Reviewer’s report

Title: The Impact of HAART Initiation Timing on HIV-TB co-infected patients, a retrospective cohort study

Version: 5 Date: 3 March 2014

Reviewer: Weerawat Manosuthi

Reviewer’s report:

This retrospective study aimed to examine the timing of ART initiation on survival of HIV-TB co-infected patients in Taiwan. Although there are several randomized control trials so far, there are some interesting issues from this paper. Please find my comments as below.

Major comments

1. Overall, the introduction, results and discussion sections of manuscript are relatively lengthy, including the abstract part. The author can concise all parts without compromising main contents.

2. The major limitation of the study is that there are many missing factors in this study that affected the survival of HIV-TB patients, such as co-opportunistic infection, Karnofski score, so on. Please discuss more and mention this issue in the discussion section. The author did try to sub-analyze TB-related mortality, apart from all-cause mortality, but no detail is shown.

3. Is there any difference in term of all baseline characteristics between the patients who had started ART and never started ART? And between the patients who did and did not have CD4 cell counts. If so, they could be some bias of the study due to retrospective study design.

4. In multivariate analysis of death (table 3), please give the reason that why there were only 4 parameters included in the models. And add more detail in the method section.

Minor comment

5. Please show P values on both survival graphs and add proportion number on each line. For TB IRIS graph, instead of use “proportion of not having TB-IRIS”, I suggest to use “proportion of TB IRS” and display graph as time to event instead. It is easier for the reader to follow.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

No conflict of interest.