Reviewer's report

Title: In Vivo Experimental intervertebral disc Degeneration Induced by Bleomycin in the Rhesus Monkey

Version: 2 Date: 7 July 2014

Reviewer: Thorsten Guehring

Reviewer's report:

This manuscript is of interest as it follows a slowly progressive disc degeneration model in large animals. However, compulsory revisions should include follow items:

1. How can the authors really be sure that bleomycin in fact blocks nutrition as mentioned in their manuscript? Did the authors do pre-experiments on this item? Can the authors exclude for example a toxic reaction of bleomycin?

2. In the discussion the authors mentioned the important aspect of notochordal disc cells, and in line 291 they state that "notochordal cells were still observed". How did they do this by histology? This does not appear in the results section at all.

3. The authors should explain why they chose the specific target genes for the gene expression analysis. Did they consider using further genes as well as protein expression analysis?

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

Declaration of competing interests:

I declare that I have no competing interests