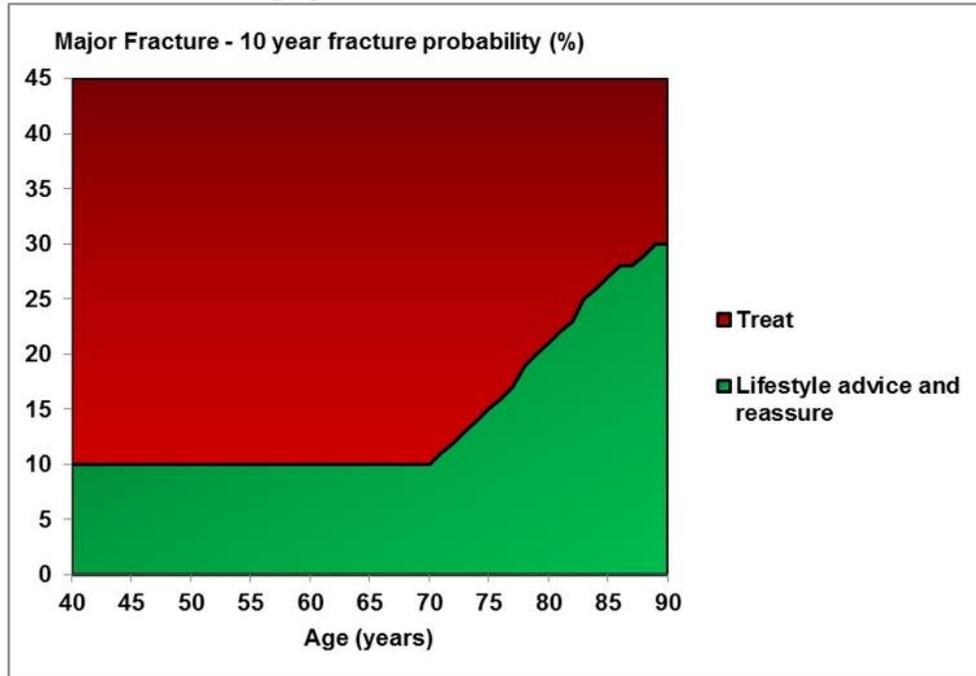


Intervention threshold graph for Lebanon



**OSTEOS**  
Lebanese Society for  
Osteoporosis &  
Metabolic Bone Disorders



الجمعية اللبنانية لأمراض الغدد  
الغدية والسكري والاضطرابات  
**LSEDL**  
LEBANESE SOCIETY  
OF ENDOCRINOLOGY  
DIABETES AND LIPIDS



**LSR** **SLR**  
Société Libanaise de Rhumatologie  
Lebanese Society of Rheumatology

**Interpretation:**

The 2013 Lebanese FRAX-Based Osteoporosis Guidelines intervention thresholds are depicted by the solid black line between the green and red areas in the graph above, and are based on 10 year probability of major osteoporotic fracture, that is at the spine, hip, humerus or forearm.

The patient's individual risk is plotted on the graph.

The guidelines recommend the following:

- Treatment to be considered in individuals with a 10 year probability of a major osteoporotic fracture AT or ABOVE the intervention threshold, as depicted in graph above.
- Re-assessment for individuals with a 10 year probability of a major osteoporotic fracture below the intervention threshold, in 2-5 years, depending on the clinical context.
- A bone density measurement is recommended for individuals with a 10 year probability of a major osteoporotic fracture that is within a few percentage points of the intervention threshold, if the FRAX probability was based on risk factors alone, to further refine risk assessment.
- Treatment of women below age 50 years is only applicable if postmenopausal and in select clinical situations.

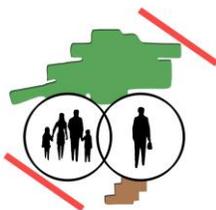
*These guidelines do not supersede clinical judgment, but are formulated to provide a framework on which to build clinical decisions.*

**BMD testing:**

BMD test could be considered in those patients with FRAX derived overall risk values based on risk factors only that are within a few percentage points of the intervention threshold.

**Management:**

- For a more detailed description of the guidelines recommendations, including lifestyle measures, calcium/vitamin D and drug therapies, please refer to the additional relevant documents for the Lebanese FRAX-Based Osteoporosis Guidelines 2013:



SOCIÉTÉ LIBANAISE DE RADIOLOGIE  
LEBANESE SOCIETY OF RADIOLOGY



الجمعية اللبنانية للتوليد والامراض النسائية  
**LSOG** 1958  
Lebanese Society of Obstetrics & Gynecology

-Full document (<http://www.aub.edu.lb/fm/cmop/downloads/diagnosis-trt.pdf>)

-Executive Summary (<http://www.aub.edu.lb/fm/cmop/downloads/executive-summary.pdf>)

-PowerPoint (<http://www.aub.edu.lb/fm/cmop/downloads/FRAX-guidelines.pdf>)

- No trials have been designed and powered to detect differences in the magnitude of fracture reduction between different treatments. Thus, the choice of agent is determined by individual patient risk profile and each drug spectrum of anti-fracture effects across skeletal sites, side effects and cost.

- **Treatment options in women:**

o For menopausal women requiring treatment of osteoporosis, alendronate, risedronate, zoledronic acid and denosumab can be used as first-line therapies for prevention of hip, nonvertebral and vertebral fractures.

o For early postmenopausal women (< 60 years of age) requiring treatment of osteoporosis in combination with treatment for vasomotor symptoms, hormone therapy should be considered as first-line therapy for prevention of hip, nonvertebral and vertebral fractures. In the absence of vasomotor symptoms, raloxifene can be used as a first-line therapy for prevention of vertebral fractures.

o For women 65 years or older with severe osteoporosis defined as a low BMD (T-score  $\leq -2.5$ ) and a prevalent vertebral fracture, teriparatide can be used as a first-line therapy to reduce vertebral fracture risk.

- **Treatment options in men:**

o For men requiring treatment of osteoporosis, alendronate, risedronate and zoledronic acid can be used as first-line therapies for prevention of fractures.

o Teriparatide should be considered as a second-line therapy for men 65 years or older who have severe osteoporosis and prevalent fragility fractures.

- **Treatment of Glucocorticoid Induced Osteoporosis (GIOP)**

- In patients on steroids, the derived FRAX estimate is pro-rated for steroid dose.

(<http://www.aub.edu.lb/fm/cmop/downloads/executive-summary.pdf>)

**The Lebanese 2013 FRAX-based Osteoporosis Guidelines were endorsed by the following Lebanese Scientific Societies: Lebanese Society for Osteoporosis and Metabolic Bone Disorders (OSTEOS), Lebanese Society of Endocrinology, Lebanese Society of Obstetrics and Gynecology, Lebanese Association of Orthopedic Surgeons, Lebanese Society of Radiology, Lebanese Society of Rheumatology, Lebanese Society of Family Medicine, Lebanese Society of Internal Medicine, Lebanese Society of General Practitioners, and by a ministerial decree by the Lebanese Ministry of Health.**