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Osteoporosis treatment in Austria-assessment of FRAX-based intervention thresholds for high and very high fracture risk

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Abstract

The adoption of the management pathway proposed by the National Osteoporosis Guideline Group (NOGG), UK applied using the Austrian FRAX® tool in a referral population of Austrian women categorises 22-29% of women age 40 years or more eligible for treatment of whom 28-34% are classified at very high risk.

Purpose: The aim of this study is to provide a reference document for the further development of existing guidelines for the management of osteoporosis in Austria, considering FRAX-based intervention thresholds for high and very high fracture risk.

Methods: The model development was based on two Austrian hospital referral cohorts. Baseline information was collected to compute the 10-year probability (using the Austrian FRAX model) of a major osteoporotic fracture (MOF) and hip fracture both with and without the inclusion of femoral neck bone mineral density (BMD). Assessment thresholds for BMD testing were defined, as well as intervention thresholds. In addition, thresholds that characterise men and women at high and very high fracture risk were established. The management pathway followed that currently recommended by the UK National Osteoporosis Guideline Group (NOGG).

Results: The two cohorts comprised a total of 1306 women and men with a mean age of 66.7 years. Slightly more than 50% were eligible for treatment by virtue of a prior fragility fracture.

In those women without a prior fracture, 22% (n = 120) were eligible for treatment based on MOF probabilities. Of these, 28% (n = 33) were found to be at very high risk. When both MOF and hip fracture probabilities were used to characterise risk, 164 women without a prior fracture were eligible for treatment (29%). Of these, 34% (n = 56) were found to be at very high risk. Fewer men without prior fracture were eligible for treatment compared with women.

Conclusion: The management pathway as currently outlined is expected to reduce inequalities in patient management. The characterisation of very high risk may aid in the identification of patients suitable for treatment with osteoanabolic agents.

Keywords: Austria; FRAX; High risk; Intervention threshold; Very high risk.

Figures

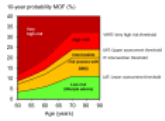

Fig. 1 Assessment, intervention and risk thresholds...

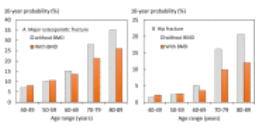

Fig. 2 Mean 10-year probabilities of **A...**

Fig. 3 Assessment pathway and categorisation of...

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