

Alendronic acid/colecalciferol more than breaks even

Alendronic acid/colecalciferol is a cost-effective option in women with osteoporosis aged ≥ 70 years, and in women aged ≥ 60 years with a history of vertebral fractures. These results were found in a modelling study using data for women from the UK and The Netherlands.*

Using a Markov model, researchers simulated the costs and outcomes of alendronic acid/colecalciferol 70mg/2800IU, compared with no treatment, alendronic acid plus dietary vitamin D supplements, and ibandronic acid. The model was populated with women aged 50, 60, 70 or 80 years with osteoporosis or a history of vertebral fractures; cost and efficacy data were abstracted from published studies and other literature.

For the population of women with osteoporosis, alendronic acid/colecalciferol would be considered cost effective versus no treatment among women aged ≥ 70 years, and would have an incremental cost-effectiveness ratio (ICER) in the UK of **£17 439 per QALY gained** for those aged 70 years, and £5887 for those aged 80 years; the respective ICERs would be €27 506/QALY and €11 258/QALY for women in The Netherlands.**

For the population of women with a history of vertebral fractures, alendronic acid/colecalciferol would be worth it versus no treatment for women aged ≥ 60 years, having ICERs in the UK of **£29 283/QALY, £7871/QALY, and dominant**, for those aged 60, 70 and 80 years old, respectively. The respective ICERs for The Netherlands would be €46 685/QALY, €13 906/QALY and dominant.

The model showed alendronic acid/colecalciferol would be cost saving versus alendronic acid plus dietary vitamin D supplements, for all age groups in both disease arms in both countries, and would be economically dominant versus ibandronic acid in both countries in women aged ≥ 60 years with a history of vertebral fractures.

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** Costs (2004 values) were those related to the study drugs, general practitioner visits and bone mineral density scans. Costs and outcomes were discounted at rates of 3.5% per annum in the UK and 4% per annum in The Netherlands.

Jansen JP, et al. Cost-effectiveness of a fixed dose combination of alendronate and cholecalciferol in the treatment and prevention of osteoporosis in the United Kingdom and The Netherlands. *Current Medical Research and Opinion* 24: 671-684, No. 3, Mar 2008

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