**Reviewer's report**

**Title:** Recent Efforts to Elucidate the Scientific Validity of Animal-Based Drug Tests by the Pharmaceutical Industry, Pro-Testing Lobby Groups, and Animal Welfare/Three Rs Organisations.

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**Reviewer:** Rebecca Walker

**Reviewer's report:**

This paper keeps an important issue in animal research ethics in the limelight by reaffirming the need to justify the use of animals in drug testing regimes. The authors' work in this field is ground-breaking and commendable.

Nevertheless, the paper suffers from some flaws that make it difficult for a general audience to digest. For example, the authors spend quite a bit of time up front discussing a back and forth about their previous work and its criticism, which is frustrating for the reader. It would be better to set the stage more simply and directly for the current paper and argument. In general, the structure and presentation of the argument would be improved by a more nuanced and accessible approach to the reasons on each side of the debate. For example, the authors claim, "Our analyses indicate that, if a drug appears safe in animals, it could very well still be toxic in humans. As such, any claim that animal safety tests do a "good job" of predicting drug safety profiles, is without foundation." Leaving aside the authors' argument for their substantive point, is it not still the case that drug testing in animals is valuable for human safety if it shows toxicity in animals? Other authors, such as Aysha Ahktar (2015) also take on this question, but it is left unexamined here. Indeed, the authors seem so focused on defending their previous work and undercutting the arguments of the other authors they examine that the paper fails to paint a broader, more approachable, picture of the main issues at stake in animal drug testing.

Overall, while not doubting their scientific objectivity in the least, it seems the authors are invested in a particular perspective on this issue that will appear similarly 'biased', in opposing valence, to that of the drug industry whose work they examine. It might best be published with a 'rebuttal' by Monticello et al.
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