Reviewer’s report

Title: Is Treated HIV Infection Associated with Knee Cartilage Degeneration and Structural Changes? A Longitudinal Study using Data from the Osteoarthritis Initiative

Version: 0 Date: 19 Mar 2019

Reviewer: Pattappa G

Reviewer's report:

The manuscript describes the relationship between osteoarthritis and HIV patients using a variety of scores and checking for knee abnormalities using MRI scans. The results of the study show that there is a relationship between patients using antiretroviral therapy and osteoarthritis indications. Though the results show a clear relationship, the following questions need to be answered prior to publication,

1) The data proves clinical indications of osteoarthritis. Do you have any synovial fluid and assessed the proteins in both control and antiretroviral therapy patients to understand what are the biological markers in fluid causing osteoarthritis in the latter patients?

2) Similar to question 1, do the authors have any indications on the cellular activity of chondrocytes under the conditions described and can a short in vitro experiment be performed to observe the changes in chondrocytes activity in the presence of antiretroviral drugs?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

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