Reviewer's report

Title: Clinical predictors of statins prescription in acute ischemic stroke patients: findings from the Lombardia Stroke Registry

Version: 2 Date: 6 October 2013

Reviewer: Cheng-Hsien Lu

Reviewer's report:

This is a clinical study to identify the factors influencing statins prescription by Stroke Unit physicians at hospital discharge. In this study, the authors try to the impact of demographic, risk factors, tPA treatment, in-hospital procedures and complications on statins prescription rate at discharge. We appreciate the amount of hard work that has gone into your study, but feel that the role of these biomarkers in the prediction of statins prescription rate at discharge can not be reliably assessed without controlling the other parameter of vascular risk factors (e.g. glucose, total cholesterol, HDL, LDL) and inflammatory biomarkers (e.g. high sensitive CRP), and blood pressure. The major shortcoming is its methodology. There are several concerns in this study which may influence the statistical results and have a statistical bias. First, this study only provide the categorical data of vascular risk factors (e.g. diabetes mellitus, coronary artery diseases, hypercholesterolemia, etc) rather than the level of the vascular risk factors (e.g. glucose, total cholesterol, HDL, LDL etc). Second, the usage of class and dosage of statin (e.g. Rosuvastatin, Simvastatin, Fluvastatin, and Vytorin, etc) depends on the preference of the attending physician, this may cause potential bias in statistical analysis and in drawing conclusions. The level of these biomarkers may be influence by other drugs (e.g. calcium channel blockers) or underlying conditions, which may cause potential bias in statistical analysis. Finally, the statistical results are too complicated and are hard to understand for the reader of BMC Neurology. Consequently, the conclusions that can be drawn are very limited.

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:
'I declare that I have no competing interests'