Reviewer's report

Title: Oxidative stress as a risk factor for osteoporosis in Mexican elderly

Version: 1 Date: 16 August 2007

Reviewer: Salih Ozgocmen

Reviewer's report:

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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In this study the Authors investigated oxidative stress markers in a group of elderly Mexicans and suggest that oxidative stress is an independent risk factor for osteoporosis.

- The major drawback of the paper is the criteria for diagnosing osteoporosis. This decision was not made on "gold standard" (standard DXA measurements of the spine or proximal femur, WHO references). Did they used peripheral DXA? The methods and results of BMD should be given. Also the characteristics of the reference population (Authors own population or population supplied by the manufacturer?, details of race or ethnicity?) and comparison to standard DXA (cons and pros) should be given and discussed.

- Some of the values of OR given in the results section are different in table 3.

- For female subjects years since menopause is extremely important for developing osteoporosis. Did authors take this factor account while matching osteoporotic and non-osteoporotic women?

- Again the authors should not neglect methods used to judge osteoporosis while comparing their results with other in vivo studies.

What next?: Accept after discretionary revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

'I declare that I have no competing interests'