Reviewer’s report

Title: Regional sympathetic blockade decreases endotoxin-induced endothelial injury

Version: 1  Date: 10 February 2014

Reviewer: ulrich schmidt

Reviewer’s report:

Major revisions
The manuscript by Enigk et al covers a very interesting and controversial topic mainly the effect of regional sympathetic blockade on endotoxin induced endothelial injury. Overall the paper is very well written and the experiments are very well performed

• Given the potential mechanism for the effects of TEA as reduction in plasma concentration of epinephrine, it seems important to test this hypothesis. This could be performed by infusing epinephrine in healthy animals and measuring the most significant endpoints of the current study. A saline infusion could be the control. I do not expect the authors to repeat all the experiments and include epinephrine infusion as a fourth group.

• The authors should consider to measure serum lidocaine concentrations during epidural infusion. This would provide a stronger argument that the observed effects are not a direct effect of the local anesthetic

• The statistical section should be expanded. The authors should explain why they performed one way analysis. For some of our readers it would be important to explain why the authors performed certain test. (For example why did the authors perform a Dunns test and not perform all possible comparisons)

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

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