Reviewer’s report

Title: Why genomics researchers are sometimes morally required to hunt for secondary findings

Version: 1 Date: 30 Nov 2019

Reviewer: Tina Rulli

Reviewer's report:

I have 3 comments-- two are very minor. One is more important. I recommend acceptance of the paper, at the Editor's discretion.

Minor comment #1:
Objection 4. In this section the authors speak of individual and institutional duties to rescue, defending them against the view that these duties should be collective. But earlier in the paper, the authors have added a caveat that says they are focusing only on institutional duties to rescue. This requires at least minor fix to make the paper consistent. A) maybe just delete reference to individual researcher duties here. B) But maybe it's worth thinking about whether institutional duties to rescue are in fact a type of collective duty to rescue. That's not obvious to me, but what is the difference? The answer to this question could change how the authors want to deal with this inconsistency. They might, for instance, concede that they are arguing for a collective duty.

Minor #2: in the Conclusion—authors state that they have *argued* that the duty to rescue does not currently establish a moral obligation to hunt for secondary findings. They haven't really argued this— they've conceded it. But they have argued that once these barriers are reduced, there could be a duty to search. Very minor fix required.

Bigger concern:
The probability of an individual having a gene variant on the ACMG's 56-gene list is 1.7%, according to one estimate the authors cite. This seems like a very low probability per individual. Does it give rise to a duty to search for such findings— e.g. does the expected utility (the probability times benefit) generate a duty that proportionally outweighs the cost to researchers? This also raises the question of what the harms of the 56 variants are. If they are all deadly and actionable, then maybe this raises the expected utility to the appropriate threshold. That's not obvious to me--but it's the best case scenario for a duty to rescue. The authors do not explicitly discuss these issues. The low percentage leaves some doubt in my mind. One thought is that researchers might systemically seek for such findings across a lot of people, thus raising the probability of such a finding; but then this also raises the cost to them. More explicit discussion of how this seemingly low probability works in the expected utility calculus to generate a duty to rescue would make the argument more compelling and ward off a fairly obvious objection that the probability of finding an important result if sought is simply too low to generate a duty to rescue. It is suggested here that as we increase our knowledge of gene variants, the odds will rise. Are the authors suggesting that this is one of the reasons that researchers do not currently have a duty to seek findings? How likely is it that the odds will rise high enough to generate a duty to rescue?

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

Yes
Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

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

Yes

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:

Acceptable

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