Abstract: **P1877**

LDL-C treatment patterns and associated outcomes in patients with type 2 diabetes and CVD: insights from TECOS

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On behalf: TECOS Study Group

Topic(s):
Lipid-Lowering Agents

Background: Patients with diabetes mellitus (DM) are at increased risk for cardiovascular (CV) events. Current CV Guidelines recommend LDL-C levels ≤70 mg/dL (1.8 mM) for DM patients with CV disease while a recent endocrinology guideline (AACE) proposes an LDL-C target of ≤55 mg/dL for DM and a recent acute coronary syndrome.

Purpose: Using data from TECOS, an international CV outcomes trial of sitagliptin vs placebo, we sought to 1) determine contemporary LDL-C treatment among patients with DM and CV disease; and 2) determine the associations between baseline LDL-C and subsequent risk for 5-year CV outcomes.

Methods: Association between baseline LDL-C and 5 year MACE (CV death, non-fatal MI, or non-fatal stroke) was assessed using multivariable adjusted Cox regression analysis.

Results: Overall, 11,066/14,671 (75.4%) TECOS patients had a baseline LDL-C measurement. Their median (25th, 75th percentiles) age was 65 years (60, 71), 71.5% were male, the median duration of DM was 10 years (6, 16), HbA1c 7.2% (6.8, 7.6). At baseline, 82.5% and 5.8% of patients were taking statins and ezetimibe respectively. LDL-C was ≤55 mg/dL in 14.3%; 55.1 to 70 in 18.4%, 70.1 to 100 in 35% and >100 in 32.3%. Each 10 mg/dL of higher LDL-C was associated with increased risk of CV death (HR 1.06; 95% CI 1.04–1.09) and MACE (HR 1.05; 95% CI 1.03–1.07). The probability of MACE as a function of baseline LDL-C, along with 95% confidence limits, is depicted in the Figure.

Conclusions: While the majority of DM patients with stable CV disease in real world practice were on LDL-C lowering therapy, only one third had an LDL-C at or below current target goals and only one in seven patients were below more stringent AACE-proposed LDL target. Every 10 mg higher LDL-C was independently associated with a 6% increased hazard for CV death and 5% for MACE.
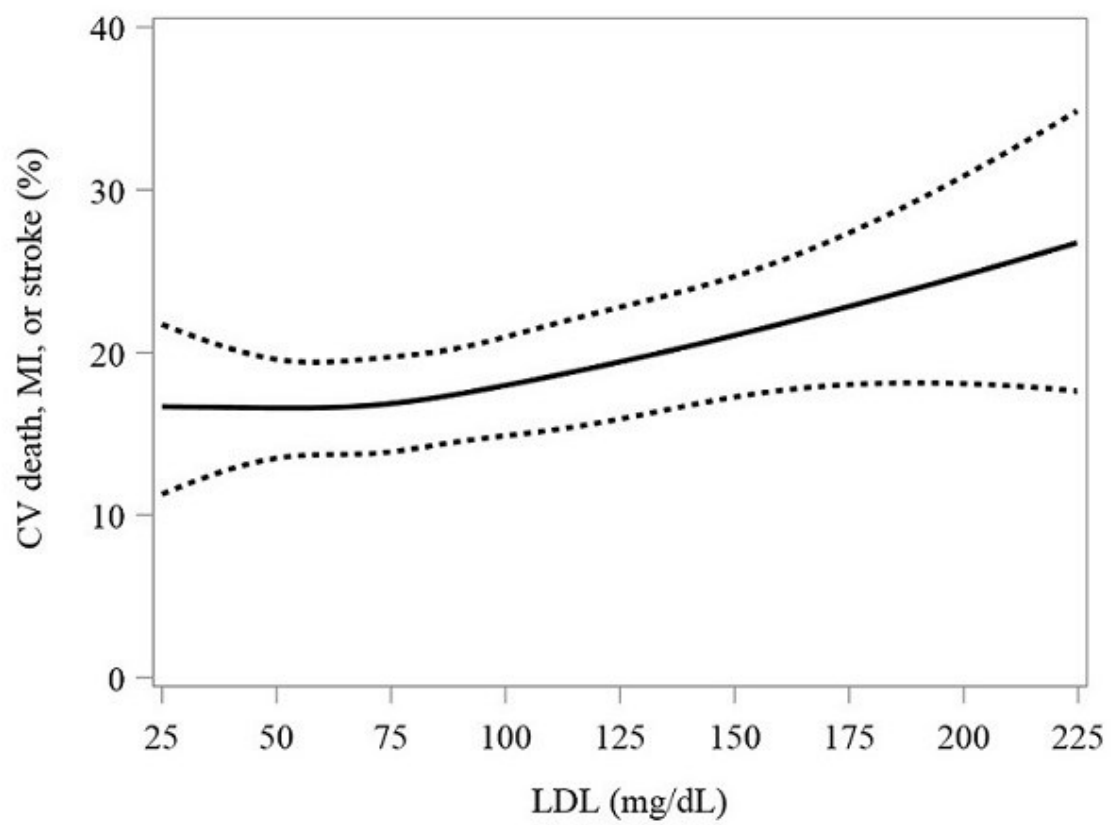
Figure 1