Reviewer's report

Title: Tissue ischemia microdialysis assessments following severe traumatic haemorrhagic shock: lactate/pyruvate ratio as a new resuscitation end point?

Version: 2 Date: 28 September 2014

Reviewer: Ali Elsayes

Reviewer's report:

Major Compulsory Revisions:

1) The study should include more patients.
2) What were the inclusion criteria? "Serious Trauma" should be clearly defined.
3) More data regarding the general conditions of the studied patients and the level of intervention before arrival to ICU and beginning of monitoring (EMS/ED/OR resuscitation)
4) Monitoring was started within six hours which is a very long period of time when considering critical patients. A lot of resuscitation is done in the first two hours and can significantly alter the hemodynamics and outcome of these patients.

Minor Essential Revisions:

1) When dividing patients into categories using Hb values, at what point were these measurements taken? Are they single point values or means of multiple measurements over the course of ICU stay?
2) Polytrauma is the most common cause of death till 40 yrs old -- citation needed.
3) Hyperlactataemia with elevated LPR levels is associated with higher mortality than hyperlactataemia with normal LPR levels -- citation needed.

Discretionary Revisions:

1) The term "traumatic shock" could be substituted for a term that is pathologically more accurate.. such as hemorrhagic or hypovolemic. Trauma can cause neurogenic shock or cardiogenic shock through tamponade and tension pneumothorax.
2) When you use the word "can" it does not show a clear recommendation vs opinion. Perhaps the words "should" or "better" should be used instead?
3) Specifically mentioning TRALI as a complication of MT -- there are many other complications which are also relevant such as DIC.

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published

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