Abstract: P827
EXPLORE-J: Lipid management and 2-year long-term clinical outcome in Japanese patients with acute coronary syndrome

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Background: The cardiovascular event rate in Japan is much lower than that in Western countries. However, the incidence of atherosclerotic CV disease and its burden are expected to increase in the Japanese society with rapid aging, westernization of lifestyles and metabolic derangement. An increase in patients with CAD has been remarkable in spite of various preventive measures. The positive linear correlation of LDL-C level with CAD incidence along with LDL-C lowering and CAD event reduction is established by large-scale studies in Western countries, but data in Japan are limited. EXPLORE-J, observational study, was conducted to gain insights into the relationship between LDL-C management and CV events in the Japanese ACS patients.

Purpose: The primary objective was to evaluate the status of post-ACS lipid management and CV events in Japan.

Method: ACS patients aged ≥20 years were enrolled and followed up for 2 years. The primary endpoint was the incidence proportion of major adverse cardiovascular events (MACE), including CV death (death associated with MI/stroke and other CV deaths), non-fatal ACS/stroke requiring hospitalization during the observation period. Other endpoints were medications and metabolic parameters. Additional stratified analyses of MACE incidence proportions by median LDL-C reduction category (above/below absolute or % reduction) from the first measurement after ACS to V1 (Day 1 ± 14 days) was also conducted.

Result: Of the 2016 registered patients, 1944 were analyzed. The mean age and BMI were 66.0 years and 24.2 kg/m², respectively. At 2-year follow up, the cumulative incidence proportion of MACE was 6.8%. The cumulative incidence proportions of CV death, non-fatal ACS and stroke were 0.7%, 4.5% and 1.7%, respectively. Statin, intensive statin, and ezetimibe were prescribed, respectively, to 93.6%, 8.2%, and 3.9% at V1, and 92.3%, 10.5%, and 11.6% at V5 (Day 730±30 days).

The mean LDL-C levels were 121.2, 99.4, 80.9, and 79.8 mg/dL at the first measurement after ACS, V1, V2 (Day 30±7 days) and V5, respectively. The proportions of patients who achieved LDL-C <70 and <100 mg/dL at V1 and V5 were 14.4% to 34.6% and 56.5% to 82.8%, respectively. The incidence rate of MACE was lower among patients with larger than median absolute reduction in LDL-C level than among those with smaller reduction (median -17.0 mg/dL; 5.5% vs 8.3%, p=0.0435). The same trend was observed in patients with higher LDL-C reduction rate (median -15.36%; 6.3% vs 7.6%, p=0.4302).

Conclusion: The results show the status of medical management and CV event rates in post-ACS Japanese patients. It also shows that half of the ACS patients did not achieve the recommended LDL-C levels of <70
mg/dL per guidelines, indicating the need to intensify lipid lowering therapy. To further characterize and quantify the patient population and the benefit of lipid management, we plan to conduct additional analyses with risk stratification of the population.

Kaplan-Meier estimates of MACE incidence