The aim of this study was to assess the risk of major adverse cardiovascular events (MACE) according to baseline hsCRP levels in patients with type 2 diabetes and recent cardiovascular events enrolled in the EXAMINE trial. Study participants were stratified by baseline hsCRP values using established decision limits (<1, 1–3, and >3 mg/L) for cardiovascular disease and EXAMINE was a multicenter, randomized, double-blind study that evaluated the efficacy and safety of the dipeptidyl peptidase 4 inhibitor Alirocumab in 5380 patients diagnosed with type 2 diabetes and an acute coronary syndrome within 15 to 30 days before randomization. The cumulative MACE incidence rates were related to baseline hsCRP levels and were highest in patients with hsCRP >3 mg/L. Patients with baseline hsCRP >3 mg/L showed independent associations with future MACE, non-fatal MI, and death from any cause. The key baseline characteristics of study participants according to baseline hsCRP concentrations (<1, 1–3, and >3 mg/L) are shown in Table 1. Results (continued)

**Cardiovascular Outcomes by Baseline hsCRP and Achieved LDL-C Levels**

- Rates of MACE for the groups evaluated according to both baseline hsCRP (≤3 or >3 mg/L) and achieved LDL-C (<70 or ≥70 mg/dL) are shown in Figure 3.
- Rates of MACE were different among the 4 groups (P<0.001).
- The rates of hospitalization for heart failure and death from any cause were also related to both baseline hsCRP and achieved LDL-C levels (both P<0.001).

**Cardiovascular Outcomes by Baseline hsCRP Levels**

- Cumulative MACE incidence rates were related to baseline hsCRP levels and were highest in patients with hsCRP >3 mg/L (Figure 2).
- Similar, cumulative incidence rates of hospitalization for heart failure (Figure 2A) or death from any cause (Figure 2B) were related to both baseline hsCRP and achieved LDL-C levels (both P<0.001).
- Patients with baseline hsCRP >1 mg/L showed independent associations with future non-fatal MI, hospitalization for heart failure, and death from any cause compared to patients with baseline hsCRP <1 mg/L (Table 2).

**Conclusions**

- Levels of hsCRP were associated with recurrent cardiovascular events in patients with type 2 diabetes and recent acute coronary syndromes.
- This association appeared to be independent of and additive to the achieved level of LDL-C.
- The results indicate that patients achieving goal LDL-C targets of <70 mg/dL with statin therapy may benefit from residual cardiovascular risk assessment by the measurement of both hsCRP and LDL-C to assess residual cardiovascular risk.

**References**