Reviewer’s report

Title: Allelic variants of IL1R1 gene associate with severe hand osteoarthritis

Version: 1 Date: 23 February 2009

Reviewer: Dongquan Shi

Reviewer’s report:

Discretionary Revisions
Cite more new papers about IL1 and OA research.

- Minor Essential Revisions
  1) page 5, line 3, “IL1RI” should be “IL1R1”;
  2) page 14, line 7, “IL1R1L” should be “IL1R1”.

- Major Compulsory Revisions
  1) “28 patients had physician-diagnosed hand OA and were also included in the hand OA material to increase statistical power. “
     Systematic OA is different from local site OA. Is it a good way to increase the statistical power?
  2) Due to the limited sample size, we did not analyse males and females separately.
     It will be better to analyse the males and females separately. As, the author said “based on a Finnish study , the genetic effects seem to be more prominent in females.
     Is it possible to amplify the sample number? It will be more powerful.
  3) It would be better to collaborate other center to do replication study. Then it must be more powerful.

Level of interest: An article of limited interest

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.