

Lipid Management in Patients With and Without Diabetes

CONTRIBUTING AUTHORS: Sanjay Gandhi, MD, MBA, Case Western Reserve University; Jackson T. Wright, Jr, MD, PhD, Case Western Reserve University; Randy Wexler, MD, MPH, The Ohio State University, on behalf of Team Best Practices

Statin therapy and lifestyle changes remain the cornerstone for primary and secondary prevention of atherosclerotic cardiovascular disease (ASCVD) in adults over 40 years old. Risk stratification based on pooled cohort equations, in patients 40 to 75 years old, is used to determine the long-term ASCVD risk and need for statin therapy for primary prevention.¹ In patients for whom the risk-benefit of statin therapy is borderline, a coronary artery calcium score may be helpful.¹

Patients with diabetes mellitus (DM) who are 40 to 75 years old are considered high-risk and benefit from moderate intensity statins for primary prevention, even in the absence of elevated low-density lipoprotein cholesterol (LDL-C).¹ For patients with DM who are 20 to 39 years old, statin therapy in the presence of risk enhancers, such as microvascular disease,¹ should be considered.

The recommended approach for primary and secondary prevention in LDL-cholesterol management is outlined in Table 1.

Table 1. AHA/ACC Categories and LDL-C Goal/Recommendation

Categories	LDL-C Goal/Recommendation	Comments
Primary Prevention Mostly for age 40-75 years		
ASCVD High Risk >20%	High intensity statin (LDL-C reduction ≥50%)	
ASCVD Intermediate Risk (≥7.5% to <20%)	Moderate intensity if risk enhancers [^]	
ASCVD Borderline Risk (5% to <7.5%)	Risk discussion if risk enhancers [^]	
ASCVD Low Risk (5%)	Lifestyle changes	
LDL-C ≥190 mg/dL	High intensity statin (LDL-C reduction ≥50%)	
Diabetes Mellitus	Ages 20-39	Consider statin therapy if risk enhancers [^] present
	Ages 40-74	Moderate intensity statin (LDL-C reduction 30%-49%)
Secondary Prevention		
ASCVD Very High Risk	Multiple major ASCVD events (recent ACS, history of MI, history of ischemic stroke, symptomatic peripheral artery disease) and multiple high risk conditions [*]	High intensity statin (LDL-C reduction ≥50% and LDL-C <70 mg/dL)
ASCVD Not At Very High Risk	Age ≤75 years	High intensity statin (LDL-C reduction ≥50% and LDL-C <70 mg/dL)
	Age >75 years	Moderate or high intensity statin

Adapted from AHA/ACC/multisociety guideline¹. Abbreviations: ACS, acute coronary syndrome; ASCVD, atherosclerotic cardiovascular disease; eGFR, estimated glomerular filtration rate; LDL-C, low-density lipoprotein C; MI, myocardial infarction; PCSK9i, proprotein convertase subtilisin/kexin type 9 inhibitors. ^{*}High-Risk Conditions: Age ≥65 years, heterozygous familial hypercholesterolemia, history of prior revascularization, diabetes mellitus, hypertension, chronic kidney disease (eGFR 15-59 ml/min/1.73 m²), current smoker, persistently elevated LDL-C (≥100 mg/dL despite statins and ezetimibe), history of congestive heart failure. [^]Risk Enhancers: Diabetes duration >10 years (type 2), >20 years (type 1), albuminuria (>30 mcg/mg creatinine), eGFR <60 ml/min/1.73 m², retinopathy, peripheral neuropathy, ankle brachial index <0.9.

Patients with established ASCVD are at very high risk for recurrent events and benefit from high intensity statin therapy to reduce LDL-C ≥ 50% from baseline and < 70 mg/dL.¹ Ezetimibe and proprotein convertase subtilisin/kexin type 9 inhibitors (PCSK9i) may be considered in high-risk individuals who do not achieve their LDL-C goals on maximally tolerated statin therapy.¹⁻³ Bempedoic acid was recently approved for those with statin intolerance or added to achieve LDL goal. Icosapent ethyl has shown benefit in reducing cardiovascular events in statin-treated patients with moderate hypertriglyceridemia and established CVD or diabetes.⁴

For more information, access Cardi-OH's expanded resource on [lipid management](#).

REFERENCES

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