Reviewer’s report

Title: Efficacy of tranexamic acid in reducing blood loss in posterior lumbar spine surgery for degenerative spinal stenosis with instability: a retrospective case control study

Version: 4 Date: 14 September 2011

Reviewer: Jean Wong

Reviewer’s report:

Minor Essential Revisions

Abstract, results

1. The hemoglobin is higher in the tranexamic gp than control, suggesting less blood loss, the conclusion should be revised to include this.

2. The authors state that the "intraoperative cell saver volume demonstrated a significant difference..but this was in favour of the control group.."

If they are referring to the total blood loss in the cell saver, this would indicate less blood loss in the tranexamic gp than the control gp, which would be in favour of tranexamic acid. Please clarify.

Major Compulsory Revisions

4. Discussion, the authors need to consider blood loss, as reflected by hemoglobin change separately from transfusion and to revise the discussion to reflect the higher hemoglobin in the tranexamic acid gp suggesting less blood loss. Given the relatively small volume of blood loss in the patients in this study, it is underpowered to show a difference in transfusion rates. A much larger sample size would be necessary, this needs to be clearly stated as limitation of this study.

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

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

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

Declaration of competing interests:

I declare that I have no competing interests.