Reviewer's report

Title: 1,25-Dihydroxyvitamin D3 prevents bone loss of the secondary spongiosa in arthritic rats by an increase of bone formation and mineralization and inhibition of bone resorption

Version: 3 Date: 13 July 2014

Reviewer: Bjoern Rath

Reviewer's report:

Minor Essential Revision

M&M

You mentioned that the ethical guidelines for experimental investigation in animals were used and all procedures complied with the regulations of the Thuringian Commission for Animal Protection. Please add a sentence representing the approval of your local ethics committee.

Why did you start with a diet containing vitamin D before arthritis induction?
Why did you inject Group 1 and 2 before AIA induction?
Did the healthy animals also receive this diet?
Did you check the vitamin D serum levels throughout the experiment?

"Preparation of bones" should precede "Histopathologic assessment of inflammation and joint destruction"

The figures should appear in an ascending sequence in the text. Figure 5 should not be mentioned before figure 4.

Please describe the score used in figure 2B (0-10) more detailed.

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.