What You Need to Know About Forteo Injections for Osteoporosis

by LANA BARHUM

Forteo for Osteoporosis

Teriparatide, under the brand name Forteo, is an artificial version of parathyroid hormone, a naturally occurring hormone in the body that works to regulate calcium metabolism. Forteo for osteoporosis may be used as a treatment option, as teriparatide also promotes bone growth. It is different than other osteoarthritis medications, which improve bone density by slowing down and hindering bone resorption, the breakdown and absorption of old bone.

Under the brand name Forteo, teriparatide was approved for use in 2002 by the American Food and Drug Administration (FDA). It is the only osteoporosis medication available that rebuilds bone.

When the FDA approved teriparatide, it gave it a black box warning. The reason for the warning was the potential risk for osteosarcoma, a rare, malignant and often fatal cancer.

Research Studies Surrounding Foreto for Osteoporosis

Various studies have found teriparatide to be an effective treatment for osteoporosis.

Study results show it is successful in reducing bone loss and in the formation of new bone. It also helps to increase bone mineral density and strength.

One study published in the Journal of Bone Mineral Research, finds that teriparatide use results in increased vertebral bone mineral density in postmenopausal woman, regardless of age or previous history of fracture. The study also found women older than 65 experienced the most improvement.

Another study from the University of Arkansas for Medical Sciences, Little Rock, Arkansas, finds that teriparatide successfully introduces new bone formation, physically similar to normal bone. The researchers further note teriparatide increases bone mass density and reduces the risk for fracture.

A study from earlier this year, also published in the Journal of Bone Mineral Research, looked at combination treatment of denosumab (Brands: Xgeva and Prolia) and teriparatide therapy. The study reveals that combination therapy improves total bone density and bone strength more than either drug alone does.

Another study from 2016, reported in the medical journal, Bone, finds Forteo for osteoporosis increases bone volume, improves bone structure and expands bone thickness. That study further reports on a reduction in non-vertebral fracture, especially hip fractures.

Who Can Take Teriparatide?

Doctors prescribe teriparatide for patients who have a history of osteoporotic fracture and risk factors for fracture

and for patients who are intolerant to other osteoporosis treatments or who other treatments have not worked for.

Teriparatide injections are mainly prescribed for men with osteoporosis and postmenopausal women. Of note is it does not prevent osteoporosis and it is not prescribed to treat moderate cases.

How is Teriparatide Taken?

Teriparatide comes as a liquid injection administered under the skin in your thigh or stomach. The medication comes in pre-filled injectable pens.

It is usually injected daily for up to two years. You should follow all the directions on the box and any additional instructions by your doctor.

You can inject yourself at home or you can ask a friend or loved one to help you. If you are using a teriparatide injection for the first time, ask your doctor to show you how to properly use it.

These injections control osteoporosis and keep it from worsening. If you find the injections are making you sick, don’t stop them without asking your doctor.

Side Effects

Side effects of teriparatide injections include itching, swelling, redness and bruising at the injection site. Other side effects include nausea, joint pain and leg cramps.

Severe side effects are possible. Let your doctor know if you think you are having a bad reaction to teriparatide.

Some adverse effects that have been reported include gastritis, pneumonia, dyspnea, insomnia, anxiety and herpes zoster. These effect less than 10% of people taking teriparatide according 2007 FDA clinical studies.

Shortcomings

Teriparatide has at least three shortcomings. One is that its research studies do not expand over two year durations and we do not know enough about long-term complications.

Animal studies show teriparatide use is a risk factor for osteosarcoma. Since no patients should be taking it for more than two years, the risk for bone cancer should be minimized.

It is also linked to osteoblastoma, a non-cancerous mass that forms in bone tissue and osteoma, a condition that causes small benign bone lesions.

A third shortcoming is teriparatide’s price tag. In 2004, the medical journal, American Family Physician, reported the cost was $560 monthly.

Last year, New York Times reported the price tag was now $2,551.77. Even with insurance, copays and deductibles can be pretty high.

The Takeaway

Teriparatide has been successful for many patients and the risks associated are small in number. But still, it is an expensive drug and if you have moderate osteoporosis, it may not be the best choice for you.

Of course, only you and your doctor can best determine whether teriparatide is a viable treatment option for your situation.