

# Bisphosphonates

Patient Name \_\_\_\_\_

Date \_\_\_\_\_

Chart Number \_\_\_\_\_

Recent scientific literature has noted a possibly significant risk of developing osteonecrosis (disease/destruction of the jaw bone) in patients taking intravenous bisphosphonate medications. Bisphosphonates are commonly used for the treatment of various cancers, osteoporosis, and other bone metabolic diseases. The complication is seen most commonly when either more potent forms of the medication were used intravenously or when there have been prolonged and/or high doses of oral medications. The concern for patients considering dental implants or other oral surgical procedures is the degree of risk/benefit in taking oral bisphosphonates. Commonly prescribed bisphosphonates include, without limitation, the following medications:

- **Fosamax<sup>®</sup> (alendronate)**
- **Boniva<sup>®</sup> (ibandronate)**
- **Didronel<sup>®</sup> (etidronate)**
- **Aredia<sup>®</sup> (pamidronate)**
- **Actonel<sup>®</sup> (risendronate)**
- **Zometa<sup>®</sup> (zoledronate)**
- **Skelid<sup>®</sup> (tiludronate)**
- **Bonefos<sup>®</sup> (clodronate)**

The majority of osteonecrosis cases have occurred in patients taking intravenous forms of these drugs. However, a small percentage of osteonecrosis cases have been reported in which patients were taking an oral form of these drugs. It is known that bisphosphonate medications accumulate in the bone over time and dissipate from the bone very slowly. The osteonecrosis cases that have been reported in connection with the use of oral forms of the drugs have been at higher doses for more than 2.5 years or with lower doses for more than 5 years. At recommended bone concentrations these medications may promote bone formation, but at higher concentrations they can have negative effects on bone cells.

The risk of osteonecrosis appears to be associated with trauma to the jaws, such as would occur with tooth extraction or dental implant placement. However, reports of spontaneous osteonecrosis of the jaws associated with these drugs have been noted in the scientific literature as well.

It is impossible at this time to know the degree of risk for an individual patient or procedure. These drugs have been on the market for many years, and many thousands of patients taking oral bisphosphonates have had tooth extractions and implants over the years without experiencing the complication of osteonecrosis of the jaw bones. However, due to the recent reports, we feel we must make patients aware of the risks if they are considering extractions or dental implants.

If you are taking any medication for the treatment of osteoporosis, it is impossible to know whether or not discontinuing the drugs prior to your procedure will decrease or eliminate the risk for the disorder. If you have been taking high doses for any period of time or low doses for a significant time period it may be prudent to discontinue the use of these drugs for several weeks or months prior to having any procedure done. Literature s that the bone density benefits derived from at least one of the bisphosphonates were still present even after discontinuing therapy for 2 years. We recommend that you discuss this possible complication with your prescribing physician as well with your dentist if extractions or implants are being considered.

I have read and understand the above information and have had an opportunity to discuss the risks and benefits of the proposed procedure with my treating dentist, Dr. \_\_\_\_\_.

I understand that, in the event I am currently taking or have at any point in the past taken any form of bisphosphonates, I may have an increased risk of developing osteonecrosis.

Notwithstanding that risk, I choose to undergo the procedure.

**Patient Full Name (Print)** \_\_\_\_\_

**Patient Signature** \_\_\_\_\_

**Oral Surgeon Signature** \_\_\_\_\_