Reviewer’s report

Title: Muscle Research and Gene Ontology: New standards for improved data integration.

Version: 4 Date: 29 October 2008

Reviewer: Yugyung Lee

Reviewer’s report:

Some of reviewer’s comments were well addressed. However, I still see the serious limitation of this paper in terms of the lack of scientific rigor and validity in methods and evaluation about their work. Specifically, the authors made bold statements without being provided supporting empirical data or justifications. This manuscript must address and foresee any side effects due to the changes or additions. This should be fully analyzed in terms of within concepts within ontology, across ontologies, and relationships with annotated gene productions, etc. In addition, how the new child terms can help our understanding of normal muscle pressure and muscle pathological conditions should be elucidated with some examples.

For more valid design and evaluation, they will have to follow scientific approaches to collect relevant information for identifying the new areas and for evaluating the new standards. For example, these authors introduced just few articles to justify the proposed model. However, a more systematic approach may need to retrieve consensus on the proposed model.

The description of the results of this work in the text and Figures still needs improvement. Figures should have detailed scheme to support the conclusion.

Regarding related work, using the Pubmed search engine, “gene ontology muscle”, there are 64 publications. Many of them are published in 2008. The authors have not fully reviewed relate work.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Not suitable for publication unless extensively edited

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 interests.