### Patient Education

**Alendronate** *(a len’ droe nate)*

**Names**
Alendronate is the generic drug name. Fosamax® is the brand name. (There may be other names for this medication.)

**How is it Administered?**
Alendronate comes as a tablet (taken daily or once a week) and as a liquid (taken once a week) to take by mouth.

- You must take alendronate just after you get out of bed in the morning, before you eat or drink anything. Never take it at bedtime or before you get out of bed for the day.

- Swallow tablets with 6-8 ounces of plain water – never take it with any other kind of liquid!

- Swallow the tablets whole; do not split, chew or crush them. Do not suck on the tablets.

- If you take the solution, drink at least a quarter of a cup (2 ounces) of plain water afterwards.

- After taking your Fosamax, do not eat, drink, take any other medications, vitamins, or antacids, or lie down **for at least 30 minutes** – remain upright in a sitting or standing position.

- After the 30 minutes have passed, you may eat your first food of the day. After eating, you may lie down.

**Why am I Taking Alendronate?**
Alendronate is one of the bisphosphonate drugs, which work by preventing bone breakdown and increasing bone density (thickness). It is used to treat and prevent osteoporosis, a condition that causes the bones to become thin/weak and break easily.

**How Does it Work?**
There are two kinds of bone cells – osteoblasts that create bone and osteoclasts that break down bone. The creation and destruction of bone is generally kept balanced, though we tend to lose bone mass as we age.

Some cancers cause osteoclasts to accelerate bone destruction. In addition to bone weakness increasing your risk of a fracture, it can also cause pain and release excess calcium into the bloodstream.
Calcium can affect your heart rate, among other bodily functions. Alendronate is a bisphosphonate; these drugs slow down the osteoclasts and may help prevent the complications caused by overactivity of the osteoclasts.

**What Should I Tell My Doctor Before I Begin Receiving Alendronate**

Tell your doctor if you:

- have ever had an allergic reaction to alendronate or similar medicines such as risedronate (Actonel®)
- are undergoing radiation therapy, or have anemia, vitamin D deficiency; difficulty swallowing; heartburn or other upper GI problems; any infection; problems within your mouth or dental disease, a blood clotting disorder; or kidney insufficiency or disease

*This drug may interact with other medications or cause harmful side effects. Tell your doctor and pharmacist about all prescription or over-the-counter medications, vitamins, herbal, or diet supplements that you are taking.*

**Osteonecrosis of the Jaw**

Alendronate may cause serious problems with your jaw, especially if you have dental surgery or treatment. Osteonecrosis (also called vascular or aseptic necrosis) of the jaw is a rare condition that involves the loss, or breakdown, of the jawbone and it can be serious. It is not known exactly what causes osteonecrosis of the jaw but it has occurred in some cancer patients receiving alendronate.

Symptoms include:

- pain, swelling, infection, or poor healing of the gums
- loosening of teeth
- numbness or the feeling of heaviness in the jaw

Some possible risk factors for osteonecrosis include:

- radiation therapy to the head or neck
- chemotherapy or steroid therapy (i.e. cortisone)
- anemia (low blood count) and other blood disorders (i.e. poor circulation)
- infection
- history of poor dental health, gum disease or dental surgery
- alcohol abuse or cigarette smoking
- poor nutrition
Diagnosis is made by x-rays or tests for infection. Treatments may include antibiotics, oral rinses, and removable mouth appliances.

Rarely, minor dental work may be necessary to remove injured tissue and reduce sharp edges of the bone. Once your cancer treatment has started, if you experience pain in your mouth, teeth, or jaw or have any other symptom of possible dental problems, tell both your oncologist and your dentist immediately.

What Are Some Possible Side Effects I May Experience?

- Nausea, pain, and/or bloating in the stomach
- Constipation, diarrhea, and/or gas
- Change in your ability to taste food
- Headache
- Dizziness
- Swelling of joints, hands, or legs

How Can I Manage These Side Effects?

- Ask your doctor about medication to help prevent or lessen nausea, diarrhea, or headache.
- Check with your doctor or nurse before using enemas, laxatives, or suppositories for constipation. Be sure to drink plenty of water, unless your doctor has advised you otherwise.

When Should I Call the Doctor?

If you experience any of the following symptoms, call your doctor immediately before you take any more alendronate:

- new or worsening heartburn or chest pain
- difficulty swallowing or pain on swallowing
- bloody vomit or vomit that looks like coffee grounds, or black, tarry, or bloody stools
- blisters or peeling skin, rash, itching, and/or hives
- swelling or pain in eyes, face, lips, tongue, or throat
- difficulty breathing or hoarseness
- painful or swollen gums and/or loosening of the teeth
- numbness, a heavy feeling or poor healing in the jaw
- Call your doctor right away if you experience severe bone, muscle, or joint pain at any time during your treatment with alendronate.
What Else Should I Know About Alendronate?

• Talk to your doctor about other ways to protect your bone health such as avoiding smoking and large amounts of alcohol, and planning a regular program of weight-bearing exercise.

• If you have difficulty swallowing or conditions that delay esophageal emptying, you should not take this drug.

• If you miss a dose of once-daily alendronate, do not take it later in the day – take it the next morning as usual. If you miss a dose of once-weekly alendronate, take one dose the morning after you remember and then return to taking one dose on your regularly scheduled day the next week. Never take a double dose and never take more than one dose in one day.

• Keep this medication in the container it came in, tightly closed, and out of reach of children. Store it at room temperature and away from excess heat and moisture (not in the bathroom). Do not freeze alendronate solution.

• If you have any additional questions about alendronate, please talk to your doctor.