Reviewer’s report

Title: Transcriptome sequencing of lncRNA, miRNA, mRNA and interaction network constructing in Coronary Heart disease

Version: 1 Date: 26 May 2019

Reviewer: David Tan

Reviewer's report:

The revised manuscript has improved but the authors have failed to address one of my major criticism regarding the novel transcript CTA-384D8.35. The authors correctly identified the coordinates of the overlapping transcript (TCONS_00029745) however no additional work was performed to determine if both refer to the same transcript. Rather the authors blindly state that they believe CTA-384D8.35 and TCONS_00029745 are unique without providing any supporting evidence. Given that CTA-384D8.35 overlaps and extends on exon 2 of TCONS_00029745 I argue that there is a good chance both annotations are derived from the same transcript or alternatively are transcript isoforms of the same gene. As previously mentioned the authors could examine their RNA-Seq data with established pipelines (stringtie or cufflinks) or even just visually examining the reads through IGV. As the RNA-Seq data will not be available for analysis after publication I believe this information should be made available for the research community. For TCONS_00029745 to be part of CTA-384D8.35 I would expect an equal proportion of read alignings the first exon with reads supporting the splice junction. If the authors want to perform a comprehensive analysis of these transcripts they could perform additional qPCR across the splice junction. The results of these suggested analysis should be presented and discussed. I recommend this to be completed before considering the manuscript for publication.

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.

No
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.

I am able to assess the statistics

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 organisation 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