Reviewer’s report

Title: Time Course of 1,25-(OH)2D (Vitamin D) as well as PTH (Parathyroid Hormone) during Fracture Healing of Healthy and Osteoporotic metaphyseal human Bone

Version: 4 Date: 30 October 2012

Reviewer: Richard Stange

Reviewer’s report:

The present study investigates the time course of 1,25-(OH)2D (Vitamin D) and PTH (Parathyroid Hormone) during fracture healing in osteoporotic versus nonosteoporotic fractures in a matched pair analysis of elderly Patients. 30 patients aged over 50 years who suffered a metaphyseal fracture of the proximal humerus, distal radius or proximal femur were included in the study. Osteoporosis was verified by DEXA measuring. Development of Bone Turn over Markers (BTMs) were examined over 8 week duration.

Serum values of PTH showed an increase in the first week after fracture followed by a slight decline up to eighth week. Serum values of 1,25-(OH)2D showed a slight decline up to eighth week and no significant differences between osteoporotic and healthy bone.

The study addresses an interesting topic, the monitoring of biochemical markers in the course of fracture healing in the elderly. The work is clearly presented, the concerns from the first version were incorporated and changed for the most part.

Tables for Fig 1 + 2 should be exchanged to english

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'