Reviewer's report

**Title:** Therapeutic plasma exchange as rescue therapy in severe sepsis and septic shock: retrospective observational single-centre study of 23 patients

**Version:** 4  **Date:** 4 January 2014

**Reviewer:** Bernd Stegmayr

**Reviewer's report:**

Major Compulsory Revisions requested:
MS 1277131712936803
TPE and Sepsis

**Material and Methods**

Page 5 End of paragraph 1

....One patient received albumin only. ...

Reviewer comment: In brackets you can give the number of the patient.

Page 7

Paragraph 2, Line 8.

the ICU, median time from termination of the first TPE and death was 48 h (IQR 29-162). Two

patients (22%) survived to ICU discharge in the CITRATE anticoagulation group, 5 patients (56%) in the .......

Reviewer comments: Probably you mean heparin instead of citrate the first time.

**Results**

Page 8 paragraph 2 line 4

You wrote:

for non-survivors and survivors in Figure 3. Surprisingly, platelet counts decreased significantly

during the first (p = 0.012) and second (p = 0.023) day following the first TPE procedure, irrespective

of outcome (p > 0.31).

Reviewers comment: This is not surprising since once the time to revert the MOT takes some days of Pex and secondly the treatment by itself consumes platelets (both by filtration and centrifugation). Therefore this should not be a big concern
to stop treatment.
I suggest that you rewrite this part.

In the result you can mention that you performed more TPEs at a median in those who survived than in the others (although not significantly different but at a median of 3 versus 1.5).

This should also be mentioned in the discussion- If the TPE was hesitated and not limited due to short term survival of the patients- You could insert:

Page 11

organ failure. iv) Rescue TPE was instituted on the basis of individual team decisions instead of predefined start and stop criteria. ALTHOUGH NOT SIGNIFICANT, THOSE WHO DIED RECEIVED FEWER TPEs. It is therefore possible that under-dosing might have lead to underestimation of the efficacy of rescue TPE. v) When analysing the hemodynamic effects of TPE,

Page 9 second paragraph line 12 to bottom-

The information about the substitution fluids is not correct according to the three references- Check all three of them again. Correct.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

no competing interest