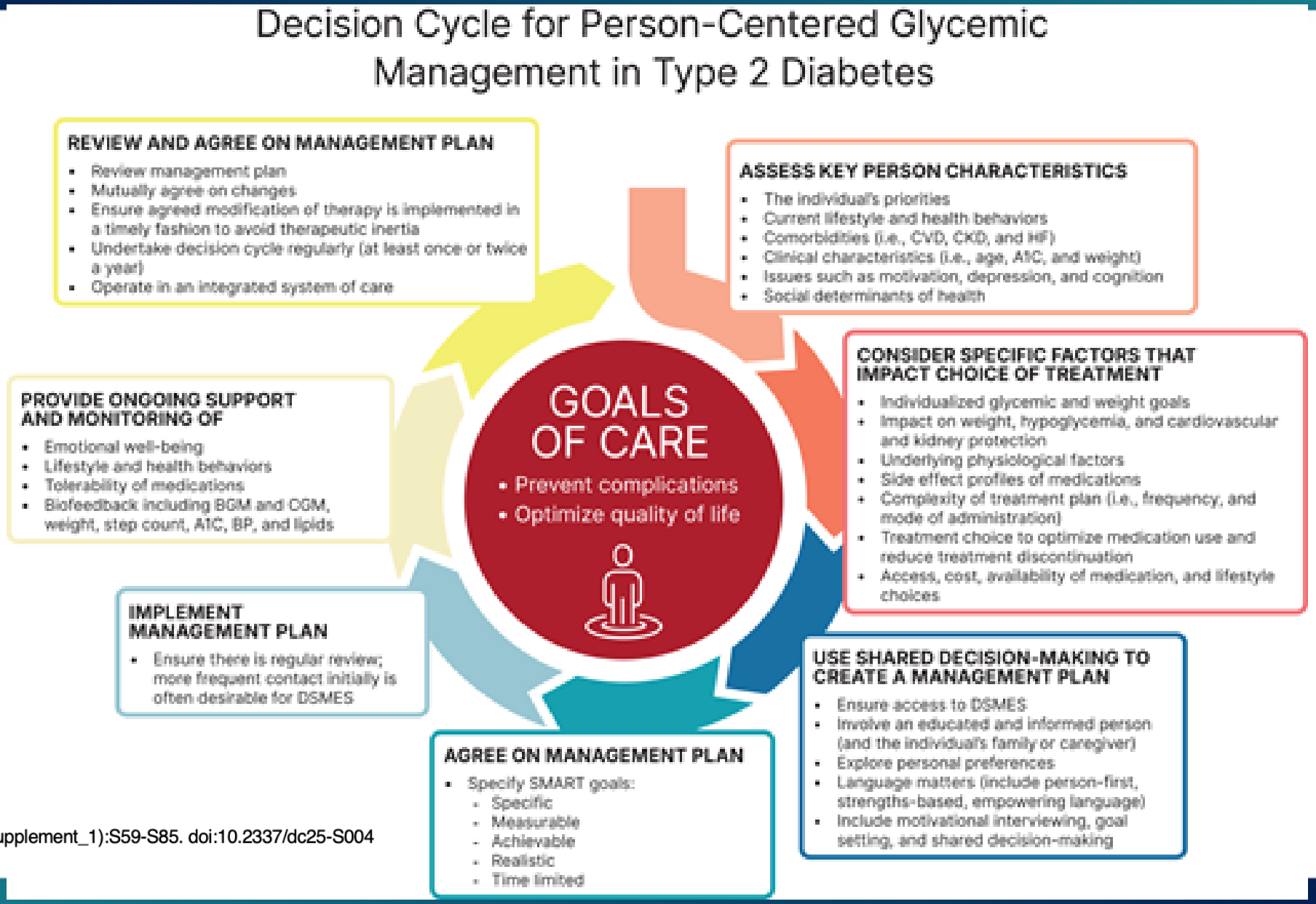
Best approach is patient centered care

Having an individual approach for patient's blood pressure goal is better than trying to fit a one size fits all model.

The current blood pressure recommendations are based on studies with heterogeneous populations, different treatment goals and endpoints. Even the ADA says the goal of <130/80 is applicable if it can be safely obtained.

It's always best to review with your patients what fits best with their lifestyle, drug-drug interactions, potential adverse events and limiting pill burden as well as costs.

Decision Cycle for Person-Centered Glycemic Management in Type 2 Diabetes



Diabetes Care. 2024;48(Supplement_1):S59-S85. doi:10.2337/dc25-S004

Lifestyle Modifications

ALWAYS A PART OF MANAGEMENT

Reducing salt intake to less than 1.5 grams per day (using potassium-based salt substitutes)

Increasing consumption of fruits and vegetables (8-10 servings per day)

Increasing consumption of low fat dairy products (2-3 servings/day)

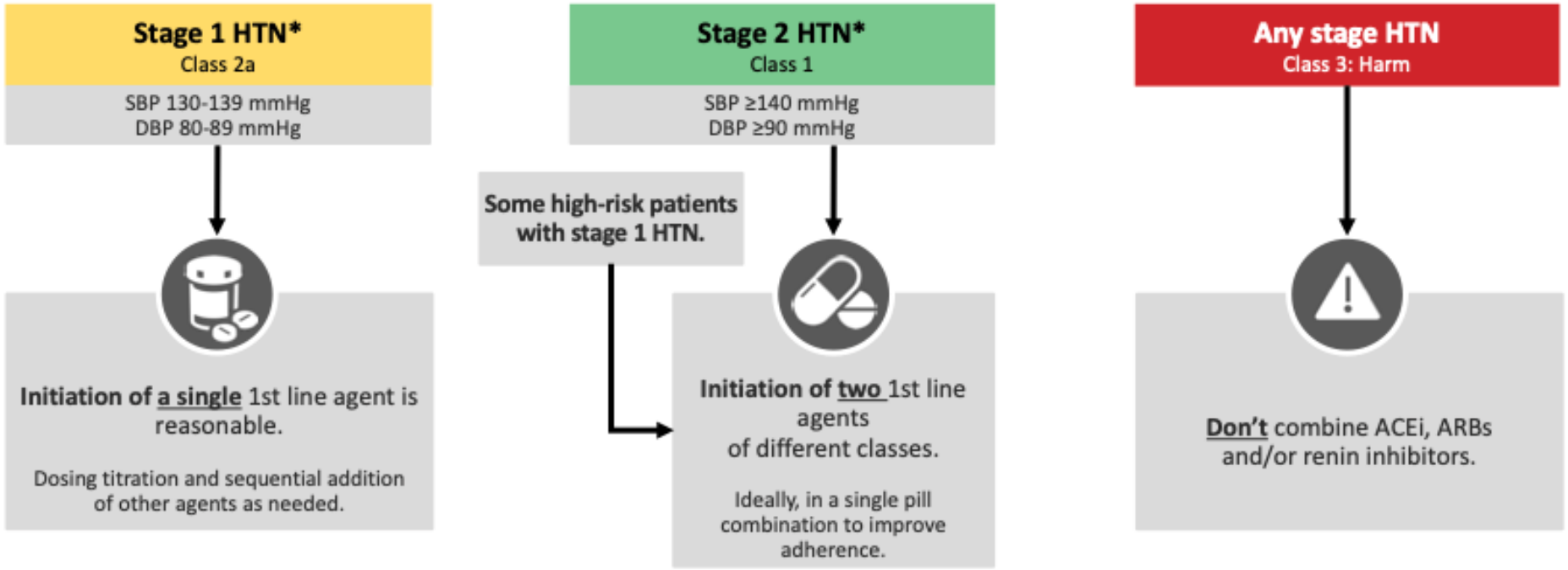
Losing weight (loss of 1 kg of body weight has been associated with a decrease of BP of ~1 mmHg)[4]

Avoiding alcohol consumption – less than 2 drinks/day for men and 1 drink/day for women[4]

Increase exercise (at least 30-45 minutes a day)

Always remember to ask about sleep! Treatment of obstructive sleep apnea has shown to reduce BP in patients with diabetes[4]

Choice of initial monotherapy vs combination drug therapy



Abbreviations: ACEi indicates Angiotensin Converting Enzyme inhibitors; ARB, Angiotensin Receptor Blocker; and HTN, hypertension.

American Heart Association.

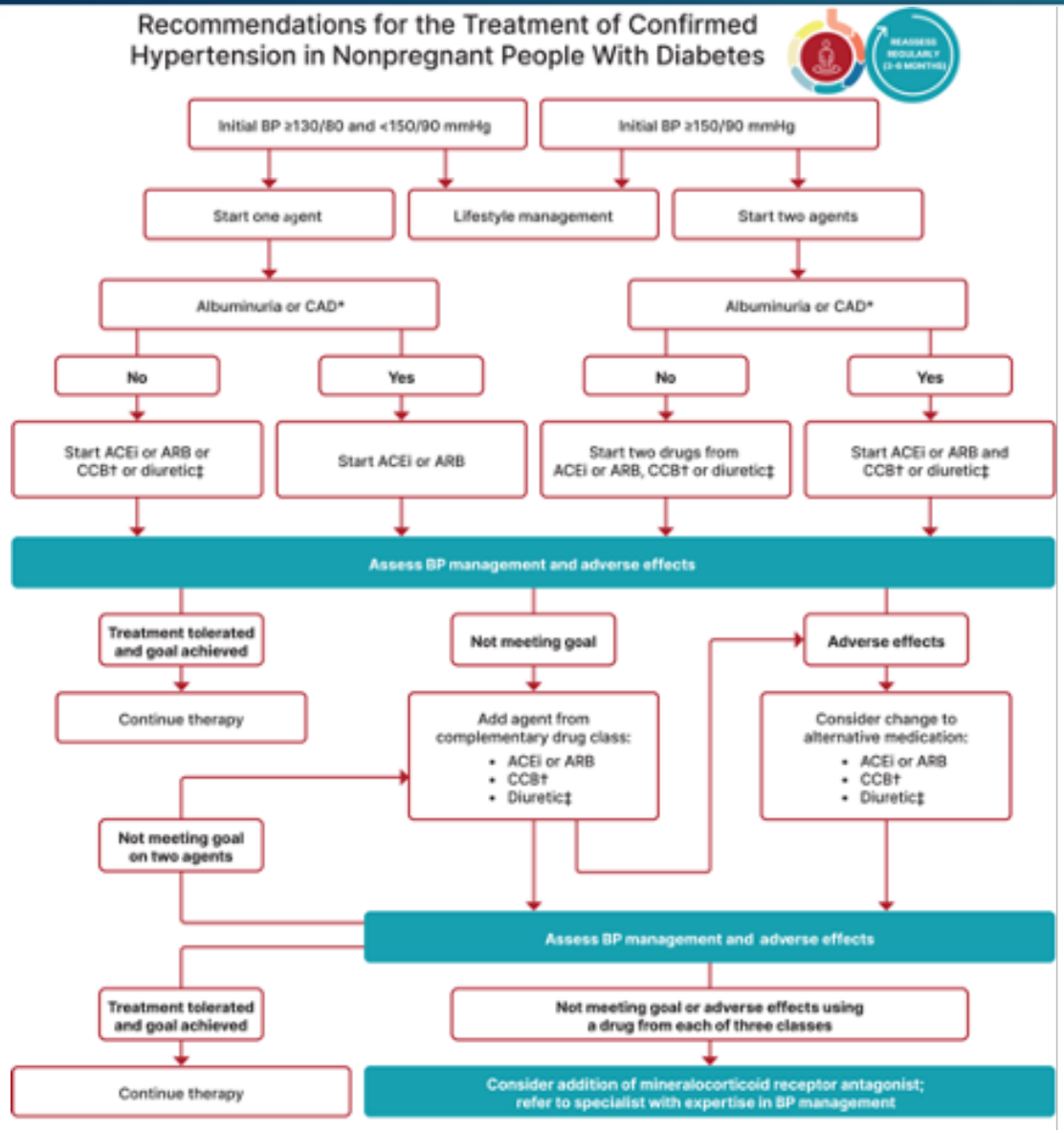
Jones, D.W., et al. (2025). 2025 AHA/ACC/AANP/AAPA/ABC/ACCP/ACPM/AGS/AMA/ASPC/NMA/PCNA/SGIM Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults. *Circulation*.

First Line Therapies for HTN

Thiazide-type diuretics

Long-acting dihydropyridine calcium channel blockers (CCB)

Angiotensin-converting enzyme inhibitors (ACE-I) or angiotensin II receptor blockers (ARB)



Diabetes Care. 2024;48(Supplement_1):S207-S238. doi:10.2337/dc25-S010

Table 4 Classes of Anti-hypertensive Medications.

Adapted from American Heart Association: *Types of blood pressure medications*. www.heart.org. (n.d.). https://www.heart.org/en/health-topics/high-blood-pressure/changes-you-can-make-to-manage-high-blood-pressure/types-of-blood-pressure-medications#ARB.

Classes of Antihypertensive Medications	
Mechanism of Action	Examples
Angiotensin Renin Inhibitors (ACE-I)	Lisinopril Enalapril Captopril
Angiotensin Receptor Blockers (ARB)	Losartan Potassium Valsartan Irbesartan
Dihydropyridine Calcium Channel Blockers (DHP CCB)	Amlodipine Felodipine Nifedipine Nicardipine
Thiazide Diuretics	Chlorthalidone* Indapamide* Hydrochlorothiazide
Beta Blockers	Metoprolol Tartrate/Succinate Atenolol Labetalol
Potassium-Sparing Diuretics	Amiloride hydrochloride Spironolactone Triamterene
Blood Pressure Vasodilators	Hydralazine Hydrochloride Minoxidil
Non Dihydropyridine Calcium Channel Blockers (Non-DHP CCB)*	Diltiazem Verapamil
Alpha Blockers	Doxazosin Terazosin
Loop Diuretic	Furosemide Bumetanide
Central Agonists	Clonidine Hydrochloride Alpha Methyldopa

Angiotensin Renin Inhibitors and Angiotensin Receptor Blockers

- Tends to be first line for patients with diabetes
- An ACE inhibitor (ACE- I) or Angiotensin Receptor Blocker (ARB) is suggested to treat hypertension for patients with urine albumin-to-creatinine ratio 30–299 mg/g creatinine and strongly recommended for patients with urine albumin-to-creatinine ratio ≥300 mg/g creatinine[4]
- Don’t combine the two! Has higher risk of renal side effects.
- ARB has lower side effect profile[4]
- In general, use one or the other depending on patient’s tolerance to medication

Thiazide diuretics

- ****Thiazide-like diuretic; long-acting agents shown to reduce cardiovascular events, such as chlorthalidone and indapamide, are preferred[1]**

Mineralocorticoid Receptor Agonist (MRA)

- Potassium sparing diuretics/Aldosterone agonists
  - Examples include spironolactone, eplerenone, and finerenone
- New guidelines from Kidney Disease: Improving Global Outcomes in 2022
  - **We suggest a nonsteroidal mineralocorticoid receptor antagonist with proven kidney or cardiovascular benefit for patients with T2D, an eGFR ≥25 ml/min per 1.73 m^2, normal serum potassium concentration, and albuminuria (≥30 mg/g [≥3 mg/mmol]) despite maximum tolerated dose of Renal Angiotensin Inhibitor[14]**
- For adults treated with an ACE inhibitor, ARB, mineralocorticoid receptor antagonist (MRA), or diuretic, serum creatinine/estimated glomerular filtration rate and serum potassium levels should be monitored within 7–14 days after initiation of therapy and at least annually[13]
- Individuals with hypertension who are not meeting blood pressure targets on three classes of antihypertensive medications (including a diuretic) should be considered for MRA therapy[13]

Calcium Channel Blockers (CCB)

- ***Dihydropyridine calcium channel blocker (CCB) are preferred[1]
  - More potent vasodilators
  - Longer lasting
  - Has higher effects on systemic vascular resistance

Hyperlipidemia

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Lipid disorders

Most common pattern of dyslipidemia is elevated triglycerides and decreased high density lipoprotein (HDL) levels[3]

Dyslipidemia is extremely common in T2DM affecting around 72-85% of patients[3]

LDL-cholesterol has been the primary predictor of CVD

When to screen and monitor

1

Obtain a lipid profile at the time of diagnosis or initial medical evaluation

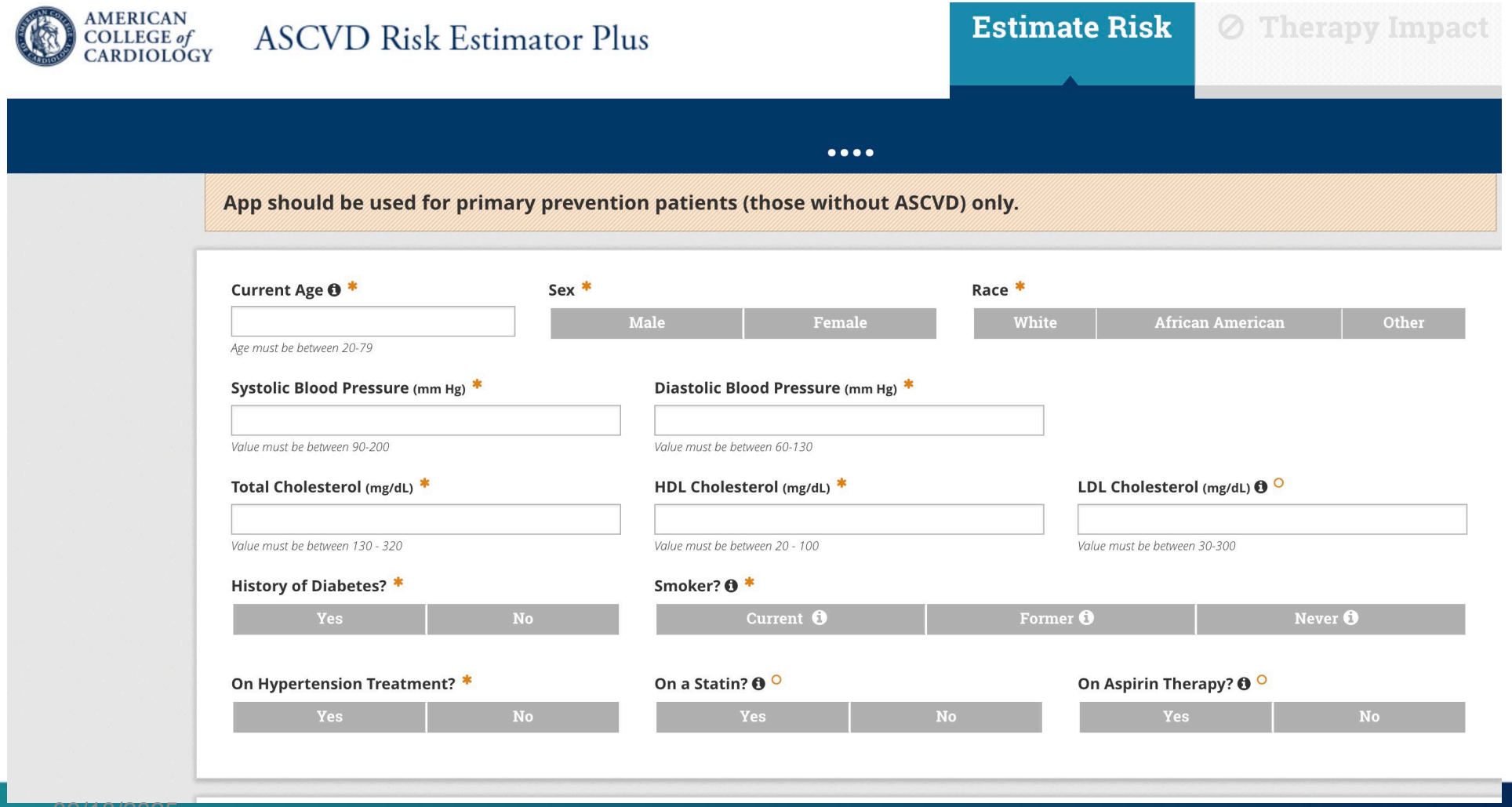
2

You can screen every 5 years if under the age of 40 or more frequently if indicated (generally 1-2 years if abnormal)[3]

3

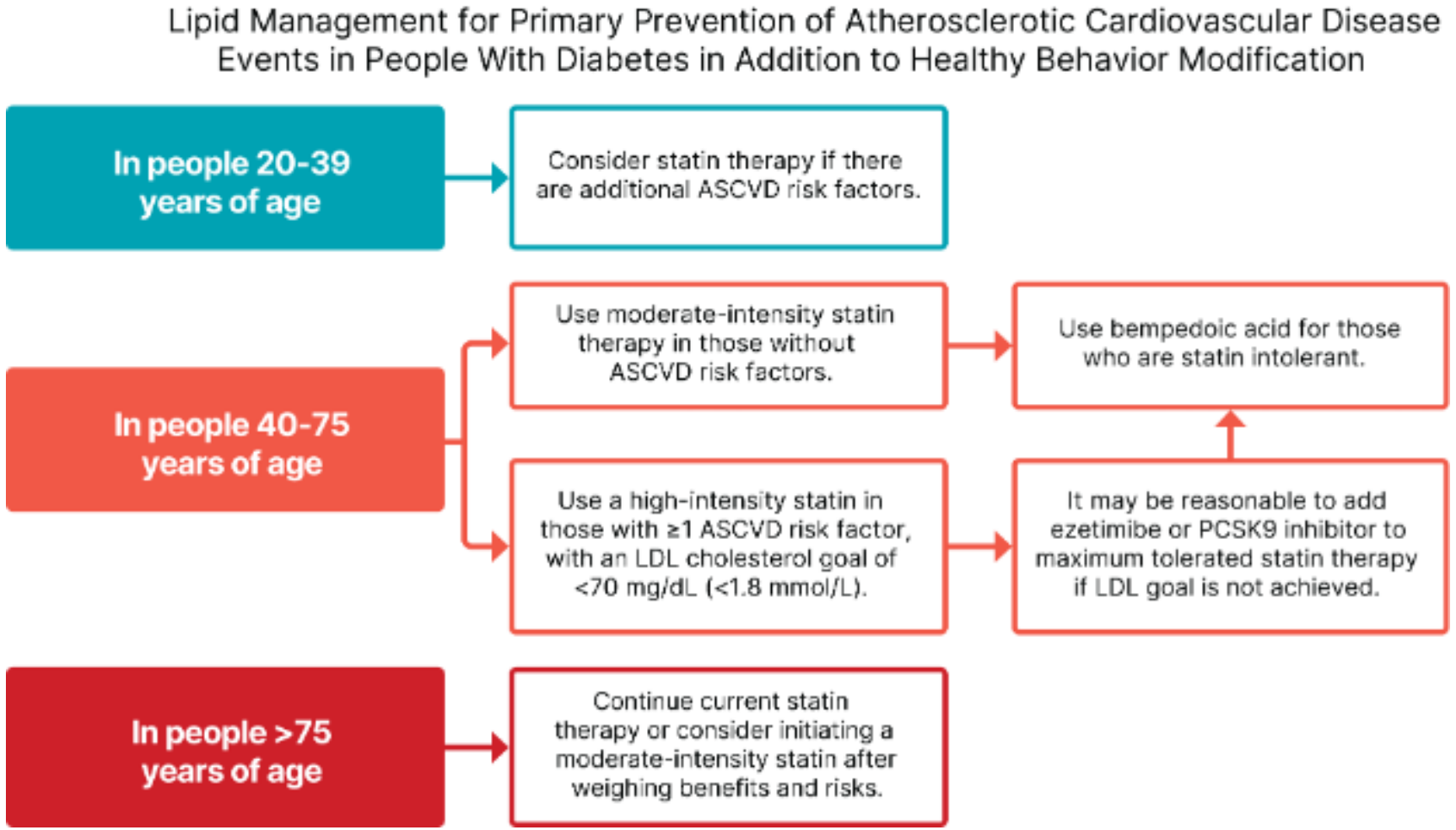
Obtain a lipid profile about 4-12 weeks after you initiate a statin to see if there is a change to see if dose needs to be titrated[3]

ASCVD Risk Assessment



https://tools.acc.org/ASCVD-Risk-Estimator-Plus/#!/calculate/estimate/

When to initiate statins



Diabetes Care. 2024;48(Supplement_1):S207-S238. doi:10.2337/dc25-S010

Hyperlipidemia Recommendations

For patients with diabetes aged 40-75 years without ASCVD, use moderate-intensive statin therapy in addition to lifestyle therapy

For patients of all ages with diabetes AND ASCVD, high intensity statin therapy should be initiated with lifestyle therapy [1]

Statins not recommended in pregnancy*[1]

Hyperlipidemia Recommendations

For patients with diabetes aged 40-75 years WITH ASCVD, use high-intensity statin to reduce LDL by ≥ 50% of baseline and to target goal LDL of < 70 mg/dL[12]

- If these patients have multiple ASCVD risk factors and an LDL ≥ 70, it is reasonable to add ezetimibe or a PCSK9 inhibitor to maximum tolerated statin therapy[12]

In adults with diabetes > 75 years already on statin therapy, you can continue their statin therapy[12]

Other considerations

- Can consider moderate intensity statin for the following[1]
  - Patients younger than 40 years of age with additional ASCVD risk factors
  - Type 1 Diabetes with additional ASCVD risk factors
  - Patients with diabetes who are 75 years or older after discussing potential risks and benefits

When to initiate hyperlipidemia/dyslipidemia medications

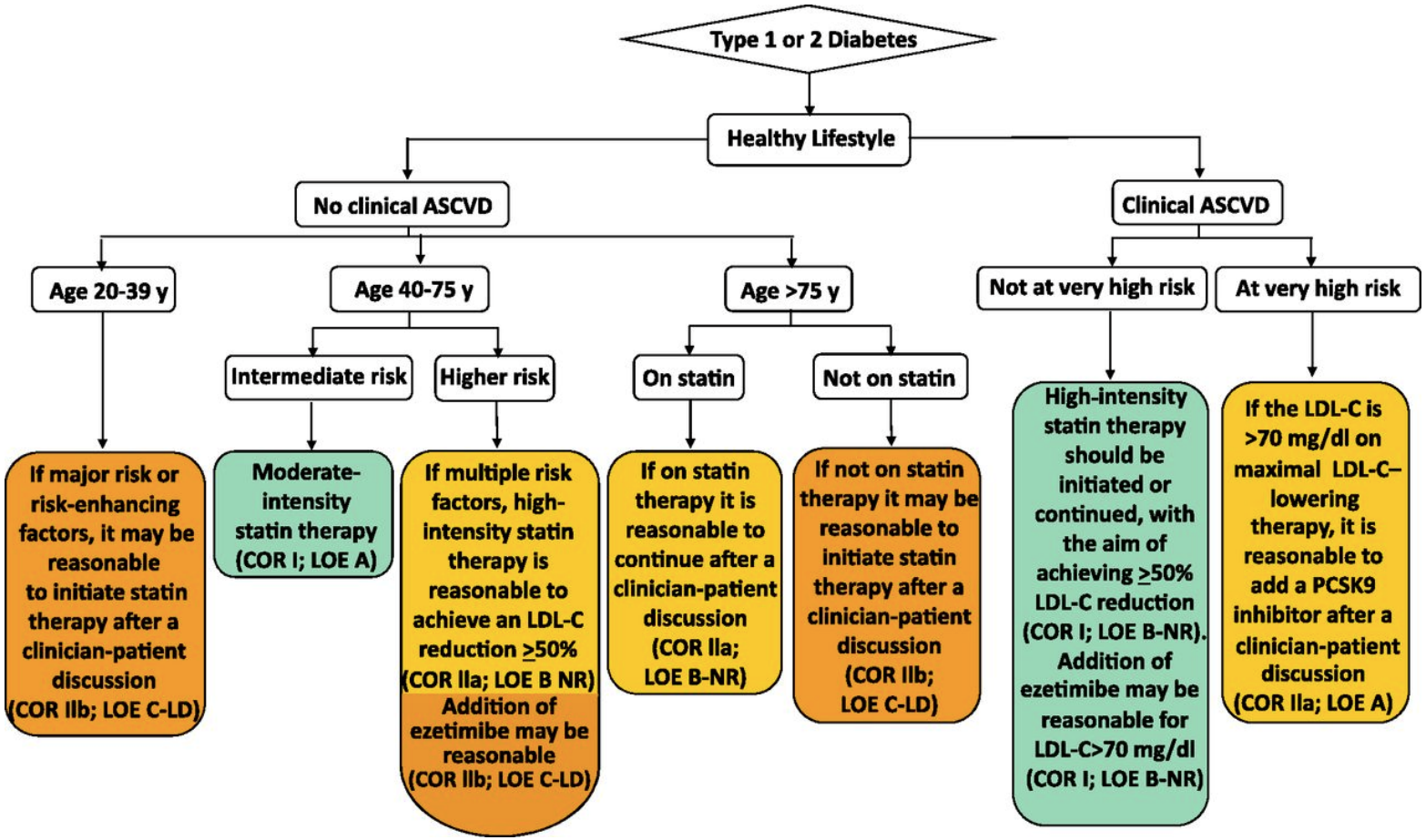


Figure 7: Statin Algorithm. Goldberg, 2018.
Adapted from Goldberg, R. B., Stone, N. J., & Grundy, S. M. (2020). The 2018 AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APHA/ASPC/NLA/PCNA guidelines on the management of blood cholesterol in diabetes. *Diabetes Care*, *43*(8), 1673–1678. https://doi.org/10.2337/dci19-0036

Moderate to High dose Statins

High-intensity statin therapy (lowers LDL cholesterol by ≥50%)	Moderate-intensity statin therapy (lowers LDL cholesterol by 30–49%)
Atorvastatin 40–80 mg	Atorvastatin 10–20 mg
Rosuvastatin 20–40 mg	Rosuvastatin 5–10 mg
	Simvastatin 20–40 mg
	Pravastatin 40–80 mg
	Lovastatin 40 mg
	Fluvastatin XL 80 mg
	Pitavastatin 1–4 mg

- Table 6: Statin Potency Chart: Diabetes Care, 2020.
- Adapted from: Cardiovascular disease and risk Management: Standards of medical care In Diabetes—2021. (2020). *Diabetes Care*, *44*(Supplement 1). https://doi.org/10.2337/dc21-s010

When to go beyond statins?

"For patients with diabetes and ASCVD considered high risk if LDL cholesterol is ≥ 70 mg/dL on maximally tolerated statin dose, consider adding additional LDL lowering therapy such as ezetimibe or PCSK9 inhibitor" (Jialal 2019)

- **Ezetimibe is often cheaper in cost**

In adults with diabetes and 10 year ASCVD risk of 20% or higher, it may be reasonable to add ezetimibe to maximally tolerated statin therapy to reduce LDL cholesterol levels by 50% or more[1]

"If patients with ASCVD or other CV risk factors on a statin with controlled LDL cholesterol but elevated triglycerides (135-499 mg/DL), the addition of incosapent ethyl can be considered to reduce CVD risk." (Jialal 2019)

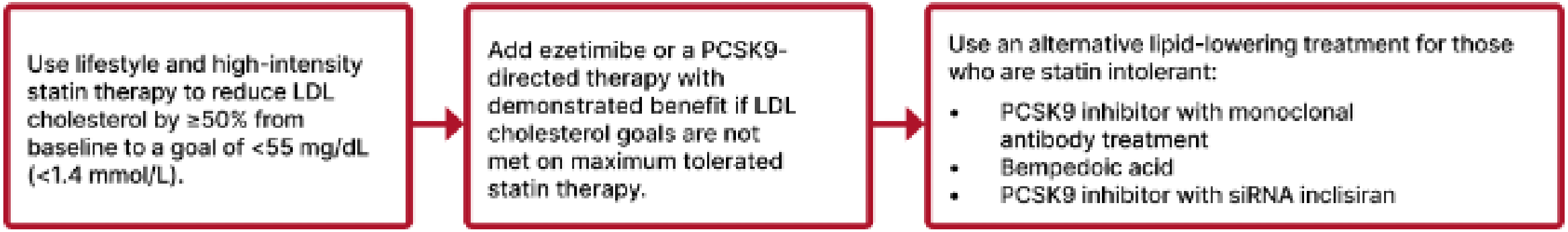
Statin + Fibrate combination generally not recommended, hasn't been shown to improve ASCVD outcomes[1]

Statin + Niacin combination therapy hasn't been show to prove additional CV benefit above statins only and may increase the risk of stroke[1]

In people with diabetes intolerant to statin therapy, treatment with bempedoic acid is recommended to reduce cardiovascular event rates as an alternative cholesterol-lowering plan.[13]

Secondary Prevention

Lipid Management for Secondary Prevention of Atherosclerotic Cardiovascular Disease Events in People With Diabetes



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What is the goal?

Lowering of LDL by 50% or more if your ASCVD risk is 20% or higher[3]	• Can add second agent if needing to reduce LDL cholesterol levels by 50% or more
Primary prevention	• LDL goal less than 70
Secondary Prevention	• LDL goal less than 55
Diabetes is considered a high-risk condition for ASCVD	

When to consider Lipoprotein A (LpA)?

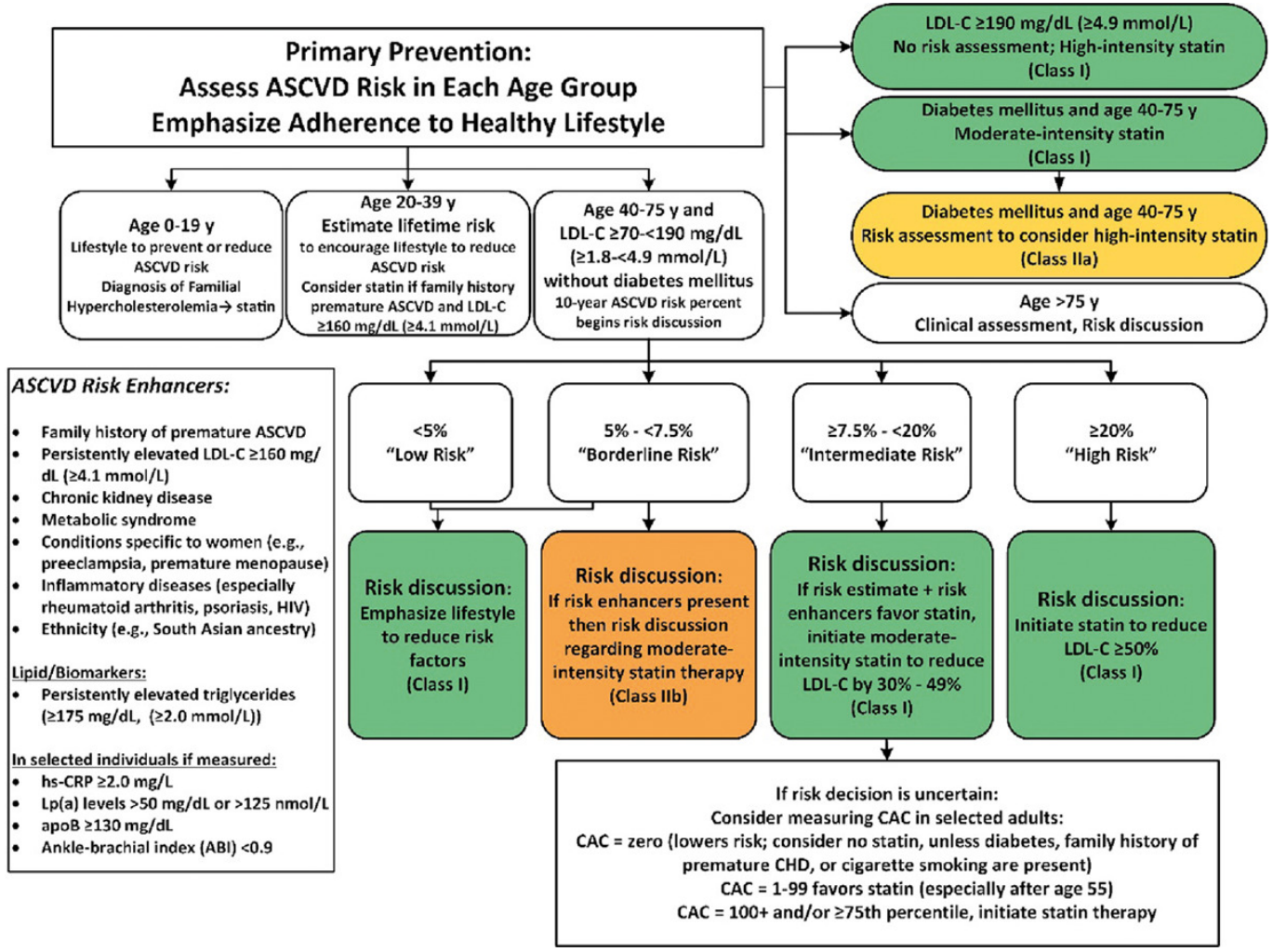

Table 5:Summary of low-density lipoprotein-cholesterol lowering medications

Drug class	Mechanism of action	Clinical efficacy	Adverse reactions
Statins	Inhibition of HMG coenzyme A Reductase	Highly effective	Myalgia, myositis, rhabdomyolysis, elevation in liver enzymes, new onset diabetes
Ezetimibe	Decrease intestinal cholesterol absorption by binding to Niemann-Pick C1-like 1 protein	Moderately effective; Safe addition to statin therapy	Worsening of liver function, myopathy or rhabdomyolysis if added to statins; Nasopharyngitis, diarrhea, upper respiratory tract infection
PCSK9 inhibitors	Inhibition of Proprotein Convertase Subtilisin/Kexin Type 9	Very highly effective in combination with statin therapy	Injection site reaction including itching, swelling, erythema and pain
Bile acid sequestrants	Bind bile acids in the small intestine and prevent reabsorption	Moderately effective, safe addition to statin therapy, not desirable if triglycerides are > 300 mg/dL	Constipation, abdominal pain, bloating, drug malabsorption

HMG: Hydroxymethylglutaryl; PCSK9: Proprotein convertase subtilisin/kexin type 9.

Table adapted from Jialal I., & Singh, G. (2019). Management of diabetic dyslipidemia: An update. *World journal of diabetes*, *10*(5), 280–290. https://doi.org/10.4239/wjd.v10.i5.280

When to screen?

Adults (> 20 years of age)

Measurement of Lp(a) is reasonable to refine risk assessment for ASCVD events in:

- Individuals with a family history of 1st degree relatives with premature ASCVD (<55 years of age in men; <65 years of age in women)
- Individuals with premature ASCVD (<55 years of age in men and <65 years of age in women), particularly in the absence of traditional risk factors.
- Individuals with primary severe hypercholesterolemia (LDL 190mg/dL) or suspected familial hypercholesterolemia
- Individuals at very high** ASCVD risk to better define those who are more likely to benefit from PCSK9 inhibitor therapy

When to screen?

Adults (> 20 years of age)

Measurement of Lp(a) may be reasonable to refine risk assessment for ASCVD events in:

- Intermediate (7.5-19.9%) 10-year ASCVD risk when the decision to use a statin is uncertain, to improve risk stratification in primary prevention.
- Borderline (5-7.4%) 10-year ASCVD risk when the decision to use astatin is uncertain, to improve risk stratification in primary prevention.
- Less-than-anticipated LDL-C lowering, despite good adherence totherapy.
- A family history of elevated Lp(a).
- Calcific valvular aortic stenosis.
- Recurrent or progressive ASCVD, despite optimal lipid-loweringtherapy.

How to approach an elevated LpA

"In the absence of an acute illness, **the level of Lp(a) is stable throughout an individual's lifetime and unaffected by lifestyle. Therefore, a case could be made to measure Lp(a) in all individuals, at least once in a lifetime**, based upon strong support for the association between elevated Lp(a) levels and increased risk, together with genetic findings that indicate elevated Lp(a) is causally related to premature ASCVD and VAS.

However, there is no current evidence to substantiate the benefit of such an approach, and **there is currently no targeted treatment(s) to lower Lp(a) levels that have been proven to affect ASCVD outcomes or progression of VAS**. Therefore, although some panel members supported it, a recommendation for universal testing of Lp(a) was not made at this time.

The Scientific Statement Committee acknowledges that there is likely little harm from a universal screening approach and that the cost of the test is relatively inexpensive compared to other cardiovascular disease screening tests. **As more data become available in the future, the potential role of universal testing should be re-evaluated**."[17]

National Lipid Association

Categories of high risk and very high risk

*High-risk patients: clinical ASCVD including myocardial infarction, acute coronary syndrome, stable or unstable angina, coronary or other arterial revascularization, stroke, transient ischemic attack, or peripheral artery disease, including aortic aneurysm, all of atherosclerotic origin.

**Very-high-risk patients: history of multiple major ASCVD events or 1 major ASCVD event and multiple high-risk conditions.

Treatment for secondary prevention

- In adults aged 40–75 y with a 10-y ASCVD risk of 7.5 %–19.9 %, the finding of an Lp(a) ≥125 nmol/L or ≥50 mg/dL is reasonable to be used as a risk-enhancing factor to favor initiation of a moderate- or high-intensity statin in those with on-treatment LDL-C ≥ 70 mg/dL (or non-HDL-C ≥ 100 mg/dL)[18]
- In high-risk or very-high-risk patients with Lp(a) ≥125 nmol/L or ≥50 mg/dL, it is reasonable to consider more intensive LDL-C lowering to achieve greater ASCVD risk reduction
- In high-risk or very-high-risk patients taking a maximally tolerated statin, with Lp(a) ≥125 nmol/L or ≥50 mg/dL, the addition of ezetimibe is reasonable in those with on-treatment LDL-C ≥ 70 mg/dL (or non-HDL-C ≥ 100 mg/dL)[18]
- In high-risk or very-high-risk - patients taking a maximally tolerated statin, with Lp(a) ≥125 nmol/L or ≥50 mg/dL, the addition of a PCSK9 inhibitor is reasonable in those with on-treatment LDL-C ≥ 70 mg/dL (or non-HDL-C ≥ 100 mg/dL)[18]
- Lipoprotein apheresis is reasonable for high-risk patients with FH and ASCVD (coronary or peripheral arteries) whose Lp(a) level remains ≥60 mg/dL (~150 nmol/L) and LDL-C ≥ 100 mg/dL on maximally tolerated lipid-lowering therapy[18]
- Niacin or HRT with estrogen and progesterone, which lower Lp(a) concentration, is not recommended to reduce ASCVD risk`[18]

Available therapies

Existing Lp(a) Lowering Strategies	Lp(a) Reduction
PCSK9i	25–30%
Inclisiran	20-26%
Niacin	20%
Lomitapide	3%
Estrogens	10-15%
LDL Apheresis	30-35%
Lp(a) Lowering Strategies Under Development	
Pelacarsen	80%
Olpasiran	90%
SLN 360	To be determined

Table 7: **Current Treatments for Lp(a)**

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