Reviewer's report

Title: Gait analysis of C57BL/6 mice with complete Freund's adjuvant-induced arthritis using the CatWalk system

Version: 1 Date: 19 November 2012

Reviewer: Peter van der Kraan

Reviewer's report:

This manuscript describes the use of the Catwalk system to evaluate Freund's adjuvant arthritis in mice. Although this system has been used in rats frequently, the number of studies in mice is smaller. The manuscript is not particularly novel or innovative but it clearly shows the usefulness of the Catwalk system in arthritis models in which the ankle joint is involved. Gait analysis collagen-induced arthritis in the mouse has been reported. Therefore the novelty of this contribution is partial. The manuscript is well written but since intra-articularly injection of CFA in the ankle joint is such a drastic model it is not unexpected that this can be easily measured with the catwalk system.

The study is well designed although of limited significance and the conclusions are valid. The data are clearly presented and the discussion is relevant. The author does not refer to all articles relevant for his study.

Major Compulsory Revisions

The author states that two other studies used the Catwalk system for mice but that only static analysis was performed. However, gait analysis using a similar system has been performed in mice with collagen-induced arthritis. In this study also dynamic analysis was performed (Vincelette J, Xu Y, Zhang LN, Schaefer CJ, Vergona R, Sullivan ME, Hampton TG, Wang YX. Gait analysis in a murine model of collagen-induced arthritis. Arthritis Res Ther. 2007;9(6):R123).

Minor Essential Revisions

Page 10. Monoarthtic should be monoarthrititic

Level of interest: An article of limited interest

Quality of written English: Acceptable

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