Reviewer's report

**Title:** Soluble receptor for advanced glycation end products as an indicator of pulmonary vascular injury after cardiac surgery

**Version:** 1  **Date:** 8 May 2013

**Reviewer:** Shu Qiang

**Reviewer's report:**

The authors present the results of biochemical associations with the development of pulmonary vascular injury following cardiac surgery. Some minor points need to be elucidated here.

**Abstract**
- The authors investigated the relationship of plasma sRAGE levels and the development of lung vascular injury after cardiac surgery, so they could not conclude that the lung vascular injury after cardiac surgery was mediated by sRAGE.
- Is keyword “TRALI” necessary? And it is not shown in the list of abbreviations.

**Methods:**
- The section is somewhat disorganized and can be more organized.
- Some definitions need to be more precise.
- The details of the cardiothoracic surgery/anesthesia procedures, and the assays procedure can be in an addendum but the details regarding the potential risk factors for ALI score and biomarker need to be in more detail.
- The statistical review needs to be more precise.

**Results:**
- There are many details which need to be better organized.
- Graphs can be used for sections such as the relationship.
- Since these data are exploratory, the authors need to perform a logistic regression to adjust the confounder factors with the outcome elevated PLI; and the parameters presenting potential risk factors for ALI, such as operation time should be built into the model.

**Discussion:**
- The conclusion in relatively weak and nonspecific.
- The discussion sections need to be more cohesive.

**Level of interest:** An article of importance in its field
Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
'I declare that I have no competing interests