Reviewer’s report

Title: The effects of the Korean reference value on the prevalence of osteoporosis and the prediction of fracture risk

Version: 1 Date: 27 December 2014

Reviewer: Maha Maha El Gaafary

Reviewer’s report:

• Major Compulsory Revisions
  - It is well known that using the reference values of the country on the population of that country would be more valid in estimating the prevalence of the disease. As osteoporosis is related to cultural factors related to the community (e.g. eating habits, physical exercises) it is important to use the local reference value of the community when assessing their risk of osteoporosis and fracture.
  - The authors should mention the importance of having a valid figure for the prevalence of osteoporosis as it is used in calculation the post test odds and probability of the disease (osteoporosis) and consequently starting the treatment.
  - Statistically age could be correlated with the difference in T-score as measured by the Korean reference compared to that measured by WHO reference values.
  - It is better to include a table containing the prevalence of osteoporosis at different age groups when using the Korean compared to the prevalence when using the WHO reference values and the differences in a separate column.
  - The difference in fracture risk and prevalence of osteoporosis being increasing with age in men and decreasing with age in women should be explained by the authors.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

No competing interest.