

MIDDLE EAST & NORTH AFRICA CONSENSUS ON OSTEOPOROSIS

PROTELOS UPDATE

Strontium ranelate is a new antiosteoporotic agent with a dual mode of action indicated as first line treatment in postmenopausal osteoporosis to reduce the risk of vertebral and hip fractures. Strontium ranelate dissociates the process of bone formation and bone resorption involved in bone remodeling. In-vitro and in-vivo studies have shown that it promotes bone formation by stimulating the replication of preosteoblasts, leading to an increase in the bone matrix synthesis, while simultaneously decreasing osteoclast differentiation and activity, leading to a reduction in bone resorption¹. The effect of strontium ranelate on osteoclasts differentiation has been evidenced recently through an effect on osteoprotegerin expression involving the Rank/RankL system². Strontium Ranelate clinical efficacy has been assessed in 2 large-scale clinical trials SOTI³ and TROPOS⁴ which have shown a significant decrease in vertebral and peripheral fracture risks, including hip fractures. Strontium ranelate is taken at a dose of 2g/day and is well tolerated^{3,4}.

1. Marie PJ, et al. *Calcif Tissue Int.* 2001;69:121-129
2. Brennan T, et al. *Calcif Tissue Int.* 2006; 78(suppl 1):S129(8356)
3. Meunier PJ, et al. *N Engl J Med.* 2004 ; 350(5) :459-468
4. Reginster JY. *J Clin Endocrinol Metab.* 2005 ; 90(5) :2816-2822