Reviewer’s report

Title: Copeptin concentration in cord blood as a marker of perinatal stress

Version: 1 Date: 24 February 2011

Reviewer: Victor Kiri

Reviewer’s report:

The authors must describe how the 155 controls were selected from the pool of over 3700 potential candidates.

The authors stated "we hypothesized that copeptin cord blood concentrations are increased in neonates with different stress situations such as EOS and perinatal asphyxia." If so, why have the authors conducted two-sided tests? They should either involve 1-sided test or change the hypothesis to one of “association between copeptin cord blood concentrations and …” as stated in the opening sentence of “Conclusions”. For instance, the statement “EOS infants with septic shock or with positive blood cultures did not have higher copeptin concentrations compared to the rest of EOS infants (p>0.05)” should be based on a 1-sided test.

I also have problem with the statement “Interestingly, neonates with the highest copeptin levels had only minor HIE, but the sample was not powered to detect differences in small subgroups”. It suggested the study was powered to detect any differences. The manuscript has no mention of a required sample size or statistical power. The authors should find that gap by providing the power based on their study sample size or modify the sentence to read "...but the study was not powered to detect differences"

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