Reviewer's report

Title: Homing and reparative effect of intra-articular injection of autologus mesenchymal stem cells in arthritic animal model

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Reviewer: Brunella Grigolo

Reviewer's report:

The paper aims to investigate the homing and reparative effect of intra-articular injection of mesenchymal stem cells in an arthritic animal model. This is an interesting work with detailed and well performed experiments.

However, my major concern is relative to the number of animals used. 3 animals for each group are not enough to perform a statistical analysis. It would have been better to have only two groups such as mild an severe osteoarthritis with more animals each.

Major points.

- Materials and methods. IV Microscopic histopathology. Group-I post injection termination after 1 month. Animals in this group were lost..... What does it means? Did they died? It must be explained.

- Discussion. The same period is repeated twice. ...Unlike chondrocytes, the use of MSCs in not hindered by the limited availability........................

- A lot of mistakes with the References. Murphy et al. (2003) need the relative reference number. The reference of Appleton at al [27] is not the same as in the reference List. All the other references from this point are uncorrected.

- Table 3. Are the numbers indicated the mean values of the animals for each group? It is better to indicate this in the text.

- Table 4. Re-write the title: Radiographic scoring of osteophyte formation and cartilage loss of different groups before and at 1, 2, 6 months from the treatment

Minor points.

Check for typographical and English errors.

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: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I declare that I have no competing interests'.