Reviewer's report

Title: Factors Which Influence the Cardiac Surgeon's Decision Not to Operate on Patients Referred for Consideration of Surgery.

Version: 1 Date: 11 November 2007

Reviewer: Fernando Cesena

Reviewer's report:

General
1. The manuscript addresses an interesting subject about patients referred for cardiac surgery but turned down. This study may be important especially considering the delicate issue about surgeon’s decision to operate or not and publication of surgeon-specific mortality data.

It is well written and presented, but I think some questions should be clarified before acceptance.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. An important issue not well addressed refers to whether not operating is an independent predictor of mortality. Figure 3 is very illustrative but turndown group is composed by more severely diseased patients. Was any multivariate analysis performed (for instance, Cox regression, controlled for co-morbidities, left ventricular function or previous cardiac surgery)? I think the authors should mention this point and, if this analysis cannot be done, the reason(s) should be stated (for instance, small sample).

Another interesting analysis would be comparing survival curves in treated/turndown groups according to EuroSCORE. For instance, among patients with a given EuroSCORE range, are survival curves different for treated and turndown groups?

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. A period is missing after "Surgery was thought to be ineffective due to poor distal vessels" (page 6).

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Discretionary Revisions (which the author can choose to ignore)
1. It would very interesting to know in more details about the deaths in the turndown group. What is the cause of death, mostly heart failure, myocardial infarction, sudden death?
2. If possible, definitions for “renal dysfunction”, “respiratory disease” and “peripheral vascular disease” should be explained.

3. The discussion should be improved by adding some references. For instance, a reference may be placed after “patients who have most to gain from an operation in terms of increased life expectancy…”.

4. The meaning of “CABG” (Table 1) and “MI”, “EF” (Table 2) should better be placed on legends.

5. The conclusion should be improved, not just summarizing the results.

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

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.