Reviewer's report

Title: Biological efficacy of low versus medium dose aspirin after coronary surgery: results from a randomized trial [LREC 01/624]

Version: 2 Date: 5 March 2006

Reviewer: Christian von Heymann

Reviewer's report:

General
Dr. Lim and colleagues report on the efficacy of low dose versus medium dose of aspirin to inhibit the aggregation of platelets after cardiac surgery. This study was well conducted and offers interesting results.

There are no major Compulsory Revisions.

Minor revisions:

1. Were all patients consecutively assessed for eligibility in the study period (2002-2004)?
2. Please provide the platelet count in each group at baseline. If the platelet count was different, please comment on how this could have affected the results.
3. Did you use buffered or unbuffered citrate within the collection tubes?
4. Did you standardize the number of platelets in PRP before (e.g. at 250/nL) starting the aggregometry measures?
5. I assume that all patients were awake at baseline of the study. Please comment on the rationale to exclude patients being still on the ventilator.
6. Please report on the use of inotropes, nitrates and other vasoactive substances in the study patients, which may also have affected platelet function.
7. In terms of efficacy, clinical outcome data (although the reviewer acknowledges the low power for these endpoints) e.g. rate of myocardial infarction, proven graft occlusion would be extremely interesting to the reading community.
8. Furthermore, did the dose of aspirin influence chest tube output?
9. This reviewer agrees with the conclusion that low dose aspirin was equally effective to inhibit platelet aggregation as medium dose aspirin. In regard of clinical efficacy, is a 36% or 37% reduction in aggregation worthwhile to be considered clinically effective?

Discretionary revisions.

1. Please report on the co-medication of the patients, e.g. unfractionated heparin, NSAID's, prostaglandins, theophyllin etc.

Which journal?: Appropriate or potentially appropriate for BMC Medicine: an article of importance in its field

What next?: Accept for publication in BMC Medicine after minor essential revisions

Quality of written English: Acceptable

Statistical review: No
Declaration of competing interests:

I have no financial or non-financial competing interest related to the presented data.