Reviewer's report

Title: Evaluation of Implant Loosening Following Segmental Pedicle Screw Fixation in Adolescent Idiopathic Scoliosis: A 2 Year Follow-up with Low-Dose CT

Version: 7 Date: 18 August 2014

Reviewer: Ian Stokes

Reviewer's report:

The manuscript has been revised to include the suggested use of literature references to support their contention that CT is the 'gold standard' for evaluation of screw loosening. It should be noted however that the sole cited reference [4] (Ohtori et al.) also reports a higher rate of signs of screw loosening by CT than by plain radiography, but does not establish whether this is actually evidence of higher accuracy. Those authors simply report values by both techniques, but do not address the question which is the more accurate. As in the present manuscript, they did not have a way to establish screw loosening definitively. References [12 and 13] do provide evidence that CT is more accurate for identifying solid fusion, as stated.

Level of interest: An article whose findings are important to those with closely related research interests

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