

Alendronic acid best bet for new German screen-and-treat strategy

A screen-and-treat strategy for the secondary prevention of osteoporotic fractures would result in a substantial cost increase for the German statutory health insurance (SHI), but the use of alendronic acid within such a strategy appears cost effective, according to a modelling study conducted by researchers from Germany.

Using a Markov model, the researchers assessed the cost utility and budget impact of implementing such a strategy (compared with no intervention) following a new guideline published by the German osteology umbrella organisation, *Dachverband Osteologie*:

- postmenopausal women aged 50–90 years are screened using dual x-ray absorptiometry
- those with an absolute 10-year fracture risk of $\geq 30\%$ are treated with bisphosphonates, such as alendronic or risedronic acid for 4 years, or teriparatide for 18 months.

Implementing the screen-and-treat strategy would be associated with annual costs of €175 million* for alendronic acid (€181 million for risedronic acid), or 0.14% of the SHI annual budget. However, according to the model, and compared with no intervention, **alendronic acid therapy would be the most cost-effective intervention in all age groups**, with incremental cost-effectiveness ratios (ICERs) of €3849, €16 589, €6600 and €2337 per QALY for those aged 50, 60, 70 and 80 years, respectively.

Risedronic acid would be the next most cost-effective option, while teriparatide was dominated in every age group (being both less effective and more costly than the other options).

The model's results remained robust under sensitivity analysis.

* 2006 values

Mueller D, et al. Cost effectiveness of the German screen-and-treat strategy for postmenopausal osteoporosis. *Pharmacoeconomics* 26: 513-536, No. 6, 2008

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