Glucocorticoid Induced Osteoporosis
Developed by the Lebanese National Task Force for Osteoporosis and Metabolic Bone Disorders*
Endorsed by:
Lebanese Society for Osteoporosis and Metabolic Bone Disorders, Lebanese Society of Endocrinology, Lebanese Society of Obstetrics and Gynecology, Lebanese Society of Rheumatology, Lebanese Orthopedics Society, Lebanese Society of Radiology, Lebanese Society of Family Medicine, Lebanese Society of Internal Medicine, Lebanese Society of General Practitioners.

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2. ACR 2010 guidelines.
3. IOF-ECTS 2012 guidelines.
4. Prednisone or prednisolone.
5. 10-year risk for MOF adjustment: dose < 2.5 mg/day, decrease FRAX by 20% ; dose 2.5-7.5 mg/day: no adjustment; Dose ≥ 7.5 mg/day: increase FRAX by 15%.
6. FDA approved therapies for GIOP: alendronate, risedronate, zoledronic acid and teriparatide.
7. Teriparatide is indicated in high risk individuals. High risk individuals are defined as postmenopausal women and men ≥ 50 years with high FRAX estimate as defined by FRAX Lebanon treatment thresholds, or premenopausal women and men < 50 years who have a history of fragility fracture and on a prednisone dose ≥7.5 mg daily for more than 3 months.
8. Treat for the duration of steroid therapy.

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**Postmenopausal Women and Men ≥ 50 years**

- **Corticosteroids** for < 3 months
  - **FRAX** with BMD
    - Below Threshold
      - Reassure and reassess based on clinical condition
    - Close to Threshold
    - Above Threshold
  - Yes
    - Previous hip, spine or > 2 other fragility fractures

- **Corticosteroids for > 3 months**
  - < 7.5 mg/d
  - ≥ 7.5 mg/d

**TREAT**
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Premenopausal Women and Men < 50 years

Previous fragility fractures: hip, spine or ≥ 2 other fragility fractures

No

Yes

Men and Non-childbearing Women

Duration > 3 months (regardless of dose) OR Duration 1-3 months but dose > 5 mg/d

No

Yes

Childbearing Women

Duration > 3 months AND Dose > 7.5 mg/d

Yes

No

No Consensus

Monitor and tailor therapy according to each patient’s profile ³

¹ American College of Rheumatology (ACR) 2010 guidelines
² Treat for the duration of steroid therapy.
³ If no previous fragility fracture, no recommendation was made by ACR. In a young individual with low bone mineral density and significant bone loss and who requires long term systemic glucocorticoid therapy, osteoporosis therapy may be suggested; expert opinion, Hansen et al, JBMR 2011.

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