

What is the major trigger of initiating statin treatment?

- CV risk-based approach

Dae Jung Kim (MD)

Department of Endocrinology and Metabolism
Ajou University School of Medicine, Gyeonggi-do, Korea

In general, statin therapy was significantly associated with a reduced incidence of composite CVD outcomes compared with placebo; pooled analyses of 13 trials found an RR of 0.70 (95% CI, 0.63-0.78) after 1 to 6 years. Therefore, every clinical guidelines recommend the use of statins for the prevention of cardiovascular events.

The ACC and AHA recommended statin use in 4 groups of individuals were identified for whom many RCT evidences demonstrated a reduction in ASCVD events with statin therapy: 1. Individuals with clinical ASCVD, 2. Individuals with LDL-C \geq 190 mg/dL, 3. Individuals 40 to 75 years of age with diabetes and LDL-C 70 to 189 mg/dL, 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 \geq 7.5%.

To estimate the total risk of ASCVD, the ACC and AHA recommends a comprehensive assessment of the estimated 10-year risk for an ASCVD event that includes both CHD and stroke. The calculator includes age, gender, race, total cholesterol, HDL cholesterol, systolic blood pressure, diastolic blood pressure, antihypertensive medication used, current smoking, and diabetes status.

The USPSTF recommends using the ACC/AHA Pooled Cohort Equations to calculate 10-year risk of CVD events. The American Diabetes Association also agreed with the ACC/AHA guidelines. They recommend statin use in all patients with diabetes with 40 to 75 years. In cases with <40 years with diabetes, ASCVD risk factors can be assessed for determining the statin use.

According to the Korean Heart Study, the Korean-specific risk factors for CVD are similar to those from other countries, and a Korea-specific, 10-year CAD risk-scoring system was also currently available. However, validation of this scoring system and the indication for lipid-lowering medications according to the scored risks are needed. Therefore, new Korean dyslipidemia guidelines does not recommend the Korea-specific CVD risk calculator for Koreans.