Reviewer's report

Title: Comparison of three point-of-care testing devices to detect hemostatic changes in adult elective cardiac surgery. A prospective observational study.

Version: 3 Date: 5 June 2014

Reviewer: Michael Andrawes

Reviewer's report:

Minor essential Revisions:
1. Results and discussion, paragraph 10 - "preoperative" has a typo as "peroperative"

Discretionary Revisions:
1. Table 1 could be better organized to show parameters that are closely related (e.g. TEG R time and ROTEM CT time are conceptually similar).
2. It would have been helpful to have immediate post-CPB data, which is arguably where the most timely data is needed.
3. It would also be helpful to have some data on patients with more significant coagulopathies. As it stands, the "routine" lab tests are relatively normal for post-CPB patients.
4. Discussion of how Rapid TEG fits in would be nice.
5. "Routine" coagulation tests are being treated much like a gold standard in this article, but many have argued that viscoelastic tests are actually better than these assays that were not designed to assess complex coagulopathies and do not examine the entire coagulation system.
6. Statistical analysis, 1st paragraph: Why is ROTEM the only test where "endpoint values were used"?
7. Results and discussion, 5th paragraph - was there evidence of fibrinolysis in the patients given an additional dose of tranexamic acid? Detection of fibrinolysis is one of the big advantages of these tests over routine tests. It is noted in the next paragraph that fibrinolysis was not observed in general.

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

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests