

## Outline For Osteosarcoma Treatment

The earlier treatment is started, the better the chance for improvement. The location of the lesion also is important as bone cancer in the upper femur and pelvis, or in the upper humerus and scapula, progresses more quickly than lesions in the lower areas of the extremities. Please read the article about bone cancer:

<https://www.apeacefulendingathome.com/bone-cancer-in-dogs/>

Pain relief should be one of the main goals in dealing with osteosarcoma. In my opinion, opiates, or opiate derivatives should not be used, as the side effects are, in many cases, worse than the disease itself. Species specific NSAID's are the most helpful. Gabapentin is a poor choice as studies have shown that it is not a good pain mitigator (also my experience) and has too many side effects. Bis-phosphonates (human medication and used off label here) can be quite helpful for pain relief and to slow the progression of the disease. BP's inhibit bone resorption and decrease osteoclastic (involved with bone cancer) activity. The injectable bis-phosphonates are often used along with chemotherapy, but are quite expensive. The oral version, Alendronate (Fosamax) according to several sources may be a helpful adjunct along with NSAID's for pain relief. This outline will only focus on the oral version of the bis-phosphonate, Alendronate. Your veterinarian will have to be willing to prescribe this medication. Downloading one of the pharmacy apps (GoodRx or BuzzRx), is essential to find the least expensive pharmacy near you. Once downloaded, the app is fairly self-explanatory. The search engine will help you find the drug. Just type in Alendronate or Fosamax and the app will bring up the appropriate medication. It comes in various strengths. For medium to large dogs, 70 mg tablets work well. Each package contains 4 tablets (humans take 1 tablet each week), so for quantity, put in 7 packages (28 tablets total) or you can put in a custom number, which should be 28. For giant breeds, 140 mg should be used. Generally, the 70 mg costs around \$1.00 per dose, and at some pharmacies, less. The prescription should be written for PRN refills. That will be good for 1 year.

This medication needs to be given once daily on an empty stomach. It cannot be given with food. Once the tablet is given, water needs to be administered to make sure the pill gets into the stomach. Food can be given 1/2 to 1 hour later. Human pharmacists are used to filling the human prescription which calls for 1 tablet each week. It's important the pharmacist knows this is for cancer treatment for a dog and requires the drug to be given daily. They do get confused. I've had a couple of pharmacists who initially refused to fill the prescription, so you will have to be persistent. I have not seen any significant side effects to using Fosamax.

I recommend Deracoxib (Deramaxx) for the NSAID to use. It's given once daily and can be given in the evening with food. It's fairly expensive, but works well with the Fosamax. The recommended dose is 1-2 mg/kg given once daily. Start with 1 mg/kg, initially and you can go to the higher dose if needed.