Format for ANSWERING REVIEWERS

August 26, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 12033-review.doc).

Title: Fractal lacunarity of trabecular bone and MRI: New perspectives for osteoporotic fracture risk assessment

Author: Annamaria Zaia

Name of Journal: *World Journal of Orthopedics*

ESPS Manuscript NO: 12033

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

Reviewer 02444711 commented that the paper deal with a rather new area in the field. The key advantage of MRI is radiation-free and therefore is worthy to further explore as an alternative to the current technology of CT or pQCT. The Reviewer also provided feedback for more quantitative data and related discussion. However, the aim of this paper is to highlight the need of new methodological approaches for TBA characterization to overcome the limits, both technological and analytical, that make hard their application in clinical practice. In my opinion, discussing numerical results does not solve the problem as quantitative TBA characterization per se is not put in doubt, rather its feasibility in clinical routine.

Reviewer 02467561 commented that the paper looks convincing both in terms of description of the different methods of analysis and rich bibliography tracing 40 years of studies and analyses with no comments for improvement.

Reviewer 02508171 found the article interesting and worth reading and provided suggestions for improvement. Dealing with "The limitation of cost and poor validation of MRI for fracture prediction should be mentioned and discussed", It is not clear whether "limitation of cost" is related to validation studies or to MRI technology. In this second case, based on MRI experts' opinion: it is true that MRI devices are expansive, but it is also true that, once MRI equipment is available in a clinical center, higher the use higher the cost amortization. As far as mentioning and discussing poor validation of MRI for fracture prediction is concerning, the paper starts from this evidence (Abstract) and the causes determining this aspect are widely mentioned and discussed in both MRI AND CLINICAL ASSESSMENT OF BONE STRUCTURE and DISCUSSION/CONCLUSION sections. In any case, I hope that the revised version of this section be more exhaustive.

At the suggestion of reviewers the following sections have been revised together with other minor corrections highlighted in the paper:

Title
Abstract
Introduction
Discussion

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Orthopedics*.

Sincerely yours,

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