Reviewers report

Title: Postoperative troponin elevation is associated with high early mortality after lung resection for cancer

Version: 1 Date: 22 March 2006

Reviewer: Valerie Rusch

Reviewer's report:

General
This retrospective study evaluated the impact of elevation of serum troponin levels in 41 patients who underwent resection of primary lung cancer. The authors suggest that postoperative troponin elevation is an independent predictor of mortality postoperatively.

There are serious methodological problems with this paper. Because of the retrospective nature of the study, only 41 of 205 patients had serum troponin levels drawn postoperatively. Therefore there is no way that the study can arrive at valid statistical conclusions. The number of patients who had serum levels drawn is small and the number of patients who had elevation of those levels even smaller. It is quite possible that some patients within the remaining approximate 160 patient cohort would have had elevated serum troponin levels as well, without obvious clinical manifestations of myocardial ischemia. In addition, no information is provided about how patients were evaluated preoperatively from the standpoint of cardiac reserve. The authors state that some patients have a history of ischemic heart disease but there is no information provided about whether those patients underwent stress test evaluation. Not surprisingly, patients who had troponin elevation experienced the highest risk of death in the first six months postoperatively. This would be consistent with the known clinical course after myocardial infarction. It is surprising that patients who had troponin elevation do not appear to have undergone further evaluation of their myocardial ischemia postoperatively. Ordinarily such individuals would be submitted to cardiac catheterization or at least stress test evaluation. Therefore, the information provided in this manuscript can only serve as potential pilot data for a prospective investigation. They are not worthy of report in a manuscript.

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

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?: Reject as not of sufficient priority to merit publishing in this journal

Level of interest: Reject as not of sufficient priority to merit publishing in this journal

Quality of written English: Acceptable

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