Lipid Management 2013 – Statin Benefit Groups

Approved by Board Chair

Signature   Name (Please Print)   Date

1. Individuals with clinical ASCVD
2. Individuals with primary elevations of LDL-C >190 mg/dL
3. Individuals 40 to 75 years of age with diabetes and LDL-C 70 to 189 mg/dL without clinical ASCVD
4. Individuals without clinical ASCVD or diabetes who are 40 to 75 years of age and have LDL-C 70 to 189 mg/dL and an estimated 10-year ASCVD risk of >7.5%. This requires a clinician-patient discussion. Individuals in the last group can be identified by using the Pooled Cohort Equations for ASCVD risk prediction developed by the Risk Assessment Work Group. Lifestyle counseling (i.e. cholesterol, obesity, lifestyle) should occur at the initial and follow-up visits as the foundation for statin therapy and may improve the overall risk factor profile. Most importantly, our focus is on those individuals most likely to benefit from evidence-based statin therapy to reduce ASCVD risk. Implementation of these ASCVD risk-reduction guidelines helps to substantially address the large burden of fatal and nonfatal ASCVD in the United States. *(Reference @ document end: JACC 63:25, page 2897)*
High dose statins

High-dose statin is the goal of therapy and it’s best (not required) if LDL is reduced by 50%. High dose is defined as rosuvastatin 20-40 mg or atorvastatin 40-80 mg. Moderate dose statin is recommended if the high-dose statin is not tolerated or for patients greater than 75 years of age.

Clinical ASCVD

- Acute coronary syndromes
- A history of MI
- Stable or unstable angina
- Coronary or other arterial revascularization
- Stroke
- Transient ischemic attack
- Peripheral arterial disease presumed to be of atherosclerotic origin
For primary prevention in individuals without clinical ASCVD or diabetes who have an LDL-C 70 to 189 mg/dL, the estimated absolute 10-year risk of ASCVD (defined as nonfatal MI, CHD death, or nonfatal and fatal stroke) should be used to guide the initiation of statin therapy. The 10-year ASCVD risk should be estimated with the Pooled Cohort Equations (Section 4.7).

For the primary prevention of ASCVD in individuals with diabetes (diabetes mellitus type 1 and type 2), estimated 10-year ASCVD risk can also be used to guide the intensity of statin therapy.

For those with clinical ASCVD or with LDL-C >190 mg/dL who are already in a statin benefit group, it is not appropriate to estimate 10-year ASCVD risk.

In primary prevention, additional factors may influence ASCVD risk in those for whom a risk-based decision is unclear." (Reference @ document end: JACC 63:25, page 2897)

Note: The above “... 4 major statin benefit groups were identified for whom the ASCVD risk reduction clearly outweighs the risk of adverse events based on a strong body of evidence.... Moderate evidence supports the use of statins for primary prevention in individuals with

- 5% to <7.5% 10-year ASCVD risk,
- 40 to 75 years of age with LDL-C 70 to 189 mg/dL.
- Selected individuals with <5% 10-year ASCVD risk, or <40 or >75 years of age may also benefit from statin therapy." (Reference @ document end: JACC 63:25, page 2897)

Additional information regarding patient groups statin treatment

The algorithm for evaluation indicates primary prevention screening to be done every 4-6 years for healthy individuals 20 to 79 years old. “The estimated risks are specific to defined combinations of the risk factors and demonstrate how they vary over a broad spectrum of potential profiles. Risk factor levels that are more adverse than those shown in these tables should always be associated with a higher estimated risk. For example, if a given risk factor combination indicates an estimated 10-year risk of hard ASCVD of 8%, but a patient has a higher level of systolic BP or total cholesterol, or a lower level of high-density lipoprotein cholesterol, than shown for that table cell, then the estimated risk would be >8%.”

The 2013 JACC Algorithm for Blood Cholesterol Guidelines and also the ACC Risk Calculator.  
Smartphone app QxMD uses the same 2013 ACC/AHA CV risk calculator algorithm.  
LDL>190: Adults under the age of 40 who have an LDL greater than 190 likely have a genetic condition, would be treated with statin and should undergo genetic assessment for a lipid abnormality.
Documentation regarding prior guidelines

1. No data were identified for treatment or titration to a specific LDL-C goal in adults with clinical ASCVD.

2. The expert panel did not find any RCTs (randomized controlled trials) that evaluated titration of all individuals in a treatment group to specific LDL-C targets <100 mg/dL or <70 mg/dL, nor were any RCTs comparing 2 LDL-C treatment targets identified. No trials reported on-treatment non–HDL-C levels.

3. For primary and secondary prevention: High-intensity statin therapy on average lowers LDL-C by approximately >50%, moderate-intensity statin therapy lowers LDL-C by approximately 30% to <50%, and lower-intensity statin therapy lowers LDL-C by <30%. Given the absence of data on titration of drug therapy to specific goals, no recommendations are made for or against specific LDL-C or non–HDL-C goals for the primary or secondary prevention of ASCVD. High-intensity statin therapy should be initiated for adults <75 years of age with clinical ASCVD who are not receiving statin therapy, or the intensity should be increased in those receiving a low- or moderate-intensity statin, unless they have a history of intolerance to high-intensity statin therapy or other characteristics that could influence safety. The expert panel considers it reasonable to continue statin therapy in persons >75 years of age who have clinical ASCVD and are tolerating statin therapy. (Reference @ document end: JACC 63:25)

What is new in the 2013 guidelines

1. **Focus on ASCVD risk reduction: 4 statin benefit groups**
   This guideline is based on a comprehensive set of data from RCTs (randomized controlled trials) and identifies high-intensity and moderate-intensity statin therapy for use in secondary and primary prevention.

2. **A new perspective on LDL-C and/or Non–HDL-C treatment goals**
   The Expert Panel was unable to find RCT evidence to support continued use of specific LDL-C or non–HDL-C treatment targets. The appropriate intensity of statin therapy should be used to reduce ASCVD risk in those most likely to benefit. Nonstatin therapies, as compared with statin therapy, do not provide acceptable ASCVD risk-reduction benefits relative to their potential for adverse effects in the routine prevention of ASCVD.

3. **Global risk assessment for primary prevention**
   This guideline recommends use of the new Pooled Cohort Equations to estimate 10-year ASCVD risk in both white and black men and women. The guideline focuses statin therapy on those most likely to benefit and indicates, on the basis of RCT data, those high-risk groups that might not benefit.

4. **Safety recommendations**
   This guideline used RCTs to identify important safety considerations in individuals receiving treatment of blood cholesterol to reduce ASCVD risk. (Reference @ document end: JACC 63:25)

Care Team Guidelines