S-12911: *'promising'* in postmenopausal osteoporosis

S-12911* [strontium ranelate] increases lumbar bone mineral density (BMD) and decreases the incidence of vertebral fractures in women with postmenopausal osteoporosis, according to a multinational group of researchers.

A total of 353 Caucasian women aged 45–78 years who were ≥ 12 months postmenopausal and who had established vertebral osteoporosis were included in the study.** The women were randomised to receive S-12911 at dosages of 0.5, 1, or 2 g/day, or placebo, for 2 years. All women also received calcium 500 mg/day and colecalciferol [vitamin D_3] 800 IU/day throughout the study. 272 women completed the study.

After 1 and 2 years of treatment, S-12911 was associated with a dose-dependent increase in lumbar BMD. After adjustment for the content of strontium in the bone, the mean annual slopes for the % change in lumbar BMD were 1.35, 1.65, 2.97, and 0.5, for the S-12911 0.5, 1, and 2g groups, and the placebo group, respectively. These values were associated with a statistically significant group effect. Even after adjustment for a greater bone strontium content (95% CI), the value for the S-12911 2g group was significant, compared with that for the placebo group. Unlike other antiresorptive treatments, the two individual years of S-12911 treatment produced similar rates of lumbar BMD increase.

During the second year of the study, the proportion of women who experienced new vertebral fractures was reduced by approximately 44% in the group who received S-12911 2 g/day, compared with the placebo group.

* Servier; phase III for postmenopausal osteoporosis

** The study was funded by Servier.

Meunier PJ, et al. Strontium ranelate: dose-dependent effects in established postmenopausal vertebral osteoporosis - a 2-year randomized placebo controlled trial. Journal of Clinical Endocrinology and Metabolism 87: 2060-2066, May 2002

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