Reviewer's report

Title: Characterization of bone repair in rat femur after treatment with calcium phosphate cement and autogenous bone graft

Version: 1 Date: 31 January 2010

Reviewer: Anthony Markus

Reviewer's report:

Thank you for submitting this paper.

It is a good study though I cannot find any reference in the discussion to the effect of periosteum in bone healing. It cannot be ignored and must be partly responsible, as in any bone defect or fracture for some of the outcome. It should be mentioned even if for no other reason than to exclude it as a confounding variable in outcome.

There are a number of other statements that need clarification:

P3Para2 advancement in surgical techniques – there is no doubt that autogenous bone grafting is better in certain situations but you talk about “….this therapeutic area” – are you referring to the science of bone grafting or to a specific site for bone grafting?

P4Para P1LineL3 “… greater resistance..” – greater resistance to what?

P8ParaP1Line14 this sentence is difficult to understand. I think I know what it means and would suggest the following re-wording:

On Day 60, there was a small indent in the cortex suggestive of wound healing.

Whilst I appreciate that English is not the first language, there will need to be some modifications by you or the Editorial team. Cortical is an adjective, cortex is the noun.

The references are good and the illustrations excellent.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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'