Reviewer’s report

Title: Pharmacogenetic testing through the direct-to-consumer genetic testing company 23andMe

Version: 0 Date: 12 Feb 2017

Reviewer: Roxana Daneshjou

Reviewer's report:

This is a clinically useful paper - many physicians often ask about which 23andMe results are useful. However, this paper strikes me more as a review than original research - there is no set hypothesis tested or original findings.

Recs:

- There is no statistical testing done when discussing the differences in allele frequencies for different ancestries. Many publicly available data sources such as the Exac Browser provide allele counts which could be used to statistically show which variants have ancestry-based differences.

- Any differences between what 23andMe reports in the UK vs elsewhere?

- Might be useful to pull in the actual CPIC information on drugs covered, particularly ones that have different treatment regimens as a result of genetic data. (Another column on Table 1)

- Could you comment on how this data might be incorporated in a clinical encounter? Would the physician place the 23andMe results in a chart, or would they require validation/retesting?

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.

Unable to assess
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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