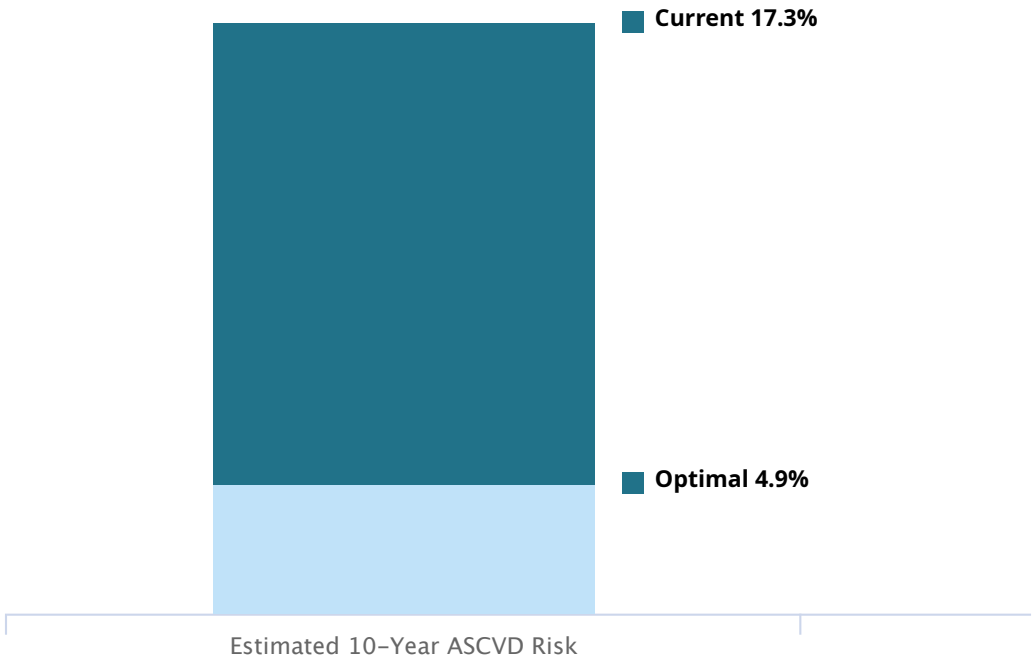
ASCVD Risk M/55y (generated on 3/18/2024 16:29)

Visit Summary

Below is a summary of patient's risk, treatment options, and treatment advice based on the data provided.

ASCVD Risk Profile

10-yr risk for first ASCVD event is:
INTERMEDIATE



Inputs

Sex: **Male**

Race: **African American**

Values	Current
Age:	**55**
Total Cholesterol (mg/dL)	**300**
HDL Cholesterol (mg/dL)	**70**
LDL Cholesterol (mg/dL)	**144**
Systolic Blood Pressure (mm Hg)	**155**

Diastolic Blood Pressure (mm Hg)	**88**
Diabetes:	**Yes**
Smoker:	**Former**
Treatment for Hypertension:	**No**
Aspirin Therapy:	**No**
Statin:	**No**

Treatment Advice

The advice below represents suggestions for clinicians on lowering a patient's ASCVD risk, based on ACC/AHA clinical policy (see Resources/References in the app).

LDL-C Management (for this Patient)

Moderate intensity statin initiation is indicated (I, A). High-intensity statin therapy to reduce risk by ≥50% is reasonable (IIa, B-R).

- Clinicians and patients should engage in a risk discussion that considers patient preferences for individualized treatment.
  Discussion checklist
- Clinicians should evaluate risk enhancing factors.
  Overall list of risk enhancing factors
  Additional risk factors for diabetes patients
  Race/ethnic specific factors in assessing and treating ASCVD risk
- If statin therapy is decided upon, clinician and patient should discuss risk and benefits before initiation.
  Statin types and intensities

Supporting Guideline Recommendations

Clinician-Patient Risk Discussion

- Clinicians and patients should engage in a risk discussion that considers risk factors, adherence to healthy lifestyle, the potential for ASCVD risk-reduction benefits and the potential for adverse effects and drug–drug interactions, as well as patient preferences for an individualized treatment decision. (I,B-NR)
- A clinician-patient risk discussion is recommended before initiating statin therapy to review net clinical benefit, weighing the potential for ASCVD risk reduction against the potential for statin-associated side effects, statin-drug interactions and safety, yet emphasizing that side effects can be addressed successfully. (I,A)

Drug Therapy for Risk Reduction

- In adults 40 to 75 years of age with diabetes mellitus, regardless of estimated 10-year ASCVD risk, moderate-intensity statin therapy is indicated. (I,A)
- In patients with diabetes mellitus who have multiple ASCVD risk factors, it is reasonable to prescribe high-intensity statin therapy with the aim to reduce LDL-C by 50% or more. (IIa, B-R)

Risk Enhancing Factors

- Clinicians should consider conditions specific to women such as premature menopause (age < 40 years) and history of pregnancy-associated disorders (hypertension, preeclampsia, gestational diabetes mellitus, small-for-gestational-age infants, preterm deliveries), when discussing lifestyle intervention and the potential for benefit of statin therapy. (I,B-NR)
- For clinical decision-making in adults of different race/ethnicities, it is reasonable for clinicians to review race/ethnic features that can influence ASCVD risk so as to adjust choice of statin or intensity of treatment. (IIa, B-NR)

Link to Full ACC/AHA Cholesterol Guideline (https://www.acc.org/guidelines/hubs/blood-cholesterol)
Link to Full ACC/AHA CV Risk Guideline (http://www.onlinejacc.org/content/63/25_part_b/2935?_ga=2.145115380.1960733943.1500303927-237461518.1450120708)

Blood Pressure Management (for this Patient)

Patient has stage 2 hypertension.

- Initiation of BP-lowering medication therapy (with 2 agents of different classes) is recommended in combination with nonpharmalogical therapy.
- First line antihypertensive agents include thiazide diuretics, CCBs, and ACE inhibitors or ARBs. For nonpharmalogical therapy recommendations, see the Lifestyle section of this table.
- Patient should be evaluated by or referred to a primary care provider within 1 month of the initial diagnosis, and have a repeat BP evaluation in 1 month after therapy initiation.
- A BP target of less than 130/80 mm Hg is recommended.

Supporting Guideline Recommendations

- Use of BP-lowering medications is recommended for secondary prevention of recurrent CVD events in patients with clinical CVD and an average SBP of 130 mm Hg or higher and an average DBP of 80 mm Hg or higher, or for primary prevention in adults with an estimated 10-year atherosclerotic cardiovascular disease (ASCVD) risk of 10% or higher and an average SBP 130 mm Hg or higher or an average DBP 80 mm Hg or higher (SBP:I, A; DBP:I, C).
- Adults with stage 2 hypertension should be evaluated by or referred to a primary care provider within 1 month of the initial diagnosis, have a combination of nonpharmacological and antihypertensive drug therapy (with 2 agents of different classes) initiated, and have a repeat BP evaluation in 1 month (I, B).
- For initiation of antihypertensive drug therapy, first-line agents include thiazide diuretics, CCBs, and ACE inhibitors or ARBs (I, A).
- Simultaneous use of an ACE inhibitor, ARB, and/or renin inhibitor is potentially harmful and is not recommended to treat adults with hypertension (III, A).

- For adults with confirmed hypertension and known CVD or 10-year ASCVD event risk of 10% or higher, a BP target of less than 130/80 mm Hg is recommended (SBP:I, B; DBP:I, C).

Tobacco Cessation (for this Patient)

- At every visit, assess tobacco use (I,A) and risk of relapse based on time since last smoked.
- For best results with smoking cessation medication, encourage use for at least 3 and, preferentially, 6 months.
- Make a follow-up plan.
- Avoid exposure to secondhand smoke (III: Harm, B)

See below for more information on each of these steps.

*Supporting Expert Consensus Advice**

Assess risk of relapse based upon time since last smoked

How long ago did patient quit smoking?	Next steps
Less than 1 month – Highest risk for relapse	◦ Ask about smoking status on follow-up visits. ◦ Start and/or intensify pharmacotherapy to address nicotine withdrawal. ◦ Connect patients to behavioral/psychosocial treatment program. ◦ Monthly follow up contact with referral to treatment if relapsed.
1-6 months ago – Moderately high risk	◦ Ask about smoking status on follow-up visits. ◦ Continue/adjust pharmacotherapy as needed. ◦ Monthly follow-up contact with referral to treatment if relapsed.
More than 6 months ago – Lower risk for relapse	◦ Ask about smoking status on follow-up visits. ◦ Offer treatment if requested.

<u>When using pharmacotherapy</u>

- Offer to every patient who is willing to accept it.
- Prescriptions should be written even for over-the-counter medications because insurance plans might cover them.
- Individuals using smoking cessation medications should be encouraged to continue use for at least 3 months.
- Extended use of medications for up to 6 months has been shown to increase long-term abstinence.

- Download ACC's Tobacco Cessation Medications Reference Tool (https://www.acc.org/~/media/Non-Clinical/Files-PDFs-Excel-MS-Word-etc/Guidelines/2018/Tobacco-Cessation-Clinician-ToolFINAL112918.pdf?la=en) for more information

Avoid secondhand smoke (SHS) exposure to reduce ASCVD risk. (III: Harm, B-NR)

- There is no safe lower limit of exposure to secondhand smoke (SHS).
- SHS exposure is known to cause cardiovascular disease and stroke in nonsmokers and can lead to immediate adverse events.
- SHS exposure in nonsmokers is associated with increased risks of ischemic heart disease, atrial fibrillation, peripheral artery disease, and poorer quality of life in heart failure patients.
- Assess all former smokers for SHS exposure and advise adopting smoke-free policy for home and car.

*Recommendations labeled with a (COR, LOE) designation are derived from the 2019 ACC/AHA Primary Prevention Guideline (http://www.onlinejacc.org/content/early/2019/03/07/j.jacc.2019.03.010). All other advice is derived from ACC's 2018 Expert Consensus Pathway on Tobacco Cessation (https://www.jacc.org/doi/10.1016/j.jacc.2018.10.027)

Diabetes Mellitus Management (General)

In patients who have A1c > 6.5% consistent with type 2 diabetes

- Dietary counseling regarding key aspects of a heart healthy diet is recommended (I, A)
- At least 150 minutes/week of moderate intensity or 75 minutes/week of vigorous physical activity is recommended (I, A)
- Metformin as a first line pharmacologic therapy to improve glycemic control and reduce CVD risk may be considered (IIa, B-R)

After assessing response to lifestyle therapies and metformin

- **If A1c < 7.0% NOT achieved, and**
  - If patient has other CVD risk factors, consideration may be given to an SGLT-2i or a GLP-1R agonist to improve glycemic control and reduce CVD risk (IIb, C-LD)
  - If no additional CVD risk factors, further management of diabetes per primary care provider or endocrinology is suggested
- **If A1c < 7.0% is achieved**
  - Reinforce importance of diet and physical activity and continue current management

Lifestyle Recommendations (General)

Nutrition and Diet

- To reduce ASCVD risk in all patients:
  - A diet emphasizing intake of vegetables, fruits, legumes, nuts, whole grains, and fish is recommended (I, B-R). A diet containing reduced amounts of cholesterol and sodium can be beneficial (IIa, B-NR).
  - Replacement of saturated fat with dietary mono- and poly-unsaturated fats can be beneficial (IIa, B-NR).

- Minimizing the intake of trans fats, processed meats, refined carbohydrates, and sweetened beverages as part of a heart healthy diet is reasonable (IIa, B-NR).

- For adults with type 2 diabetes mellitus:
  - A tailored nutrition plan focusing on a heart-healthy dietary pattern is recommended to improve glycemic control, achieve weight loss (if needed), and improve other ASCVD risk factors (I, A).

Exercise and Physical Activity

- To reduce ASCVD risk, adults should:
  - Be routinely counseled to optimize a physically active lifestyle (I, B-R).
  - Engage in at least 150 minutes per week of accumulated moderate intensity or 75 minutes per week of vigorous intensity aerobic physical activity (or an equivalent combination of moderate and vigorous activity) (I, B-NR). This includes adults with type 2 diabetes mellitus (I, A).
  - Decrease sedentary behavior (IIb, C-LD).
- For adults unable to meet the minimum physical activity recommendations:
  - Engaging in some moderate or vigorous intensity physical activity, even if less than this recommended amount, can be beneficial to reduce ASCVD risk (IIa, B-NR).

Intensity	METS	Examples
Sedentary Behavior*	1-1.5	Sitting, reclining, or lying; watching TV
Light	1.6-2.9	Walking slowly, cooking, light house work
Moderate	3.0-5.9	Brisk walking (2.4-4mph), biking 5-9mph, ballroom dancing, active yoga, recreational swimming
Vigorous	≥6	Jogging/running, biking ≥10mph, singles tennis, swimming laps

*Sedentary behavior is defined as any waking behavior characterized by an energy expenditure ≤1.5 metabolic equivalents (METs), while in a sitting, reclining, or lying posture. Standing is a sedentary activity in that it involves ≤1.5 METs, but is not considered a component of sedentary behavior; mph indicates miles per hour

Obesity and Being Overweight

- In overweight and obese adults:
  - Weight loss is recommended to improve the ASCVD risk-factor profile (I, B-R).
  - Counseling and comprehensive lifestyle interventions, including calorie restriction, are recommended for achieving and maintaining weight loss (I, B-R).
  - Calculating body mass index is recommended annually or more frequently to identify overweight and obese adults for weight loss considerations (I, C-EO).
  - It is reasonable to measure waist circumference to identify those at higher cardiometabolic risk (IIa, B-NR).

Aspirin Use Recommendations (for this Patient)

Supporting Guideline Recommendations

- **Low dose aspirin (75-100 mg oral daily) may be considered for primary prevention of ASCVD among select higher risk ASCVD adults aged 40-70 years who are not at increased bleeding risk. (IIb, A)**

  - Given the narrow balance between benefits and harms of prophylactic aspirin, there is less justification for aspirin use at doses >100 mg daily for primary prevention.

  - Meta-analyses suggest that the ASCVD benefit for low-dose aspirin is equivalent to high-dose aspirin, but the bleeding risk is higher.

  - Low-dose prophylactic aspirin may be best justified among high-ASCVD risk persons who cannot achieve optimal control of other ASCVD risk factors.
- **Low-dose aspirin (75-100 mg oral daily) should not be administered for primary prevention of ASCVD among adults at any age who are at increased risk for bleeding. (III: Harm, C-LD)**

  - A non-exhaustive list of conditions associated with increased bleeding risk includes: history of GI bleeding or peptic ulcer disease or bleeding at other sites, age > 70 years, thrombocytopenia, coagulopathy, chronic kidney disease, or concurrent use of other medications that increase bleeding risks such as NSAIDs, steroids, DOACs or warfarin.

Immunization Practice (General)

CDC's Standards for Adult Immunization Practice

1. **ASSESS** the immunization status of all your patients at every clinical encounter.
2. Strongly **RECOMMEND** vaccines that your patients need.
3. **ADMINISTER** needed vaccines or REFER your patients to a vaccination provider.
4. **DOCUMENT** vaccines received by your patients.

Therapy Safety Information (General)

See Resource Section of this app for full prescribing information.

- **Statins:** There is moderate quality evidence that statins do not increase the overall risk of adverse events, but that they may increase the risk of diagnosis of type 2 diabetes in certain individuals.
- **Blood Pressure-Lowering Therapies:** Adverse effects of blood-pressure-lowering therapies are generally poorly reported, and vary by drug class.
- **Tobacco Cessation:** Adverse effects of tobacco cessation therapies are generally poorly reported, and vary by drug.
- **Aspirin:** There is high-quality evidence indicating that aspirin may increase the risk of major bleeding. A calculator for considering major bleeding risks and potential benefits of aspirin therapy for MI and stroke prevention is available here (http://annals.org/aim/article/2513179/aspirin-use-primary-prevention-cardiovascular-disease-colorectal-cancer-u-s).

[*]Disclaimer: The results and recommendations provided by this application are intended to inform but do not replace clinical judgment. Therapeutic options should be individualized and determined after discussion between the patient and their care provider.

Recommendations are designated with both a class of recommendation (COR) and a level of evidence (LOE). The class of recommendation indicates the strength of recommendation, encompassing the estimated magnitude and certainty of benefit in proportion to risk. The level of evidence rates the quality of scientific evidence supporting the intervention on the basis of the type, quantity, and consistency of data from clinical trials and other sources.