Reviewer’s report

Title: CVE: an R package for interactive variant prioritisation in precision oncology

Version: 0 Date: 17 Nov 2016

Reviewer: Yaodong Hu

Reviewer's report:

Manuscript "CVE: an interactive R package for variant prioritisation in precision cancer medicine" reported a software package that is able to explore cancer variants using high-throughput sequencing data. This manuscript is well documented, and examples and supplementary files introduced to illustrate different functions of the package are appropriate. However, there are some key questions to be addressed before this manuscript to be considered for publication. Please consider the following addition to your manuscript:

1. Are there any tools with similar jobs that have been developed/implemented already? Please list.

2. If there are similar tools around, what are the forms of these tools? E.g., are they add-on packages for some programming language such as an R package or a Python module; or are they independent softwares that need to be installed such as .exe for Windows or .pkg for Mac; or are they just a website with some searching engine behind?

3. If there are other implementations, what are the advantages/disadvantages of your work? For example,

   1) Does your implementation consider more resourcing databases?

   2) If there are some Python implementations with similar jobs, it is expected for the Python implementation to win on speed. Then what are the advantages of your implementation?

4. If there are other implementations, it will be great to have some benchmarking comparisons, perhaps listed in a table, on some of the key aspects. For example,

   1) Accuracy of the results;

   2) The number of resourcing databases to be considered;

   3) The responding time on the user interface;
4) Other aspects such as graphical functionality, compatibility of output file with other commonly used tools in bioinformatics, etc.

**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

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?
5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal