Reviewer’s report

Title: Remifentanil ameliorates intestinal ischemia-reperfusion injury

Version: 1 Date: 28 November 2012

Reviewer: Carlos Medina Martin

Reviewer’s report:

Re: ‘Remifentanil ameliorates intestinal ischemia-reperfusion injury ’
Steven SC Cho, Ina Rudloff, Philip J Berger, Marcel F Nold, Michael G Irwin, Wei Cheng and Claudia A Nold-Petry

1. Is the question posed by the authors well defined? Yes
2. Are the methods appropriate and well described? Yes
3. Are the data sound? Yes
4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes
5. Are the discussion and conclusions well balanced and adequately supported by the data? Yes
6. Are limitations of the work clearly stated? No
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? Yes
8. Do the title and abstract accurately convey what has been found? Yes
9. Is the writing acceptable? Yes

Please make your review as constructive and detailed as possible in your comments so that authors have the opportunity to overcome any serious deficiencies that you find and please also divide your comments into the following categories:
- Major Compulsory Revisions

Dear Editor,

In this study, authors show that Remifentanil is useful in the management of intestinal ischaemia/reperfusion in mice by assessing histological damage, MDA and IL-6. This is a commendable aim as there is little known on the treatment/preconditioning of this disease with severe consequences. Although the subject matter of the paper is of interest, the main concern is that some of the data sets seem rather preliminary and mechanistic studies are completely absent. Overall, this study does not provide a solid insight into the action of Remifentanil on intestinal ischemia/reperfusion. More studies should be carried out in order to elucidate how remifentanil works in this condition, for instance any affect of the drug on MAPK phosphorylation.