Reviewer's report

Title: Usefulness of N-terminal pro-B-type natriuretic peptide in patients admitted to the intensive care unit: a multicenter prospective observational study

Version: 1 Date: 9 December 2013

Reviewer: Andrew Udy

Reviewer's report:

REPORT TEMPLATE

Reviewer's report

The paper reports a prospective observational study of N-terminal pro-B-type natriuretic peptide in a large multi-center cohort of critically ill patients. This represents a sub-study within a larger investigation into the validity of SAPS 3 in the same population.

The authors demonstrate an association between elevated levels and ICU and hospital mortality, in both univariate and multivariate analysis. However, ROC analysis suggests poor discrimination when used alone to predict hospital mortality.

The study is presented adequately. The standard of English language is satisfactory, particularly in the setting of non-native speakers.

Major compulsory revisions

The enrolment of patients could be more accurately presented in a flow-diagram, for ease of interpretation by the reader.

A major issue for the clinician is really whether it is useful to measure NT-Pro-BNP in day to day clinical practice. Does the added expense of this test provide any real value? From these analyses, it would seem not, as the SAPS 3 score appears to perform more accurately. Would the authors recommend this be routinely performed? Does it help in the prognosis for an individual patient? This should be expanded on in the discussion to provide greater clinical context.

Level of interest

- An article of importance in its field

Quality of written English
- Acceptable

Statistical review

- No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests

I declare that I have no competing interests

What next?

- Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Open peer review

Submission of this report is taken as confirmation that you are happy for your signed report to be posted on the BMC Anesthesiology website as part of the pre-publication history of this article.