American Heart Association.

Top Take-Home Messages for Clinicians: Using PREVENT-ASCVD Equations for Risk-Based Lipid Management

Adapted from: 2026 ACC/AHA Guideline on the Management of Dyslipidemia

Developed by Sadiya Khan, MD, MSc, FACC, FAHA, ACC/AHA Joint Committee on Clinical Practice Guidelines Member and Maggie Eaton, PhD, RN, Science and Medicine Advisor

1. Use the PREVENT-ASCVD equations as a first step in contemporary ASCVD risk assessment

The 2026 Dyslipidemia Guideline now recommends a new approach to atherosclerotic cardiovascular disease (ASCVD) risk assessment with the PREVENT-ASCVD equations. The PREVENT-ASCVD equations replace the prior Pooled Cohort Equations with more accurate and contemporary risk estimates for ASCVD, which include fatal and non-fatal myocardial infarction and stroke (Section 4.2.3.2).

2. Apply the PREVENT-ASCVD equations in appropriate primary prevention populations

The PREVENT-ASCVD equations are recommended in adults without known ASCVD or subclinical atherosclerosis and with LDL-C 70–189 mg/dL to calculate 10-year risk in those aged 30–79 years and 30-year risk in those aged 30–59 years (Section 4.2.3.2).

3. Initiate lipid-lowering therapy based on new, lower PREVENT-ASCVD risk thresholds

The guideline recommends new risk thresholds for initiation of lipid-lowering therapy (LLT), in addition to health behavior recommendations, according to 10-year or 30-year risk with the PREVENT-ASCVD equations. With more accurate risk estimates, LLT is recommended for adults with a 10-year ASCVD risk ≥5% (intermediate or high risk) and is reasonable for those with a 10-year ASCVD risk of 3% to <5% (borderline risk) after clinician–patient discussion. In selected adults aged 30–59 years at low 10-year ASCVD risk (<3%) but with LDL-C 160–189 mg/dL or 30-year ASCVD risk ≥10%, statin therapy is reasonable (See summary table below and Section 4.2.3.2).

4. Select moderate- or high-intensity lipid-lowering therapy according to PREVENT-ASCVD risk category

In adults aged 30–79 years with LDL-C 70–189 mg/dL and no history of ASCVD, statin intensity should align with PREVENT-ASCVD risk. A moderate-intensity statin is reasonable for those at borderline (3% to <5%) ASCVD risk and in selected younger adults at low (<3%) 10-year ASCVD risk but with LDL-C 160–189 mg/dL or high 30-year ASCVD risk (≥10%). At least a moderate-intensity statin is recommended for intermediate 10-year ASCVD risk (5% to <10%), and a high-intensity statin is recommended for high 10-year ASCVD risk (≥10%). For LDL-C ≥190 mg/dL, maximally tolerated statin therapy is recommended regardless of estimated risk (See summary table below and Section 4.2.3.7).

5. Guide intensification of lipid-lowering therapy according to LDL-C goals and PREVENT-ASCVD risk

Intensification of LLT should be guided by ASCVD risk and the degree of LDL-C lowering achieved. Adults at borderline or intermediate risk should achieve a 30% to 49% LDL-C reduction, with consideration of greater LDL-C lowering at the higher end of the intermediate risk range. Adults at high risk should achieve at least a 50% LDL-C reduction, with additional LDL-C lowering as needed to reach guideline-recommended goals. If LDL-C goals are not achieved on maximally tolerated statin therapy in adults who are at high risk, adding ezetimibe and, when appropriate, a PCSK9 inhibitor or bempedoic acid is reasonable (See summary table below and Section 4.2.3.7).

6. Incorporate the PREVENT-ASCVD equations into holistic risk assessment using the "CPR" framework

Use the Calculate-Personalize-Reclassify (CPR) model: Calculate 10-year ASCVD risk with PREVENT; Personalize risk by considering factors not included in the equations (risk enhancers, reproductive history, long-term LDL exposure); Reclassify when needed using coronary artery calcium (CAC), especially in adults with borderline (3% to <5%) or intermediate (5% to <10%) risk. Explain risk in absolute terms and use shared decision-making tools to support patient understanding (Section 4.2.3.2).

7. Calculate 30-year PREVENT-ASCVD risk estimates to refine prevention strategies when indicated

In adults aged 30–59 years with low (<3%) 10-year ASCVD risk, use the 30-year ASCVD risk to inform management decisions. If LDL-C is <160 mg/dL and the 30-year ASCVD risk is <10%, emphasize counseling on health behaviors to reduce LDL-C and ASCVD risk. If LDL-C is 160–189 mg/dL or the 30-year ASCVD risk is ≥10%, initiating a moderate-intensity statin is reasonable to reduce cumulative exposure to atherogenic lipoproteins (Section 4.2.3.7).

8. Consider risk enhancers to refine PREVENT-ASCVD risk estimates and personalize treatment decisions

In adults who are at borderline (3% to <5%) risk, consider additional factors that may increase ASCVD risk, including family history of premature ASCVD, chronic inflammatory diseases, persistently elevated triglycerides , elevated lipoprotein(a) [Lp(a)] or high-sensitivity C-reactive protein (hsCRP), and female-specific risk markers (e.g., preeclampsia, premature menopause). These help personalize treatment decisions and may support earlier or more intensive therapy (Section 4.2.3.3).

9. Consider coronary artery calcium (CAC) scoring to refine PREVENT-ASCVD risk estimates when treatment decisions are uncertain

If the decision about LLT is uncertain, use CAC to refine risk. Also consider incidental CAC identified on noncardiac computed tomography (CT) scans when deciding whether to start or intensify LLT; and in selected higher-risk groups (e.g., HIV, Type 1 or Type 2 diabetes, inflammatory disorders), selective coronary computed tomography angiography (CCTA) may help inform treatment intensity (Section 4.2.3.6).

10. Recognize key populations at higher ASCVD risk

In adults 40 years of age and older with Type 1 or Type 2 diabetes, chronic kidney disease stage 3 or higher, or HIV, lipid-lowering therapy has demonstrated benefit even at lower absolute ASCVD risk. However, risk varies across these groups, and those at higher estimated risk are more likely to benefit from higher-intensity LLT. The PREVENT-ASCVD equations are recommended to help identify people in these subgroups who may benefit from more intensive LLT (Sections 4.2.5, 4.2.8.8, and 4.2.8.9).

Summary Table: Risk-Based Management of Dyslipidemia with the PREVENT-ASCVD Equations

Risk Category	PREVENT-ASCVD 10-Year Risk Estimate	Lipid-Lowering Therapy	Statin Intensity	LDL-C Reduction Goal
Low	<3%	Emphasize lifestyle; statin is reasonable if LDL-C is 160–189 mg/dL or 30-year risk ≥10% (ages 30–59).	Moderate intensity	
Borderline	3% to <5%	Consider statin after clinician–patient discussion and assessment of risk enhancers.	Moderate intensity	≥30% to 49% LDL-C reduction; LDL-C <100 mg/dL and non-HDL-C <130 mg/dL
Intermediate	5% to <10%	Initiate statin therapy.	At least moderate intensity; high intensity is beneficial in the higher end of this risk range	≥30% to 49% LDL-C reduction; ≥50% LDL-C reduction is beneficial in the higher end of this risk range; LDL-C <100 mg/dL and non-HDL-C <130 mg/dL
High	≥10%	Initiate statin therapy.	High intensity	≥50% LDL-C reduction; LDL-C <70 mg/dL and non-HDL-C <100 mg/dL