

## Q1 Osteoporosis Screening

Which *one* of the following statements about using the Canadian clinical Fracture Risk Assessment Tool (FRAX) to prevent fragility fractures in females aged 65 years or older is false?

- O 1. It reduces BMD testing.
- O 2. It decreases clinician time compared to using BMD testing.
- O 3. Repeat screening should be done at least every 5 years in stable patients.
- O 4. Screening 250 patients at least once would be expected to prevent 1 hip fracture.

**Educational Point:** In May 2023, the Canadian Task Force on Preventive Health Care (CTFPHC) published a new guideline on screening for primary prevention of fragility fractures. They have recommended "risk assessment-first" screening for prevention of fragility fractures in females aged 65 years and older, with initial application of the <u>Canadian clinical Fracture Risk Assessment Tool</u> (FRAX) without bone mineral density (BMD). The FRAX result should be used to facilitate shared decision-making about the possible benefits and harms of preventive pharmacotherapy. After this discussion, if preventive pharmacotherapy is being considered, clinicians should request BMD measurement using dual-energy x-ray absorptiometry, and re-estimate fracture risk by adding the BMD T-score into FRAX (conditional recommendation, low-certainty evidence). The guideline does not recommend screening for fragility fractures in females younger than 65 years or males of any age.

A risk assessment-first strategy using FRAX is less demanding of clinician time than a BMD-first strategy. There is no good evidence to conduct risk assessments more often than every 8 years in stable patients. The CTFPHC has suggested that using the FRAX tool would reduce BMD testing, thus reducing health care costs.

At a population level, screening 1000 females after age 65 would be expected to prevent 4 hip fractures and 12 clinical fragility fractures over 3 to 5 years of follow-up. Thus, if you have 250 females aged 65 to 85 in your practice, screening them at least once via a risk assessment-first strategy could prevent 1 hip fracture and 3 clinical fragility fractures.

Adopting a risk assessment– first strategy makes sense both for doctors and for their patients. First, the time saved through this strategy can be used to address issues of greatest importance to patients. Second, a risk assessment–first strategy will avoid labelling female patients as having osteoporosis, which may paradoxically lower quality of life and lead some to reduce their physical activity.