

## Lebanese Guidelines for Osteoporosis Assessment and Treatment 2003

LMJ 2002; 50:75-125. JCD 2005; 8:148-163.



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

### ***Who should be tested?***

#### Definite indications in postmenopausal women

##### (PM):

- \* age  $\geq$  65 years
- \* Vertebral deformity or fragility fracture
- \* Demineralization by X-rays
- \* Corticosteroid therapy more than 3 months

#### Definite indications in men:

- \* Hypogonadism
- \* Corticosteroid therapy more than 3 months
- \* Vertebral deformity or fragility fracture
- \* Demineralization by X-rays

#### Less definite indications:

- \* PM women  $\leq$  65 years with risk factors
- \* Subjects with conditions that cause bone loss

#### No indications to be tested:

- \* Premenopausal healthy cycling women
- \* Healthy men

### ***When to treat?***

#### Definite indications in postmenopausal women (PM):

- \* Low BMD and history of fragility fracture
- \* T-score  $\leq$  -2.5
- \* Corticosteroid for more than 3 months and a T-score  $\leq$  -1.5

#### Definite indications in men:

- \* Low BMD and history of fragility fracture
- \* Age  $>$  70 years with a T-score  $\leq$  -2.5
- \* Corticosteroid for more than 3 months and a T-score  $\leq$  -1.5

#### Less definite indications:

- \* PM women or men with T-score between -1 and -2.5
- \* Men  $<$  70 with a T-score  $\leq$  -2.5

#### No indications to be treated:

- \* Premenopausal healthy women or young men with a T-score between -1 and -2.5.

### ***What measures to use?***

#### Diagnostic Measurements:

- Central DXA, most established technology
- Spine and hip for all patients, add forearm in select situations (hyperparathyroidism, obesity, prosthesis)
- Lowest T-score of any site to diagnose osteoporosis
- Western database for the spine
- Use NHANES reference curve for the hip

#### Follow-up Measurements:

- Same machine, model, with strict quality assurance
- Follow-up spine, if not possible then hip
- Usual time between two measures 1.5 -2 years
- Significance of serial change over time to be derived from center specific precision measures

<http://www.iscd.org/visitors/resources/calc.cfm?fromResources=7>

**1<sup>st</sup> Update of the Lebanese Guidelines for Osteoporosis Assessment & Treatment 2007**  
*based on local national data Bone 2007 40(4): 1060- and 1066-; LMJ 2007; 55( 4).*



***Which database should be used: western or local universal database?***

- Western densitometer database for the spine
- NHANES reference curve for the hip
- RR/SD decrease in BMD same as western standards

***Should a gender-specific database used in men?***

- Use gender-specific western database for men for T-score derivation

***How many skeletal site(s) should be measured?***

- Spine (L1-L4) and hip for subjects < 65 years
- Hip only > 65 years
- Add forearm in select situations: hyperparathyroidism, obesity, prosthesis
- Use lowest T-score of all sites to diagnose osteoporosis.

***Recommendations in premenopausal women.***

- WHO T-score bases diagnosis of OP does not apply
- Consider diagnosis of osteoporosis if there are:
  - Secondary causes (e.g., glucocorticoid therapy, hypogonadism, hyperparathyroidism).
  - Risk factors for fracture
  - Presence of a fragility fracture.

***This 1<sup>st</sup> Update provides basis to align the Lebanese guidelines with the WHO universal fracture risk assessment model.***

The Lebanese Guidelines for Osteoporosis Assessment and Treatment were endorsed by:

- The Lebanese Society of Endocrinology
- The Lebanese Society of Obstetrics and Gynecology
- The Lebanese Society of Radiology
- The Lebanese Society of Rheumatology
- The Lebanese Association of Orthopedics
- World Health Organization
- The Lebanese Ministry of Health