Reviewer's report

Title: High Throughput Modular Chambers for Rapid Evaluation of Anesthetic Sensitivity

Version: 1 Date: 5 October 2006

Reviewer: Helen F Galley

Reviewer's report:

General

-----------------------------------------------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

-----------------------------------------------------------------------------------

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Authors designed and tested a controlled environment to allow the rapid phenotyping of 24 mice by assessing loss of righting reflex (LORR) in response to several volatile anaesthetics.

In general this paper was well written with thoughout, with good experimental design and data analysis.

Minor essential revisions

1. Page 4 line 7. Authors state “that no genetic studies have investigated particular phenotypes of mice that exhibit altered emergence patterns following general anesthetics”. However, although they mention the Simpson et al study using ILS & ISS mice that have identified a QTL for propofol, they fail to mention the Lowes et al study which identified the genes potentially responsible. This is a genetic study on mouse phenotypes and so the comment above should be revised.

2. Page 5 and 7 the term “anasthetics dissolved in oxygen” should be reworded as "anesthetic in oxygen". Some comment should be made of the use of 100% oxygen- this is not normal practice.

3. Page 6 line 9. Figure 3 shows recovery of LORR not total anesthetic dose as described in text. Please correct.

-----------------------------------------------------------------------------------

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

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

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests