Reviewer's report

Title: Ozonated autohemotherapy: protection of kidneys from ischemia in the nephrectomized rats

Version: 1 Date: 17 September 2011

Reviewer: Maryam Zahmatkesh

Reviewer's report:

- Major Compulsory Revisions

1. The renal artery occlusion model remains the most useful model currently available to study the mechanisms of ischemia–reperfusion injury to the kidney. However, physiologic parameters known to affect kidney function or susceptibility to injury should be controlled for, measured, and reported (temperature, blood pressure, and so forth). Was hypoxia monitored during surgery? Is there any data about blood oxygenation like arterial blood gas analysis during surgery? These need to be addressed in the Method and Result part of the manuscript.

2. Was polyuria/oliguria occurred post surgery?
   These need to be addressed in the Method and Result part of the manuscript.

3. The findings of Valacchi G and Bocci V. (Valacchi G and Bocci V., Mediators of Inflammation, 9, 271–276 (2000)) which also report the effect of ozonated plasma on human umbilical vein endothelial cells (HUVECs) in culture needs to be discussed and the article listed in the References section.

4. The histology pictures did not come out very clearly, at least on the images provided to the reviewer. Is there any cellular infiltrate present at this time point e.g. neutrophils? If so, is it reduced in the treatment groups?

5. Please determine the type of Post-hoc test in Method/Statistical analysis part. Please report the F value in the Result part.

6. No mention is made about the exact time of the treating and sampling in the Ischemia-reperfusion groups (4&8)?
   Immediately after clamp release?
   before clamp release?
   or after 60 min reperfusion?
   These need to be addressed in the Method part.

- Minor Essential Revisions

7. Griess reaction determines the concentration of nitric oxide metabolites (nitrite/nitrate) not the nitric oxide concentration.
   In Method / Results/ Figure legends and Figure3, the "NO concentration" or
"plasmatic NO" should be replaced by "nitrite/nitrate" or "nitric oxide metabolites".

8. Mononephrectomy (e.g. In Abstract, paragraph 2) and mono-nephrectomy (e.g. in Experimental groups, Paragraph 1) should be replaced by "unilateral nephrectomy" throughout the manuscript.

- Minor comments:

9. The term acute renal failure is not used in the field anymore, and the term acute kidney injury (AKI) should replace ARF in the background, results and throughout the text.

**Level of interest**: An article of importance in its field

**Quality of written English**: Needs some language corrections before being published

**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.