The Best Osteoporosis Injection Option For You

by JOSH DUVAUCHELLE

Which Injection for Osteoporosis Is Right for You?

With one in three women over the age of 50 experiencing osteoporosis-related fractures, this bone disease looms as one of today's biggest health crises. But there's good news. Right now, there are more options than ever for treating osteoporosis and helping to restore your bones' natural strength.

Some of the latest treatments to hit the market are osteoporosis injections. Unlike more traditional bone medications that are delivered via pills or tablets, an injection for osteoporosis is typically needed only a few times a year.

This is important because poor compliance and follow-through with their medications are one of the primary health risks among men and women with osteoporosis. Shockingly, researchers have found that only 40 percent of patients take their treatments for more than one year.

Unlike the daily reminders and inconvenience of pills and tablets, semi-regular injections can offer people a new osteoporosis treatment route that better fits their medical needs and their lifestyles.

Your Osteoporosis Injection Options

When you receive your initial osteoporosis diagnosis, most doctors will first attempt to use a specific type of drugs called bisphosphonates. Then, depending on how you respond, as well as your other risk factors, your doctor may consider alternative injection for osteoporosis. We'll walk through all these different injection-based osteoporosis treatments below.

Bisphosphonates

In your bones are osteoclasts and osteoblasts. The former dissolve the collagen and remove the calcium in your bones, thus leading to weaker, more brittle bones and contributing to your osteoporosis. The latter are bone cells that help with bone formation and building your bone strength.

Bisphosphonates work to deactivate your osteoclasts (the bad cells) while still allowing the osteoblasts (the good, bone-remineralizing cells) to do their work. This results in slower disease progression and stronger bones.

Most forms of bisphosphonates are taken as a tablet either daily, weekly or monthly. However, there is one form under the brand name Reclast (zoledronic acid) that you can get via intravenous injections. If your doctor is trying to prevent osteoporosis, such as if you have a family history and high risks of the disease, then the injections are given once every two years for osteoporosis prevention.

If you currently have osteoporosis, the injections are given once a year.

Compared to taking a traditional bisphosphonate pill or tablet, injections have a few advantages. The pills and tablets are known for their potential to irritate the lining of your stomach and your esophagus. Thus, injections reduce and avoid stomach upset. A once-a-year injection is also far easier to schedule and stick to compared to having to remember a daily pill.

On the other hand, some people find that these injections give them mild flu-like symptoms. There are also some rare side effects, including jaw damage, loose teeth, and fractures in the thigh.

Prolia (Denosumab)

The National Osteoporosis Foundation reports that denosumab (marketed under the brand name Prolia) is one of the most effective treatments for osteoporosis. According to some reports, it can reduce the risk of spine fractures by nearly 70 percent.

This medication is known as a monoclonal antibody. In other words, it's made from the complex molecules of living microorganisms, animal cells, and plants. Thus, it’s not a “drug” in the truest sense.

Denosumab works by turning off the stimulus for the osteoclasts, the bone cells that weaken your bones. It’s given twice a year.

One known drawback is that denosumab can affect your body’s calcium levels. “Patients need to have a blood test after each dose to confirm that blood calcium level is not abnormally low,” warns the National Osteoporosis Foundation. “Signs of low calcium levels include spasms, twitches or cramps in the muscles; or numbness and tingling in the fingers, toes or around the mouth. If any of these symptoms are seen while on this medicine, patients should contact their healthcare provider.”

Forteo (Teriparatide)

Teriparatide, commonly known as Forteo, is a daily injection that you give to yourself. It comes in a pre-loaded injection pen, and each pen carries four weeks of the medicine.

This is a hormone treatment, albeit a man-made hormone. It’s ideal for people with osteoporosis who can’t take steroid medications. It’s the only injection on the market that specifically targets your osteoblasts (good, bone-building bone cells), helping to directly speed up the rate at which your bones improve their density.

One one hand, studies have found that these daily injections are more effective than bisphosphonates when it comes to building bone density. But on the other hand, the injections can only be used for a maximum of two years. After this time, it stops being effective and bones can quickly lose their strength and density. Teriparatide injections have also been linked with a rare, but higher, risk of some forms of bone cancer.

Fortical or Miacalcin (Calcitonin)

This treatment, which is a synthetic hormone, is specifically designed for postmenopausal women. In fact, the ideal candidate is a woman who is five or more years past menopause who has not experienced great results with other treatments.

The hormone may increase bone density, specifically in your spine, and also slows the breakdown of your bones. It's given either as a nasal spray, or as an injection under your skin.

However, it’s one of the least effective of all these osteoporosis medications. That being said, its reduced potency also means it has fewer serious side effects compared to some of the above treatments. The most common side effects may include headaches or nosebleeds.

Deciding on an Injection for Osteoporosis

Whatever injection for osteoporosis you opt for, your doctor can give you clear guidance, specific pros and cons related to your individual health and risk factors, and proper dosage to ensure these treatments are effective at protecting your bone health and preventing falls, fractures, and other injuries.