Reviewer's report

Title: A new scoring system to stratify risk in unstable angina.

Authors:

Dr Alfredo C Piombo (apiombo@intramed.net.ar)
Juan A Gagliardi (jag@cardioweb.net.ar)
Javier Guetta (jguetta2000@yahoo.com.ar)
Juan J Fuselli (jfuselli@cemic.com.ar)
Simon Salzberg (simon.salzberg@roche.com.ar)
Enrique Fairman (efairman@intramed.net.ar)
Carlos A Bertolasi (hauc@intramed.net.ar)

Version: 2 Date: 6 Mar 2003

Reviewer: Erik Diderholm

Level of interest: A paper of considerable general medical or scientific interest

Advice on publication: Accept after discretionary revisions

(In the majority of my comments I cannot tell if the revision dshould be discretionary or compulsory. It depends on so many things as availability of data etceteras. Concerning the questions below it is hard for me to answer as 1. I do not have english as my mother language and 2. Acceptance must be based also on availability on other manuscripts)

Comments to the manuscript "A new scoring system to stratify risk in unstable angina".

This manuscript is essential for risk stratification in patients with unstable angina. As pointed out by the authors only a few studies have focused on risk stratification in relation to the combination of different risk factors. The methods are well described and the manuscript is well written. It presents an alternative risk model to the TIMI risk score and could have a clinical impact in the management of patients with unstable angina.

The balance and content of the title, abstract, method, result, discussion and conclusion are appropriate except for remarks below.

General remarks:

The method to use the first patients to construct the scoring system, and then prospectively validate it in another patient cohort is satisfactory. However, in my view, to perform an additional analysis in the total material is not statistically appropriate. I would prefer not to present this analysis.

This patient material deals with patients with unstable angina. However, in these patients the border definition to non-ST elevation myocardial infarction is diffuse. Therefore, many clinical studies, including some of the references in this manuscript, deal with patients with the combination of unstable angina and non-ST elevation myocardial infarction. According to a consensus document from 2000 (EHJ, 21, 18; 1502-13) any detectable elevation of troponin could be regarded as MI.
With this new definition a number of patients in this material actually have an MI. Although the definition of MI with CKMB in this manuscript is appropriate, I would prefer to have the unstable angina/MI issue addressed in the discussion due to the many comparisons with other studies (which use the combined patient cohort). See specific remarks page 3.

Although a substantial numbers of endpoints will occur during the initial hospitalisation, a scoring system based on outcomes during follow-up (6 or 12 months) would, in a clinical setting, be even more helpful.

Specific remarks:

Page 3: Last sentence. The troponin cut-off level used in the study, 0.1 ng/mL, is the most cited. However, this level seems high in respect of later published manuscripts (Morrow DA et al Jama. 2001;286:2405-12 and Heeschen C et al. Lancet. 1999;354:1757-62). Thus, by using 0.1 as cut-off, a number of patients with troponin leakage were not detected in this study. The rapid assay, having the advantage to save time also has its limitation which should be addressed in the discussion.

Page 7: 4th paragraph. In table 2, in 8 variables OR is shown. However, according to the text 10 variables are included in the multivariate analysis. Are previous MI and CRP > 10 mg/L included in the multivariate analysis? If yes, their odds ratios should be included in table 2.

Page 7: 4th paragraph, last sentence. Whether 0.76 reflects a good ability or not, to discriminate the risk in these patients, should not be in the result section. Move this to the discussion. Just give the result (0.76) and then perform the scoring system in accordance with the method.

Page 8: Last paragraph. I would prefer not no to use the word trend in this setting (p=0.12 and p=0.18).

Page 9. Second and third paragraph: I would prefer not to give all these statistical numbers. Just give the endpoint rates and one chi-square test for trend. Do not use a lower p value than 0.001.

Page 9. Last paragraph. If 0.72 is good or not should be in the discussion, not in the result section.

Page 10. Second paragraph, 6th line. Due to the low number of deaths, use the phrase death or MI, not death and MI.

Page 10. Third paragraph, 7th line. The TIMI risk score has been validated prospectively in the TACTICS trial.

Page 10. Last line. Although this is in the discussion, I would prefer not to suggest which of the 2 scoring systems is the best. Just give the advantages with the 2 systems and let the reader decide which one to prefer.

Page 11: 6th line from bottom. As there are bedside analysis available for CRP, delete this sentence.

Page 14: The conclusion section needs to be rewritten. Give the main results and present the factors in the score. Delete the first and the two or three last sentences as their content is obvious.

Competing interests:

None declared.