Highly Intensive Lipid Lowering Therapy in DM without CVD
- CV Risk and LDL Cholesterol Target
Pros

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Approximately 65% of diabetes-related mortality is due to atherosclerotic cardiovascular disease (ASCVD). In comparison with individuals who do not have diabetes, individuals with type 2 diabetes mellitus (T2DM) have a significantly increased risk of ASCVD. Therefore, the presence of T2DM is considered an ASCVD risk equivalent as follows. Individuals with diabetes are considered to be at high (DM with no other risk factors), very high (DM with 1 or more risk factors) or extremely high risk (DM with established cardiovascular disease). In addition, individuals with T2DM commonly have other risk factors including hypertension, dyslipidemia (low HDL, high TG, small dense LDL), central obesity, and a procoagulant state. The relative benefit of lipid-lowering therapy has been uniform across most subgroups tested irrespective of primary and secondary prevention; but absolute reductions in ASCVD outcomes are greatest in people with high baseline ASCVD risk such as individual with T2DM and additional risk factors. The 2013 American College of Cardiology/American Heart Association (ACC/AHA) cholesterol guideline recommends high-intensity statin therapy (approximately 50% reduction in LDL-C) for adults 40-75 years of age with diabetes with a ≥7.5% estimated 10-year ASCVD risk, although it makes no recommendations for or against specific LDL-C or non-HDL-C targets for prevention of ASCVD. However, the 2016 European Society of Cardiology/European Atherosclerosis Society (ESC/EAS) guideline and the 2017 American Association of Clinical Endocrinologist and American College of Endocrinology (AACE/ACE) guideline endorse treat-to-target strategy; therefore, those at high risk (individuals with diabetes and no other risk factors) are recommended to have an LDL-C target of less than 100 mg/dL, and those at very high-risk (individuals with diabetes have 1 or more additional risk factors), an LDL-C target of less than 70 mg/dL. In addition, following examples are recommended; 1) very high-risk, LDL-C 70-135 mg/dL not on pharmacological therapy: the goal is at least a 50% reduction, 2) very high-risk, LDL-C >135 mg/dL not in pharmacological therapy: the goal is < 70 mg/dL, 3) very high-risk, LDL-C > 70 mg/dL on statin: the goal is still <70 mg/dL.