Reviewer’s report

Title: The role of cervical Electrical Impedance Spectroscopy in the prediction of the course and outcome of induced labour.

Version: 4 Date: 19 May 2009

Reviewer: Peng Chiong Tan

Reviewer’s report:

I have reviewed an earlier version of this paper previously.

Remaining issues

1) Length of labour is problematic as an outcome as it is susceptible to clinical management bias. As cervical dilatation of at least 3 cm is part of the definition of labour, it is possible women with a more favourable cervix by Bishop score may be assessed earlier in the induction cycle (e.g. for amniotomy). Therefore diagnosis of the "start" of spontaneous labour maybe brought forward in those with a higher Bishop score and lengthening length of labour will no impact on induction to delivery interval (as demonstrated).

2) There is a strong argument for censoring cases of Caesarean delivery for non-reassuring fetal status in labour particularly as a significant number of labour induction were indicated by a suspicion of fetal compromise. In these cases labour induction is akin to an "oxytocin stress test".

3) The multiplicity of analyses of different probes, different frequencies for each probe against many different clinical outcomes is still a concern with regard to statistically spurious results.

4) PPV is typically higher with Bishop score than CR across Tables 4-6 for the various outcomes considered. Therefore as a clinical tool (as opposed to ROC/AUC analyses differences), it does not at present appeared superior to Bishop Score.

Level of interest: An article of limited interest

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.