Reviewer’s report

Title: Intraoperative Bispectral Index Monitoring and Time to Extubation after Cardiac Surgery: Secondary Analysis of a Randomized Control Trial

Version: 2 Date: 18 June 2014

Reviewer: Nicole Almenrader

Reviewer’s report:

This is a very well written paper assessing the effect of BIS guided anaesthesia on extubation time. However, there are a lot of confounding factors, which make it difficult to establish a clear relationship / impact of intraoperative BIS monitoring and extubation on the ICU. Time to extubation probably depends more on management on the ICU and patient characteristics rather than intraoperative BIS monitoring. There might be a direct relationship between BIS monitoring and immediate extubation inside the OR. Did the MAC guided group have intraoperative BIS monitoring?

How many cardiac centers were involved in the data collection?

What sedation protocol / which drugs were used on the ICU? Was it standardized for all patients? Those patients who were extubated after 8 hrs (no fast track), what were the reasons for the delay? Late ICU arrival or medical problems? Are there any data available from the ICU? Please provide median plus range values for BIS and MAC.

Table 4: unit missing (minutes)
Table 5: unit missing – patient number?

Please consider also the paper by Anderson et al: Bispectral index monitoring to facilitate early extubation following cardiovascular surgery. Clin Nurse Spec 2010; 24(3): 140-8

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