**Lumbar spine or femoral neck or total hip T-score of ≤ -2.5, a history of fragility fracture, or high FRAX® fracture probability**

**Evaluate for causes of secondary osteoporosis**

**Correct calcium/vitamin D deficiency and address causes of secondary osteoporosis**

- Recommend pharmacologic therapy
- Education on lifestyle measures, fall prevention, benefits and risks of medications

### High risk/no prior fractures**

- Alendronate, denosumab, risedronate, zoledronate***
- Alternate therapy: Ibandronate, raloxifene

### Very high risk/prior fractures**

- Abaloparatide, denosumab, romosozumab, teriparatide, zoledronate***
- Alternate therapy: Alendronate, risedronate

### Reassess yearly for response to therapy and fracture risk

#### Increasing or stable BMD and no fractures

- Consider a drug holiday after 5 years of oral and 3 years of IV bisphosphonate therapy
- Resume therapy when a fracture occurs, BMD declines beyond LSC, BTM’s rise to pretreatment values or patient meets initial treatment criteria

#### Progression of bone loss or recurrent fractures

- Assess compliance
- Re-evaluate for causes of secondary osteoporosis and factors leading to suboptimal response to therapy
- Switch to injectable antiresorptive if on oral agent
- Switch to abaloparatide, romosozumab, or teriparatide if on injectable antiresorptive or at very high risk of fracture
- Factors leading to suboptimal response

#### Denosumab

- Continue therapy until the patient is no longer high risk and ensure transition with another antiresorptive agent.

#### Romosozumab

- Sequential therapy with oral or injectable antiresorptive agent.

#### Abaloparatide or teriparatide for up to 2 years

- Sequential therapy with oral or injectable antiresorptive agent.

#### Zoledronate

- If stable, continue therapy for 6 years****
- If progression of bone loss or recurrent fractures, consider switching to abaloparatide, teriparatide or romosozumab

### Factors leading to suboptimal response

- 10 year major osteoporotic fracture risk ≥ 20% or hip fracture risk ≥ 3%. Non-US countries/regions may have different thresholds.

**Indicators of very high fracture risk in patients with low bone density would include advanced age, frailty, glucocorticoids, very low T scores, or increased fall risk.

**** Medications are listed alphabetically.

***** Consider a drug holiday after 6 years of IV zoledronate.
- During the holiday, an anabolic agent or a weaker antiresorptive such as raloxifene could be used.

### Abbreviations guide

- BMD – bone mineral density
- LSC – least significant change
- BTM – bone turnover marker

---

**COPYRIGHT ©2020 AACE. MAY NOT BE REPRODUCED IN ANY FORM WITHOUT EXPRESS WRITTEN PERMISSION FROM AACE.