Reviewer's report

Title: Are patients with non-ST elevation myocardial infarction undertreated?

Version: 1 Date: 21 November 2006

Reviewer: Daniela Balzi

Reviewer's report:

General

The authors report their analysis aimed to compare treatment and prognosis in non-STEMI and STEMI patients. The question posed by the authors is not new and the study could be considered as a “confirmative prognostic factor study”.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

The higher unadjusted mortality in non-STEMI patients has previously been explained by a more pronounced co-morbidity and by a more frequent multivessel disease. In the present analysis the burden of comorbidity is restricted to history of MI, hypertension, dyslipidemia and diabetes, but there is no information about the number of diseased vessels or history of stroke, neoplasm, depression, which affect both the rate of reperfusion therapy and mortality. If this information is available in the data-set, a new analysis including such variables is suggested.

As stated in discussion an important limitation of the study is that STEMI patients could be transported to the hospital for reperfusion with primary PCI and this could introduce a selection bias (better prognosis for these patients?). In the analysis the variable “transport”, as well as pre-hospital delay could be introduced, if available.

At least, if the authors assess that a more favourable outcome in patients with STEMI is influenced by a different treatment strategy, why “treatment” is not introduced in the COX analysis?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests