Reviewer's report

Title: Validation of a transcutaneous bilirubin meter in Mongolian neonates: comparison with total serum bilirubin

Version: 1 Date: 15 July 2013

Reviewer: Daniele De Luca

Reviewer's report:

This is a nice paper describing the use of Tcb in a low-resources setting. Authors have to be commended especially because work is done in Mongolia and there are no data about jaundice in such area.

A few remarks to improve the paper:
1. It is hard to put together AAP and NICE guidelines. The first are really to be considered the gold standard recommendations now available. The second one have been widely criticized (De Luca D, Lancet 2010) and are in contradiction with AAP guidelines in some points. I would cite only AAP guidelines.
2. Please specify that JM103 is a "2nd generation transcutaneous bilirubinometer" like the others that you cited.
3. Please specify the assay method for TSB (Jendrassik? enzymatic? potentiometric? Direct spectrophotometry? HPLC?). There are many with different accuracy.. Did tube were shielded?
4. I'm assuming that forehead was uncovered and that sternum was covered. This means measuring Tcb in patched and unpatched areas and should be better specified.
5. BB test is an elegant procedure but not many colleagues are aware of this. you should better details what it is actually comparing and how. Is it performed with the software you declared?. Its results should be better commented and explained in discussion.
6. You made a nice description of studies on this topic and the the references are ok. You should also declare in study limitations that this list of studies may not be comprehensive (there are many others actually). Another study limitation to acknowledge is the small population size.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:
I declare that I have no competing interests