

Appendix 1: Search strategy for articles on the treatment of osteoporosis in postmenopausal women and older men

We searched MEDLINE and the Cochrane Database of Systematic Reviews for articles published from 1997 to January 2008. We identified studies that focused on the treatment of osteoporosis in postmenopausal women and in men over the age of 50 years.

We used the following Medical Subject Headings (MeSH) terms: osteoporosis, osteoporosis treatment, osteoporosis management, calcium, vitamin D, alendronate, risedronate, etidronate, ibandronate, zoledronic acid, raloxifene, calcitonin, teriparatide, hip protectors, meta-analysis, systematic reviews, randomized controlled trials, bone density and fracture.

We further identified additional studies by searching the website of the Canadian Agency for Drugs and Technologies in Health and performed a manual search of reference lists of studies identified through MEDLINE. We limited our search to meta-analyses, systematic reviews and most recent randomized trials conducted in English.

Although hormone replacement therapy has been shown to increase bone mineral density and to reduce the risk of fractures among postmenopausal women, its long-term use has been limited because of concerns raised by the Women's Health Initiative trial.¹ We chose not to include hormonal replacement therapy in our review because it is now primarily prescribed for the control of menopausal symptoms.²

Because the effect of testosterone on fractures in men has not been evaluated as a primary outcome in clinical trials, we did not include this therapy either in our review.

Finally, we excluded studies on secondary osteoporosis such as steroid-induced or treatment-induced (chemotherapy) osteoporosis.

References

1. Rossouw JE, Anderson GL, Prentice RL, et al. Risks and benefits of estrogen plus progestin in healthy postmenopausal women: principal results from the Women's Health Initiative randomized controlled trial. *JAMA* 2002;288:321-33.
2. Brown JP, Josse RG. 2002 clinical practice guidelines for the diagnosis and management of osteoporosis in Canada. *CMAJ* 2002;167:S1-34.