Author's response to reviews

Title: Systematic analysis, comparison, and integration of disease based human genetic association data and mouse genetic phenotypic information.

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Version: 4 Date: 30 November 2009

Author's response to reviews: see over
December 1, 2009

Editor, BMC Medical Genomics:

We would like to submit the revised manuscript Zhang et al. “Systematic analysis, comparison, and integration of disease based human genetic association data and mouse genetic phenotypic information” for publication as an article in BMC Medical Genomics.

We again appreciate the reviewer’s effort on this manuscript and feel that the changes we have made in light of the reviewers comments have strengthened the manuscript and the project.

The first reviewer did not ask for any changes. We have made all the corrections asked for by the second reviewer. These are detailed attached to the bottom of this letter.

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Sincerely,

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Reviewer's report

Title: Systematic analysis, comparison, and integration of disease based human genetic association data and mouse genetic phenotypic information.

Version: 3 Date: 6 November 2009 Reviewer: Bing Zhang

Reviewer's report:
The manuscript has been improved in the revision. However, there are still a few issues.

First, I am still not convinced that the manuscript has provided enough evidence to support the human-mouse comparison highlighted in the abstract, i.e. “Human and mouse disease and phenotype based gene sets are identified and compared between human disease groups and between species, using systems approaches”, and “…on the genetics of common human disease as compared to itself and in the context of mouse genetic models of disease”. I feel these are somewhat misleading as the systematic human mouse comparison is performed in another manuscript as mentioned by the authors. It is completely appropriate to discuss potential applications in the discussion section, but potential applications should not go to major conclusions in the current manuscript.

THE WORDING IN THE ABSTRACT HAS BEEN CORRECTED TO REDUCE CONFUSION:

FROM THIS:

“Human and mouse disease and phenotype based gene sets are identified and compared between human disease groups and between species, using systems approaches.”

TO THIS:

“Human and mouse disease and phenotype based gene sets are identified. These disease gene sets are then compared individually and in large groups through dendrogram analysis and hierarchical clustering analysis.

Second, the manuscript still requires careful editing, some of which is specified below:

1. In Abstract, “phenoypically” should be “phenotypically”;
   THIS HAS BEEN CORRECTED
2. Page 14, “perlscript” should be “perl script”.
   THIS HAS BEEN CORRECTED
3. For the description of the Fitch and Margoliash method, it is better to replace “species” with “gene sets” to fit the context better.
   THIS HAS BEEN CORRECTED
4. The headings are very confusing, e.g. “Summaries of genes and phenotypes in human and mouse” is bold while “Summaries of phenotypes and genes in human and mouse” is italic. “Group analysis of GAD disease gene sets between major classes of disease/phenotypes” and “Dendrogram analysis of human disease gene sets” are two levels and should be
Level of interest: An article of importance in its field

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

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests: I declare that I have no competing