

Last Name	Client from Week 4 Lesson
G - I	Lillian Cho

Lillian Cho is a 65-year-old woman who presents for a follow-up visit after a routine DXA scan to assess for osteoporosis. The results indicate a 3.6% 10-year probability of hip fracture and a 25% 10-year probability of a major osteoporosis-related fracture, confirming a diagnosis of osteoporosis. The nurse practitioner (NP) has ruled out secondary causes of osteoporosis, and Lillian's physical exam and lab results are unremarkable. She has a medical history of high cholesterol and is currently taking atorvastatin (Lipitor) 40mg daily and aspirin 81mg daily. Lillian is a non-smoker and consumes alcohol only twice a year. Her vital signs are stable, with a blood pressure of 115/72 mmHg, a heart rate of 83 bpm, a respiratory rate of 17 breaths per minute, and an oxygen saturation of 97% on room air. Her weight is 150 lbs, her height is 5'3", and her BMI is 26.6.

The clinical practice guideline (CPG) for osteoporosis management, such as those from the National Osteoporosis Foundation (NOF), recommends pharmacologic therapy for postmenopausal women like Lillian, particularly when there is a high risk of fracture, as indicated by the DXA scan results. First-line treatment typically involves bisphosphonates, such as alendronate or risedronate, which help to reduce bone resorption and increase bone mineral density. An alternative option includes denosumab, a monoclonal antibody that inhibits osteoclast activity, which can be beneficial for those unable to tolerate oral bisphosphonates. Additionally, the guideline emphasizes the importance of calcium and vitamin D supplementation to support bone health.

From my professional perspective, Lillian's osteoporosis diagnosis warrants consideration of pharmacological treatment. Given her 25% 10-year probability of a major osteoporosis-related fracture, starting a bisphosphonate, such as alendronate (Fosamax), may be appropriate to reduce her fracture risk. Her normal lab results and unremarkable physical exam make her a good candidate for this therapy, as there are no contraindications present. However, monitoring for potential side effects, such as gastrointestinal irritation, is important.

Several additional questions arise that could influence her treatment. For example, Lillian's adherence to bisphosphonates, which often require specific instructions for administration such as taking the medication on an empty stomach and remaining upright for 30 minutes afterward, should be evaluated. Additionally, given her age and osteoporosis diagnosis, I would like to know more about her diet, activity level, and fall risk, as these factors can significantly impact treatment choices. Further assessments such as kidney function tests (due to potential renal side effects of certain osteoporosis treatments) and periodic DXA scans may be necessary for ongoing monitoring.