Reviewer’s report

Title: Microvessel Changes after Post-ischemic Benign and Malignant Hyperemia: Experimental Study in Rats

Version: 2 Date: 28 January 2010

Reviewer: Roman Huber

Reviewer’s report:

This report is focused on MRI-techniques and the meaning of different types of hyperemia providing interesting insights into mechanisms of microvasculature, However there are still some concerns:

Major Compulsory Revisions

On page 13 it is still postulated that longer times of ischemia as well as fibrinolysis are associated with malignant hyperemia. The authors explain, that longer times of ischemia is not more than 3 hours. However even at this time point there is no hyperemia (see group 2).

Minor essential revisions:
Unfortunately fibrinolysis did not show any effect on the MRI-lesion size. it would be reasonabel to give a short explanation.

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:

I declare that I have no competing interests