Reviewer’s report

Title: Bone mineral density after Implantation of a femoral neck hip prosthesis - a prospective 5 year follow-up.

Version: 1 Date: 26 January 2015

Reviewer: Miguel Farfán

Reviewer’s report:

///No Major compulsory Revisions.///

////Minor Essential Revisions:///

ABSTRACT

Paragraph 51: Clinical outcomes are secondary. You should mention first the changes in mineral bone density (primary outcome).

Paragraph 64 "leads to a distinctive": From the beginning you should mention how different this bone reaction is. Does it increase or decrease?

METHODS

Paragraph 151 And the 60 months follow up?

Paragraph 151 Typing mistake: "One" instead of "FoOne"

Paragraph 162 Is there a validated WOMAC scale in German?

Paragraph 168 was the Densitometric measure technician blinded for the study?

Paragraph 188 Was the statistical analysis done by someone blind to the study? if not, why not?

RESULTS / DISCUSSION

Paragraph 217. You should use endpoint instead of period followed after "60 months after surgery" To separate results from Discussion.

////Discretionary Revisions////

BACKGROUND

Paragraph 106-109 "Conventional implants ... within the first 3 months": Is there any specific bibliographic reference for this sentence?

METHODS

Paragraph 127: Were the patients included according to a protocol stablished before the beginning of the study? Was the inclusion consecutive? You should mention this.

RESULTS AND DISCUSSION
Paragraph 188: Statistical analysis should mention tests for comparing categoric variables (maybe functional outcomes) like chi square and fisher exact test. The statistical analysis should specify which test would be used for comparing variables with a normal and a non normal distribution. In this case (t student for normal ones and Wilcoxon as non parametric one)

Paragraph 283 Are your referring to your study? If affirmative, I wouldn't use the term "supports" considering the descriptive methodology of your study. Maybe "suggest" would be more appropriate.

Paragraph 294. There are more limitations including the observational design of the study (not clinical trial, not randomized), if DEXA’s evaluation and statistical analysis were not blinded, there is another limitation and risk of bias in the study.

Paragraph 300. Your conclusions are too short. You should provide more information for the closure, including clinical outcomes (Secondary goal), How big the difference is (significance), what kind of patients should be considered for this type of short prosthesis ??

**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:**

'I declare that I have no competing interests'