PERCENTAGE OF WOMEN ACHIEVING NON-OSTEOPOROTIC BMD T-SCORES AT THE LUMBAR SPINE (LS) AND TOTAL HIP (TH) DURING UP TO 8 YEARS OF DENOSUMAB (DMAB) TREATMENT


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Objective: Osteoporosis treatment guidelines do not currently define treatment targets or goals. While absence of BMD loss and fracture are generally considered treatment successes, lack of a negative outcome does not set a real goal for therapy. Potential goals might include reaching a BMD T-score somewhere above −2.5, representing an acceptable level of fracture risk. We report the percentage of women who achieved a range of possible target BMD T-scores at both the LS and TH during up to 8 years of DMAB treatment.

Material and Methods: From 2343 women who received up to 8 years continuous DMAB (60 mg SC Q6M) treatment, 3 years during FREEDOM and up to 5 years during the Extension, we determined the percentage with T-scores > −2.5, > −2.0, and > −1.5 at both the LS and TH, and T-scores > −2.5 at either site, at baseline and over 8 years of DMAB.

Results: Mean (SD) LS and TH T-scores were −2.83 (0.67) and −1.85 (0.79), respectively, at FREEDOM baseline. The percentage of women with T-scores > −2.5, > −2.0, and > −1.5 at both the LS and TH progressively increased over 8 years of DMAB treatment (Fig. 1). At individual sites, the percentage of women with a T-score > −2.5 increased from baseline over 8 years of DMAB treatment from 19 to 86 % (LS) and from 75 to 94 % (TH).

Conclusion: DMAB enables a substantial proportion of women with postmenopausal osteoporosis to achieve non-osteoporotic T scores. Furthermore, the BMD T-scores achieved at the hip during DMAB treatment are a robust predictor of the subsequent nonvertebral fracture risk, and suggest that achieving T-scores of −2.0 or higher are desirable to maximise treatment efficacy.

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