Reviewer’s report

Title: Rivaroxaban does not impair fracture healing in a rat femur fracture model: an experimental study

Version: 2 Date: 27 October 2014

Reviewer: Joerg H Holstein

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The study analyzes the effect of the oral anticoagulant rivaroxaban on fracture healing in rats. Results of biomechanical testing, histomorphometric analyses and micro CT revealed no significant differences in bone repair between rivaroxaban-treated animals and vehicle-treated controls, neither at 4 nor at 7 weeks post fracture.

The question of the present study is of high clinical relevance. The study is well designed and clearly presented. The animal model used is appropriate and the statistical analysis seems to be valid. In accordance, I have no major concerns. My only minor concern is that the manuscript should be checked for misspellings (e.g. page 4, line 68: “arthroplasty” instead of “arthroplastie”). Further, I recommend to use either BE or AE consistently throughout the manuscript (e.g. page 4 lines 46 and 47 “stabilized” versus “randomised”). Past tense should be used consistently, too (e.g. page 3 line 57 “revealed” instead of “reveals”.

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.