Reviewer’s report

Title: Ethical Arguments Concerning Human-Animal Chimera Research: A Systematic Review

Version: 0 Date: 06 Aug 2019

Reviewer: Reviewer 2

Reviewer's report:

"PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

Yes - the approach is appropriate

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

No - there are major issues

STATISTICS - Is the use of statistics in the manuscript appropriate?

N/A - there are no statistics in this study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

No - there are minor issues

OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?

Maybe - with major revisions
This manuscript provides an overview of the ethical arguments concerning human-animal chimera research systematically. While this is the first attempt to conduct a systematic review in this area, and I very much enjoyed reading it, the manuscript is not suitable for publication in its current form. In particular, the authors do not include non peer-reviewed publications for systematic review based on the assumption that "pertinent bioethical arguments tracking the fast-paced development in novel scientific fields such as chimera research are reliably represented in original articles published in peer-reviewed journals" (on page 6-7). However, as the authors include the peer-reviewed publication between 2003 and 2017, the assumption should be reconsidered since this is not the case with this topic, at the very least.

REQUESTED REVISIONS:

In the manuscripts, the authors "focused exclusively on original, academic publication in international, peer-reviewed journals, excluding reviews, editorials, guidelines, opinions, position papers, newspaper articles, surveys, letters, monographs and anthologies" based on "the assumption that pertinent bioethical arguments tracking the fast-paced development in novel scientific fields such as chimera research are reliably represented in original articles published in peer-reviewed journals" on page 6-7. However, this is not the case with the ethics of human-animal chimera research. Indeed, there are some critical non peer-reviewed publications which the authors did not include. Here are examples:


So, the way the authors currently described does not adequately and comprehensively illustrate the reasons presented in this debate. The authors may wish to reconsider non peer-reviewed publications to include for their systematic review. Otherwise, they should emphasise that this is a kind of systematic review, but it seems not comprehensive since they did not include some non-peer-reviewed publications. The authors may consider a recent paper that provided an overview of the reasons presented in the future clinical application of germline genome

Also, the authors may fail to include a target article and open peer commentaries which were published in the American Journal of Bioethics in 2014 (see https://www.tandfonline.com/doi/full/10.1080/15265161.2013.868951), even though they all were international peer-reviewed publications. The authors should confirm that there are no omissions.


In this context, the authors may wish to include another table of "All included articles by reference number" which make it more accessible to readers if the journal allows to add it.

ADDITIONAL REQUESTS/SUGGESTIONS:

The authors appropriately note that the reason why Category C is the most heavily debated one may be an "editorial artefacts" since an article on moral confusion was published as a target article in AJOB and had about twenty open peer commentaries. However, the authors do not mention that another target article on moral confusion was published in the same journal in 2012 and had five open peer commentaries. This needs to be appropriately presented.

Finally, in Limitations of data section on page 21, the authors may wish to include that some critical articles in this field have been recently published but restricted to articles between 2003 and 2017 for their review. Here are examples:


Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No
**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

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