Reviewer's report

Title: Some but not all estrogen-like molecules have both bone and cartilage protective effects - suggestion of uncoupling of bone and cartilage effects

Version: 1 Date: 24 June 2008

Reviewer: Piet Geusens

Reviewer's report:

The authors describe the effect of tibolone on CTX-I and CTX-II in healthy postmenopausal women

Major comments

Tibolone is described as having estrogenic, androgenic and progestogenic properties.
However in the conclusion, it is described as a SERM.
The differences between tibolone and SERMs on bone and cartilage markers can however not be interpreted on assumption of a SERM effect. Indeed, tibolone is not selective for the estrogen nor for testosteron or progesteron receptors

Specific remarks

Introduction

Par 2: a cause-effect relation between OA after menopause and increased bone resorption has not yet been demonstrated. The authors should put this statement in a more careful context with some discussion of the literature

Par: “cartilage health”: please specify

Please add reference of effect of tibolone on BMD (e.g. Geusens et al)

Give references about tight coupling of bone and cartilage turnover. Cite also references that indicate an inverse relation between osteoporosis and osteoarthritis

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'