Reviewer’s report

Title: Characterization of Mycobacterium tuberculosis isolates from Hebei, China: genotypes and drug susceptibility phenotypes

Version: 0 Date: 01 Dec 2015

Reviewer: Anuj Kumar

Reviewer’s report:

"Charactering Mycobacterium tuberculosis isolates from Hebei, China: genotypes and drug susceptibility phenotypes"

The article is a good study elucidating genotypic profile of Mycobacterium tuberculosis isolates of China. However, the study needs key messages to be sent and can provide valuable information if the authors can clarify following points.

1. What significance author derived from genetically diverse MTB strains found in this province? Is there a mixture of different lineages, authors think, that have been descendant through the evolution or due process of population migration?

2. The authors found 90% of the isolates with Beijing family by spoligotyping, but these isolates don't have any specific drug susceptibility pattern among them or as compared to non-Beijing ones. How do the authors think Beijing strains have some clinical importance?

3. On one hand the authors think it is biased, mentioning "no significant difference was found in any drug resistance between the Beijing and non-Beijing genotypes. The results were probably biased by the small size of the non-Beijing family strains....". On the other hand they consider is right "several studies viewed that the Beijing genotypes were no more likely to acquire drug resistance than the non-Beijing genotypes, consistent with our finding..". The authors should clarify, which of the above two they think is more appropriate to conclude.

4. MIRU VNTR didn't form any pattern. Only 25.1% isolates could lie in the clustered, that too in 84 different clusters. 74.9% isolates didn't lie in any cluster and showed individual pattern. What does that signify? What is the role of MIRU-VNTR here and how it is useful then? What could it tell?

5. Did you get MTB cultures from all of the enrolled 1017 patients? No one was culture negative?

6. At last, the article is written in improper English language. It is advised that it should be re-submitted after proper English language correction.

7. The manuscript can be considered for publication after clarification / explanation of the above mentioned points and those included in the manuscript.
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.

No

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 recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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