Reviewer's report

Title: Comparison of the effect of LPS and PAM3 on ventilated lungs

Version: 2 Date: 2 March 2010

Reviewer: Graeme Zosky

Reviewer's report:

The authors have adequately addressed most of my comments however there are some points that still require clarification.

Compulsory revisions

I think there is a misinterpretation of what I meant by paralysis i.e. paralysis does not occur with ketamine and xylazine. In some studies an additional paralysing agent is used (usually pancuronium bromide) so that the mouse does not breath during the lung function measurements. The statement you have now included that refers to paralysis is not correct unless you used a paralysing agent. I also think there is an error in the doses of ketamine and xylazine that you quote – the mg/kg values you give cannot be correct (recommended dosages are usually around 100 mg/kg for ketamine)

I am pleased to see that the additional parameters based on the forced oscillation technique have now been included in the manuscript. These data clearly demonstrate that the changes in total lung resistance reported were a result of changes in the peripheral airways (as indicated by changes in tissue damping). However, there is still a lack of detail regarding the procedures for measuring lung function i.e. there is no mention of the forced oscillation technique, the type of perturbation used (i.e. duration and frequency content) or the volume displacement of the measurement. This needs to be rectified.

Can you please indicate in the “Statistics” section all of the tests that were used i.e. ANOVA and ANOVA on ranks. Also you need to indicate what test was used to compare values at the beginning and end of the experiment – was this simply a paired t-test?

Minor essential revisions

Spelling of eosin in “histological measurements”

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

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