Reviewer's report

Title: Effects of iodinated contrast agents on renal oxygenation level by BOLD-MRI in a rabbit model of diabetic nephropathy

Version: 5 Date: 3 August 2014

Reviewer: Matthew Bailey

Reviewer's report:

The authors have addressed all of my original comments in this new version of their manuscript. The study is much more focused and the control groups allow better discussion of the data.

Major compulsory Revision

The statistical approach is not clear. I have a comment on ROI (below). In addition, I think the statistical tests used should be included in the table heading and Figure legends. It is not clear to me why a combination of one-way anova (which post test?) and unpaired t-tests were used.

Minor Essential Revisions

1. Can the authors detail how the 6 ROI for each region in each rat are processed to give the data shown in Table 3 and Figure 1? Are these values averaged to give a mean value per rat? If so, how is the variability between ROI taken into account?

2. The authors include a quantitative scoring of renal injury and also of pimonidazole staining but these are difficult to follow in the text- I think putting these data in a table would improve the manuscript.

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