Reviewer's report

Title: Early decrements in bone density after completion of neoadjuvant chemotherapy in pediatric bone sarcoma patients

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Reviewer: Michael Leahy

Reviewer's report:

This is a well conducted study and the report is well written. It will have interest to oncologists treating patients with bone tumours and also to those offering long term follow-up (often endocrinologists).

The lack of significant osteoporosis is reassuring.

However, the authors may wish to consider the following comments

1. Neo-adjuvant chemotherapy for osteosarcoma (i.e. the chemo given before the resection of the tumour) in the EurAmos1 protocol is only two cycles and only 10 weeks treatment. Is this enough to cause significant reduction in BMD?

2. In contrast the neo-adjuvant chemotherapy for Ewings in EE99 is 6 cycles and 18 weeks long - nearly twice the time and more than twice the dose intensity. Are these really homogenous. I would suggest these differences should be mentioned in the report.

3. Osteoporosis may develop in these patient later, not only from the effect of the early chemotherapy before the surgery but also from the more extensive chemotherapy after the surgery. This may have both a direct effect on bone metabolism and also an indirect effect via premature gonadal hormone failure.

Thus the reassurance in the conclusion of this report needs to tempered with caution.

Level of interest: An article of limited interest

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