Reviewer's report

Title: Methodological quality of systematic reviews of animal studies: a survey of reviews of basic research.

Version: 1 Date: 20 October 2005

Reviewer: Colin West

Reviewer's report:

General

This paper presents a survey of methodologic quality of systematic reviews of animal studies. The idea that these results impact future human studies is intriguing, and suggests a sort of research bias I had not previously considered. As such, this is of general scientific interest. However, some mention of any known links between animal study reviews and human studies would solidify this argument. Currently, many or most of the animal results affecting future human studies may be unpublished data, and therefore unavailable for this review or for the systematic reviews discussed in this paper. One could hypothesize that such unpublished data is unlikely to be of higher quality than what is represented in this paper, though.

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

1. I think the standards used to assess methodologic quality of a systematic review should be stated clearly in the Methods. One could use criteria from the JAMA Users' Guides series, or from another source, but a source and listing of the key methodologic criteria would help the reader and make it clear that the selected features for review were chosen from accepted resources. As it stands currently, this could simply be one author's opinion of what should be in a systematic review, even if what is in this paper seems reasonable.

2. It is unclear what the criteria are for "good" versus "bad" evaluations of the various quality elements. This should be discussed in the Methods, even if only briefly.

3. The evaluation of these quality measures appears to be based on one author's review, and in general this could be strengthened by showing agreement with an independent reviewer's evaluations (standard procedure for systematic reviews, and a limitation of many of the studies critiqued in this paper).

4. Please address how bench studies were selected "randomly" -- this is part of being systematic in your review of systematic reviews!

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

5. Change "administrated" to administered in multiple locations.

6. In Introduction, "... basic research to [the] bedside."
7. In Methods, "... performed search of a [publicly] available ..."

8. There is a duplicate "were less prone to bias" in Results section.

9. I would add a comma after "studied" and before "risking" in the Discussion.

10. In the Acknowledgments, I would change the final sentence somehow. Perhaps "... who provided assistance with literature searches."

11. The tables have some formatting issues in the print versions I received.

Discretionary Revisions (which the author can choose to ignore)

12. The authors could consider a bit more on limitations of their own study in the Discussion.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.