Reviewer's report

Title: Evaluation of procalcitonin for diagnosis of neonatal sepsis of vertical transmission

Version: 2 Date: 17 July 2006

Reviewer: Greg Hodge

Reviewer's report:

General

The questions posed by the authors is well defined. Although the method to measure PCT is appropriate, the study suffers from the lack of any comparison with other methods to detect neonatal sepsis such as CRP and haematological indices.

Another limitation of the study was also pointed out by the authors is that the control group was asymptomatic infants without evidence of infection, which may lead to an over-estimation of the reliability of PCT as a diagnostic test.

The authors found that increased serum PCT levels was not specific for neonatal sepsis but related to different factors such as respiratory stress.

Not withstanding the above limitations, the authors do show a moderate diagnostic value for detection of sepsis of vertical transmission by using operator defined cut-off values for PCT.

There is also incomplete references to recent research into new methods to define neonatal sepsis such as measurement of multiple plasma cytokines (using cytometric bead array technology) and measurement of leucocyte activation markers.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

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What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.