

Forteo: Parathyroid Treatment for Osteoporosis

Forteo (teriparatide) is a new treatment for osteoporosis. It has been approved by the US Food and Drug Administration for post-menopausal women who have been diagnosed with osteoporosis, for men with primary or hypogonadal osteoporosis as well as men and women with a history of osteoporosis-related fracture, or who have multiple risk factors for fracture, or who have failed or are intolerant to previous osteoporosis therapy. It is administered via daily injections.

The drug is based on the parathyroid hormone and significantly increases the rate of bone formation. It increases the number and stimulates the action of bone forming cells called osteoblasts. Currently available osteoporosis medications such as the bisphosphonate Fosamax are antiresorptives that work to slow or stop bone loss by reducing the number and limiting the action of bone-removing cells called osteoclasts.

One major safety concern became apparent during a two-year study in rats. Teriparatide caused an increase in the incidence of osteosarcoma, a malignant bone tumor. No cases of osteosarcoma have been reported during the human trials. It is not known if humans treated with Forteo (teriparatide) are at increased risk for this cancer. The FDA recommends against treatment with teriparatide for children and adolescents because their growing bones put them at a higher risk for developing osteosarcoma. Because the effects of long-term use are not known at this time, therapy for more than 2 years is not recommended.

According to Eli Lilly and Company, the drug's manufacture, Forteo should not be taken by individuals with high levels of calcium in their blood, by those with a history of bone cancers or by those with metabolic bone diseases other than osteoporosis.

To the best of our knowledge, there is no evidence, pro or con, concerning use of this drug for the treatment of osteogenesis imperfecta. Adults who have OI, and who have not responded to bisphosphonate therapy to control the osteoporosis associated with OI, may wish to discuss Forteo with their doctor.

Information about a study of Forteo in adults with OI is available at <http://www.oif.org/site/DocServer/forteo.pdf?docID=1681>