Reviewer's report

**Title:** Does Prophylactic Sotalol and Magnesium Decrease the Incidence of Atrial Fibrillation Following Coronary Artery Bypass Surgery: A Propensity-Matched Analysis

**Version:** 1  **Date:** 1 February 2006

**Reviewer:** Nizar Yonan

**Reviewer's report:**

Comment:
1. It is a retrospective analysis of one surgeon practice.
2. This subject is well researched. Beta blockers use post-operatively is considered as level of evidence "A" by the published ACC/AHA guidelines. The use of sotalol has been shown in previous studies (McGovern B, et al and Gulamhusein S et al) to have a beneficial effect on incidence of AF. However, a large study by Suttorp MJ, et al have failed to show advantage for sotalol over other beta-blockers.
3. The combination of sotalol and Magnesium have been studied in a larger well designed randomised clinical trials. In a randomised trial of over 200 patients, it was found to be beneficial (Forlani et al. Ann Thorac Surgery 2002;74;720-726). The other randomised trial was by Geertman et al (J Cardiothoracic Vasc Anesth 2004;18;(3);309-12) in this study, the combination was found to be not more effective and may induce serious bradyarrhythmias.
4. I believe this study does not add to the current literature. It is certainly of interest if it was conducted as large randomised trial.

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

**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:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.