

## Osteoporosis and Medications

### PATIENT/FAMILY INFORMATION SHEET

#### What is Osteoporosis?

Osteoporosis is a disease characterized by low bone mass and loss of bone tissue that may lead to weak and fragile bones. If you have osteoporosis, you have an increased risk for fractured bones (broken bones), particularly in the hip, spine, and wrist. (For more information see Greenwich Hospital Patient Education Handout: Osteoporosis).

Prevention of osteoporosis is the goal. A diet rich in calcium and vitamin D is the cornerstone for osteoporosis prevention. (For more information, see Greenwich Hospital Patient Education Handout: Strong Bones and Healthy Nutrition).

#### What medications are used to treat Osteoporosis?

Your physician may order a bone mineral density test (BMD) to assess for osteoporosis. Depending on the result, your physician may recommend additional tests, including blood and urine analysis, to determine the cause(s) of your low bone mass. Your physician will then prescribe medication to either prevent osteoporosis or to treat osteoporosis if necessary. Medication classes are listed in the table below:

Medication Class	Drug Name	Use	Warnings
Bisphosphonates	Alendronate (Fosamax)  Ibandronate (Boniva)  Risendronate (Actonel)	Slow the rate of bone thinning  Can be used in men and women for treatment and prevention.	Strict administration guidelines for the bisphosphonates: 1. Best taken first thing in the morning and must be consumed on an empty stomach. 2. Take with a full glass (8 ounces) of water (no other beverage). 3. Wait 45 minutes-1 hour before consuming food or taking other medications. 4. Do not lay down after taking medication for at least a ½ hour.
Selective estrogen receptor modulator	Raloxifene (Evista)	Slows bone thinning and causes increase in bone thickness.  Used only in women for treatment and prevention.	

Naturally occurring hormone	Calcitonin (Miacalcin)	Helps regulate calcium levels in the body and is part of the bone-building process.  Used in men and women	When taken by injection or nasal spray, it slows the rate of bone thinning.  Relieves pain caused by spinal compression fractures.
Parathyroid Analogue	Teriparatide (Forteo)	Used for the treatment of men and postmenopausal women with severe osteoporosis who are at high risk for bone fracture	Given by injection.
Hormone therapy	Estrogen	Beneficial effect on bone. Slows the rate of bone loss. Used for prevention only not treatment purposes.	Not typically recommended for most women with osteoporosis.  If you are at high risk and cannot take other medications, your health professional may recommend estrogen under certain circumstances.

Adequate calcium and vitamin D supplementation in addition to the prescription medication is important to get maximum effect.

Your doctor will determine which medications are right for you. Regardless of medication you have prescribed, always take medication as directed and never adjust your dosing unless advised by your doctor.

Resources:

National Osteoporosis Foundation [www.nof.org](http://www.nof.org)

Medline Plus [www.nlm.nih.gov/medlineplus/osteoporosis.html](http://www.nlm.nih.gov/medlineplus/osteoporosis.html)

*For more Patient Education Fact Sheets, see the Greenwich Hospital web site at [www.greenhosp.org](http://www.greenhosp.org) and click on Patients & Visitors, then Patient Education*