

## Denosumab instructions

### Denosumab (Prolia) Injection Instructions

#### What is denosumab?

This is a medication used for men and women who have osteoporosis and/or are at high risk for fracture. It helps to prevent bone break-down and fracture. The drug is similar to other medications for osteoporosis such as alendronate (Fosamax), risedronate (Actonel), ibandronate (Boniva) and IV zoledronic acid (Reclast). However, this drug is *not* a bisphosphonate like these other medications. Denosumab also acts on the cells that break down bone and is called a RANK-ligand inhibitor.

#### How do I take denosumab?

Unlike bisphosphonates that are taken by mouth or IV zoledronic acid which is given through a vein, denosumab is given under the skin (subcutaneously, or SQ) two times per year to help strengthen the bones. Denosumab is administered in the hospital infusion center. If your doctor has prescribed denosumab, it is important that you get your shots every 6 months and do not wait too long between treatments.

#### Who is a good candidate for denosumab injections?

Unfortunately, only a small percentage of oral medications for osteoporosis are absorbed in the stomach. For some people, so little of the medication gets into the bone that the medication does not effectively treat the bone disease. Because denosumab bypasses the gut (and goes under the skin instead), it can better prevent bone loss in some people. Denosumab is also a good choice of bisphosphonates for people who have troubles with their esophagus or stomach. These conditions include, but are not limited to, reflux disease, difficulty swallowing, esophageal spasm, and peptic ulcer disease. Finally, denosumab is one of the only osteoporosis medications approved for use in patients with kidney dysfunction.

#### What are the risks associated with the denosumab injections?

In people who have vitamin D deficiency, the medication can cause low blood calcium levels. Your doctor should check your vitamin D level before the infusion and give you replacement vitamin D, if needed, to prevent low blood calcium. There are some rare side effects associated with denosumab use. These include a rare condition called osteonecrosis of the jaw. Bone in the jaw can become inflamed and exposed. This condition is typically associated with high dose, frequent denosumab injections but has been reported in men and women receiving denosumab for osteoporosis. To prevent this rare complication, we often wait to give the injection for 2 months after an invasive dental procedure (root canal, dental implant, tooth extraction, etc.). Please notify your doctor if you have an upcoming dental procedure planned so that she can schedule your injection accordingly. Rarely, atypical infections have been seen in denosumab users. These have included skin rash and upper respiratory infections/pneumonias. Please let your doctor know if you have a history of a compromised immune system.

#### How do I prepare for my denosumab injection?

1. Stay hydrated the day before, day of, and day after your injection.
2. Unless you have been told by another medical professional not to take acetaminophen or similar drugs, take extra-strength acetaminophen (Tylenol) 650mg three times daily the day before, day of, and day after your infusion.

#### What if I have questions before my denosumab injection?

Feel free to contact us with any questions or concerns that you might have.

