Reviewer's report

Title: The impact of administration of tranexamic acid in reducing the use of red blood cells and other blood products in cardiac surgery.

Version: 2 Date: 11 April 2006

Reviewer: Valter Casati

Reviewer's report:

General

------------------------------------------------------------------------

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

1) The fact that the Mangano’s study has been published after the submission of the authors’ article is not sufficient to justify the avoidance of its citation in the Bibliography. It seems not so difficult to added it in the paper without to change in a substantially manner the paper, for example in the Discussion. Seen the important discussions raised by the publication of the Mangano’s paper, it is easy to foretell that in the future all the literature on antifibrinolytic drugs use in cardiac surgery will have the start point from the article published on The New England Journal of Medicine. Furthermore, more recent, another very important article, similar in the structure and in the conclusions of the Mangano’s paper, has been published by Karkouti et all on Transfusion (March 2006 pages 327-338), accompanied by an Editorial written by Jerrold H Levi. In my opinion the authors cannot totally ignore so important new information. In general, it is a precise duty of the authors to render the readers, particularly those less expert, “able to amalgamate” the information of the literature.

2) I understand that a new statistical analysis may be expensive for the authors, justifying the maintenance of the original analysis of the data (with all the intrinsic limits and bias which the authors must clearly address). What I don’t understand, and I consider erroneous, is the affirmation of the authors regarding the fact that the propensity score may be applied only in studies considering larger numbers of covariates.

3) It is totally unclear to me how, reading a paper having as argument the use of an anti-hemorrhagic drug, the readers may be “distracted” by a simple datum such as perioperative bleeding. It is not for “the reviewer benefit” (sic!) that the authors must report this important information in their paper!

------------------------------------------------------------------------

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 importance in its field
Quality of written English: Acceptable

Statistical review: No