Reviewer's report

Title: Non-conversion of sputum culture among patients with smear positive pulmonary tuberculosis in Cameroon: a prospective cohort study

Version: 1 Date: 27 October 2013

Reviewer: Wei-Juin Su

Reviewer's report:

The authors analyzed 86 cases of sputum positive PTB without smear conversion at the end of initial phase of anti-TB treatment, and claim that the major finding of the manuscript is absence of hemoptysis and current smoking is the two main determinants of sputum non-conversion. The main basis of the conclusion is that failure rate is high among patients with positive sputum culture after intensive treatment, even in the absence of multi-drug resistant bacilli. However, high failure rate from culture-non-conversion cases among persistent S(+) cases is understandable. The main problem of this study is the authors only enrolled S(+) cases for analysis. How many are S(-)/C(+) at the end of the intensive phase? The cases with S(-)/C(+) are important covariant factors to the failure rate, thus those data need to show together. It could be more meaningful, if the failure data is analyzed also in correlation with S(-)/C(+) cases. The finding seems not new and not significant at all. Similar study was published by the same author (East Afr Med J. 2009 May;86(5):219-25). Accordingly the title of the paper may also need to change.

Comments to the Author

1. Out of 953 SPPTB, 97 (10.2%) are S(+) at the end of the intensive phase of treatment, and 86 were enrolled. How many are S(-)/C(+)? The authors need to clarify more on this issue.

2. Were pretreatment DST results used to modify treatment regimens? If so, in 14 failure cases how they have been modified?

3. Table 2 seems not necessary. How many cases with treatment failure are S < 2+? The authors did not clarify the outcome of those smear <2+.

4. In Table 3, the number of cases is confused. The total number of patient in analysis should be 78, not 86.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests.