coefficient of variation of repeat measurements). Pretest probability, as well as concordance of change at different skeletal sites, assists in determining a significant change.

After initiating a specific pharmacological intervention, clinical examinations are recommended after 3–6 months and after 6–12 months. This may include documenting pain, functionality, weight, and height.[22] Ongoing monitoring of patients taking medication, particularly those taking oral bisphosphonates, should be conducted to ensure adherence with administration instructions. Laboratory tests may be used to identify drug-induced side effects or potentially treatable conditions contributing to the patient's bone health (e.g., low vitamin D or thyroid disease).

References

1. Bouxsein ML, Eastell R, Lui LY, et al. Change in bone density and reduction in fracture risk: A meta-regression of published trials. J Bone Miner Res 2019;34(4):632–42. (https://doi.org/10.1002/jbmr.3641)
2. Melton LJ 3rd, Atkinson EJ, O'Connor MK, O'Fallon WM, Riggs BL. Determinants of bone loss from the femoral neck in women of different ages. J Bone Miner Res 2000;15(1):24–31. (https://doi.org/10.1359/jbmr.2000.15.1.24)
3. Abrahamsen B, Nissen N, Hermann AP, et al. When should densitometry be repeated in healthy peri- and postmenopausal women: The Danish osteoporosis prevention study. J Bone Miner Res 2002;17(11):2061–67. (https://doi.org/10.1359/jbmr.2002.17.11.2061)
4. Chen W, Khan Z, Freund J, Pocock N. Dual hip DXA. Is it time to change standard protocol? J Clin Densitom 2022;25(1):20–23. (https://doi.org/10.1016/j.jocd.2021.07.006)
5. Naylor KE, Jacques RM, Paggiosi M, et al. Response of bone turnover markers to three oral bisphosphonate therapies in postmenopausal osteoporosis: The TRIO study. Osteoporos Int 2016;27(1):21–31. (https://doi.org/10.1007/s00198-015-3145-7)
6. Brown JP, Roux C, Ho PR, et al. Denosumab significantly increases bone mineral density and reduces bone turnover compared with monthly oral ibandronate and risedronate in postmenopausal women who remained at higher risk for fracture despite previous suboptimal treatment with an oral bisphosphonate. Osteoporos Int 2014;25(7):1953–61. (https://doi.org/10.1007/s00198-014-2692-7)
7. Majima T, Shimatsu A, Satoh N, et al. Three-month changes in bone turnover markers and bone mineral density response to raloxifene in Japanese postmenopausal women with osteoporosis. J Bone Miner Metab 2008;26(2):178–84. (https://doi.org/10.1007/s00774-007-0807-3)
8. Farahmand P, Marin F, Hawkins F, et al. Early changes in biochemical markers of bone formation during teriparatide therapy correlate with improvements in vertebral strength in men with glucocorticoid-induced osteoporosis. Osteoporos Int 2013;24(12):2971–81. (https://doi.org/10.1007/s00198-013-2379-5)
9. Reginster JY, Sarkar S, Zegels B, et al. Reduction in PINP, a marker of bone metabolism, with raloxifene treatment and its relationship with vertebral fracture risk. Bone 2004;34(2):344–51. (https://doi.org/10.1016/j.bone.2003.10.004)