Reviewer’s report

Title: Does the low LDL goal improve survival for Acute Coronary Syndrome patients in Hong Kong?

Version: 2 Date: 13 June 2015

Reviewer: Michinari Nakamura

Reviewer’s report:

The current study demonstrates that stains were underutilized for patients with myocardial infarction (MI) in the local hospital in Hong Kong, and that lower LDL-C, especially with a cut-off value less than 2.4 mmol/L, is a significantly independent predictor for mortality in MI patients.

The current finding reveals the significance to achieve lower LDL-C in the specific race after the occurrence of MI. Thus, this paper is worthy. The biggest question for this reviewer is about the statin usage and LDL-C value. After multivariate analyses, statin is not an independent predictor for mortality, suggesting that statin usage and LDL-C may be confounding factors. The other lipid-lowering drugs rather than statins or life-style change may be more important. Thus, please provide more information on medications.

In addition, the authors mentioned that the patients who did not take statins at discharge had significantly less PCI treatment and lower LDL-C level during hospitalization. However, lower LDL-C is also shown to be a significantly independent predictor, but statin usage is not. This patient group may have achieved the goal of LDL-C cut-off value, but had worse clinical outcome. Please clarify and comment on this inconsistency.

Please discuss the reasons why all-cause mortality and hospitalization are significantly reduced in patients with statins compared to those without statins regardless of similar revascularization rate between two groups. Is cardiovascular disease-associated mortality rate also reduced by statin? If possible, please provide the information on causes of death.

Specific comments:

The detailed data regarding coronary artery disease (culprit lesion, multi-vessel disease, etc) and revascularization method (DES, graft etc) is missing.

Please describe the diagnostic definition of heart failure, hypertension, and diabetes.

Please describe the method to prescribe statins. Is there a criterion?

What kinds of statins were prescribed in this cohort? What was the dosage?

Minor comments:
Page 10, line 168-172; the data regarding hospitalization and revascularization is missing.

Were there any side effects of statins reported during follow-up?

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

no competing interests