Reviewer’s report

Title: Meta-Analysis of Randomized Controlled Trials on Magnesium in Addition to Beta-Blocker for Prevention of Postoperative Atrial Arrhythmias after Coronary Artery Bypass Grafting

Version: 2 Date: 10 November 2012

Reviewer: Fausto Biancari

Reviewer’s report:

The authors reported the results of a meta-analysis providing evidence of the lack of effect of magnesium in preventing postoperative atrial fibrillation after coronary artery bypass surgery. The manuscript is nicely written and data accurately reported. I have a few comments:

Major compulsory revisions:

1. Introduction: the first and second sentences repeat the same concept: the authors could delete the first one.
2. Postop. stroke is the major complication related with postop. atrial fibrillation (Lahtinen, Ann Thorac Surg). This should be added to the Introduction section.
3. Corticosteroids have been evaluated to reduce the risk of postoperative AA. Please add this information to the Introduction section.
4. The authors should report details regarding their criteria for defining heterogeneity.
5. “For the outcome of interest (occurrence of AA after CABG), odds ratio (OR) with 95% CI was used.” The authors should report also this endpoint as risk ratio.
6. “The combination of magnesium and beta-blocker group was higher than beta-blocker alone group in the risk of postoperative adverse events”: please rephrase this sentence.
7. “Limitation of our study include limitations inherent in any retrospective analysis”: this is not a retrospective study!

Minor Essential Revisions:

None

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

I declare that I have no competing interests