Osteoporosis Application 3

Integrated Team-Based Learning (iTBL)

# Application Exercise:

For the three patient scenarios below, review the patient information and select the most appropriate recommendation. If needed, utilize the FRAX® tool to assist with your decisions. For this Application only, you do not need to consider medication cost/prescription coverage.

A recommendation may be selected only once:

* 1. Dietary calcium (target 1000-1200 mg daily), vitamin D3 (to ensure “sufficient” levels)
	2. Denosumab (Prolia®) 60 mg SC every 6 months
	3. Ibandronate (Boniva®) 150 mg PO monthly
	4. Risedronate (Actonel®) 35 mg PO weekly
	5. Zoledronic acid (Reclast®) 5 mg IV every 2 years
1. 58-year-old postmenopausal woman who fractured a bone in her arm while skiing about 6 months ago. She has a positive family history of osteoporosis: her mother sustained several morphometric vertebral fractures. She does not smoke tobacco and drinks alcohol socially on holidays.

Ht: 66 in Wt: 118 lbs Ethnicity: Caucasian

Femoral neck BMD: 0.70 (Norland DXA)

If applicable:

 T-score: \_\_\_\_

 Risk of major osteoporosis fracture (10-yr): \_\_\_\_Risk of hip fracture (10-yr risk): **\_\_\_\_**

Most appropriate recommendation \_\_\_\_\_\_\_\_\_\_\_\_\_

1. 71-year-old man who suffered a hip fracture after tripping on a lamp cord in his home. He does not smoke tobacco and has 3-4 beers per day. He does not have a family history of osteoporosis or parental fracture.

Ht: 71 in Wt: 201 lbs Ethnicity: African-American

Femoral neck BMD: 0.681 (GE-Lunar DXA)

If applicable:

 T-score: \_\_\_\_

 Risk of major osteoporosis fracture (10-yr): \_\_\_\_Risk of hip fracture (10-yr risk): **\_\_\_\_**

Most appropriate recommendation \_\_\_\_\_\_\_\_\_\_\_\_\_

*(continued)*

1. 68-year-old postmenopausal woman with multiple medical conditions including simple partial seizures (takes phenytoin daily), and type II diabetes mellitus (takes pioglitazone [Actos®] daily). She smokes 6-7 cigarettes per day and does not drink alcohol. Her mother was diagnosed with osteoporosis and suffered a hip fracture.

Ht: 64 in Wt: 139 lbs Ethnicity: Hispanic

Femoral neck BMD: 0.59 (Hologic DXA)

If applicable:

 T-score: \_\_\_\_

 Risk of major osteoporosis fracture (10-yr): \_\_\_Risk of hip fracture (10-yr risk): **\_\_\_\_**

Most appropriate recommendation \_\_\_\_\_\_\_\_\_\_\_\_\_

*Each Team Member Sign Below*

Team Member\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Team Member\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Team Member\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Team Member\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Team Member\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Team Member\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_