

## Treatment Options for Osteoporosis

By Susan Locke, M.D.

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In some cases of osteoporosis, improvement in bone density can be achieved through increasing calcium and vitamin D, doing weight-bearing exercises, reducing alcohol and quitting smoking. However, for the majority of women with osteoporosis, lifestyle changes are not enough. In these cases, medications may be necessary.



We asked **Holly Thacker, M.D., director of the Cleveland Clinic Center for Specialized Women's Health** to discuss the different types of medications used to treat osteoporosis. The choice of which type of medication that is best for an individual should be made after discussion with your doctor about the risks and benefits of each type of medication for YOU.

### Hormone replacement therapy (HRT):

Menopause causes an abrupt decrease in estrogen which is critical for bone health. For women who have osteopenia (bone thinning) and

also have menopausal symptoms, hormone replacement therapy may be an excellent first-line choice. Estrogen has been shown to reduce the risks of all types of fractures in women of varying bone-density levels.

Bisphosphonates: This form of treatment has been shown to slow or stop the dissolution of bone without slowing down the formation of new bone. Therefore, you will not lose bone faster than it can be replaced. There are several bisphosphonates currently prescribed:

- Fosamax – oral, weekly dosing
- Fosamax plus D – oral, weekly dosing
- Actonel – oral, weekly or monthly dosing
- Boniva – oral, monthly dosing; or injection every 3 months
- Reclast – intravenous, once yearly.  
Typically used in cases of gastrointestinal intolerance to oral preparations

The choice of which bisphosphonate to use is based on three factors: patient preference (once a week vs. once a month, vs. yearly), physician preference and often the cost of the medication (may depend on insurance coverage).

Selective estrogen receptor modulator (SERM), also known as estrogen agonists-estrogen antagonists. EVISTA (raloxefine) is a SERM which acts on some but not all estrogen receptors. It reduces the risk of spine fractures, but does not treat menopausal symptoms (which you would get with traditional HRT).

**Calcitonin:** This naturally occurring hormone regulates calcium and bone metabolism and can slow bone loss. It is given by injection or nasal spray, but only recommended for women more than five years beyond menopause.

**Denosumab (PROLIA):** This is the first FDA approved RANK ligand inhibitor and is given by subcutaneously injection every 6 months and reduces risk of spine, hip and non-vertebral fractures.

**Parathyroid Hormone (FORTEO):** Parathyroid hormone regulates calcium levels in the blood. It stimulates new bone formation. FORTEO treatment requires daily injection for 18-24 months, so it is not a first-line treatment and needs to be followed with additional therapies.

Again, your physician will look at your individual risk factors and recommend the treatment that is best for you. If you would like an appointment at a top hospital, please call us.

For an excellent discussion of osteoporosis, we recommend Dr. Holly Thacker's book, [The Cleveland Clinic Guide to Menopause.](#)



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Follow Dr. Locke on Healthnetwork's website. Her *Prescription for a Better Life* can be found through her link on our home page: [www.healthnetworkfoundation.org](http://www.healthnetworkfoundation.org).

Have a health question you want to ask Dr. Locke? Send an email to [help@healthnetworkfoundation.org](mailto:help@healthnetworkfoundation.org). All inquiries are kept private and confidential.

If you have questions or you would like a referral to one of our centers of excellence, please call: 866-968-2467 or 440-893-0830.