Reviewer's report

Title: Impact of antiretroviral treatment on height evolution of HIV infected children

Version: 0 Date: 10 Jun 2019

Reviewer: Vu Linh Dang

Reviewer's report:

Dear authors,

It has been pleasure to read your manuscript, there are certain strong points of the manuscript especially the numbers of patients involved, which is 477 children that not many papers could have been accessed to that amount of data. However, there are certain points that could be taken into consideration:

1. The cohort of patients are quite similar in HIV viral load and many papers have been shown the strong association between HIV viral load and relative height, more over this is the crucial marker for the monitoring of disease progression and treatment response. Given that this marker is similar to most of the patients at the time of diagnosis, so that it is understandable that this marker did not play any role in model. However, if the original cohort is not representative of the HIV pediatrics population then the model cannot be applicable.

2. During the time followed up, patients would have changed the treatment regimen several times, so that ART regimen should be analyzed in more appropriate way.

3. Most of the covariates of interest should be monitored periodically so that the model could represent better the changes of relative height in relation to these covariates, otherwise the base line levels could not represent the whole changes during the treatment response.

4. There have been lost of follow-up in substantial numbers of children

5. The model should be represented the changes of other markers in association to the HAZ of HIV infected patients, however, this model has not been fully identify this association and it is difficult to have the application in clinic.
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.

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.

I recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Acceptable

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