[2012] SATO342 TREATMENT OF POSTMENOPAUSAL WOMEN WITH OSTEOPOROSIS FOR SIX YEARS WITH DENOSUMAB: THREE-YEAR RESULTS FROM THE FREEDOM EXTENSION

1INSERM UMR 1033 and Université de Lyon, Lyon, France; 2Leiden University Medical Center, Leiden, Netherlands; 3Laval University and CHUO Research Centre, Québec City, Canada; 4Amgen Inc., Thousand Oaks, United States; 5University of Florence, Florence, Italy; 6Krakow Medical Center, Krakow, Poland; 7University Hospital of Lausanne, Lausanne, Switzerland; 8Centro TEMPO, Buenos Aires, Argentina; 9Sahlgrenska University Hospital, Göteborg, Sweden; 10Universidade Federal do Paraná, Curitiba, Brazil; 11University of Liège, Liège, Belgium; 12St. Vincent Hospital, Vienna, Austria; 13Hospital Universitario La Fe, Valencia, Spain; 14Paris Descartes University, Paris, France; 15San Francisco Coordinating Center, CPMC Research Institute, and UCSF, San Francisco; 16Michigan Bone and Mineral Clinic, Detroit, United States

Background: Denosumab (DMAb) is approved for the treatment of postmenopausal women with osteoporosis at increased risk for fracture. A favorable risk/benefit profile was demonstrated in the pivotal, 3-year FREEDOM trial. The open-label, active-treatment FREEDOM extension study is evaluating the long-term efficacy and safety of DMAb for up to 10 years.

Objectives: Report results from the first 3 years of the extension, representing up to 6 years of DMAb treatment.

Methods: In the extension, each woman is scheduled to receive 60 mg DMAb every 6 months and supplemental calcium and vitamin D daily. For women given placebo during FREEDOM, the data here reflect 3 years of DMAb exposure (cross-over group). For women given DMAb during FREEDOM, the data reflect 6 years of DMAb exposure (long-term group).

Results: There were 5928 women eligible for the extension. Of these, 4550 (77%) enrolled (2207 cross-over; 2343 long-term). In the first 3 years of DMAb treatment during the extension, the cross-over group had significant gains in bone mineral density (BMD) at the lumbar spine (9.4%) and total hip (4.8%), comparable to those observed in the long-term DMAb group during the first 3 years of FREEDOM (lumbar spine, 10.1%; total hip, 5.7%). In the long-term group, further significant increases in BMD occurred for cumulative 6-year gains of 15.2% at the lumbar spine and 7.5% at the total hip. After the 1st (cross-over) or 7th (long-term) DMAb dose, sCTX was rapidly and similarly reduced with the characteristic attenuation at the end of the dosing period. In the cross-over group, yearly incidences of nonvertebral, new vertebral, clinical vertebral, and clinical fractures were lower than those in the FREEDOM placebo group. Fracture incidence remained low in the long-term group. Incidences of adverse events (AEs) and serious AEs did not increase over time with DMAb. Two subjects in each group had AEs adjudicated to ONJ. Both cases in the cross-over group healed without further treatment. One case in the long-term group healed, while the other continues to be followed. There were no atypical femur fractures.

Conclusions: DMAb treatment for 3 years in the cross-over group reproduced FREEDOM observations. DMAb treatment for 6 years (long-term group) continued to significantly increase BMD, maintained reduced bone turnover, and remained well tolerated. Fracture incidence remained low.

References:


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Osteoporosis

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