## **Information Sheet - Zoledronate**

Zoledronate (also known as zoledronic acid, or Aclasta) is the most potent medicine in the bisphosphonate class currently available. Bisphosphonates work by preventing resorption of bone by inhibiting the function of bone—dissolving cells called osteoclasts. Bisphosphonates are commonly used in the treatment of osteoporosis and Paget's disease, and are also used for preventing some forms of cancer from spreading in bone. Zoledronate is given by an intravenous infusion (into a vein in the arm via a "drip") over about 15 minutes and can be given every **18-36** months as needed for treatment of osteoporosis. Treatment of Paget's disease involves even less frequent infusions. Zoledronate increases the bone density in patients with osteoporosis, to about the same extent as other drugs such as alendronate (Fosamax), and is effective at reducing fracture rates, by 35-70%. It also reduces bone pain in Paget's disease. It is licensed in New Zealand for treatment of osteoporosis and Paget's disease. Side effects from zoledronate treatment are uncommon, and are in general no different from placebo-treated patients in randomised trials. It should be remembered that major fractures can be very dangerous, so this should be balanced against the small risk of ill effects from treatment

Accepted or probable side effects with zoledronate include:

- 1. About 20% of individuals may experience a flu-like illness after their first treatment, which usually lasts 24-48hrs, but which can occasionally go on for up to 7 days, sometimes with associated muscle or joint aching. This usually responds well to regular paracetamol or anti-inflammatories such as Nurofen or diclofenac. The chance of this side-effect occurring after second or third zoledronate infusions is much lower, about 3-4%.
- 2. Individuals with severe pre-existing kidney damage can sometimes experience deterioration in their kidney function after the administration of zoledronate. It is normal practice not to use zoledronate in people whose kidneys are not functioning well.
- 3. Very rarely (4-5 out of 1000 people), drugs in the bisphosphonate class can cause eye inflammation
- 4. Very rare cases of leg fractures have been reported during long-term therapy with other bisphosphonates. However, the medications prevent many more fractures, so the balance of effects very strongly favours their use in people with osteoporosis.

Unproven side effects with zoledronate include:

- 1. Osteonecrosis of the jaw (ulceration in tooth sockets or the gums) is observed in cancer patients receiving high-dose treatment but is not increased in frequency in those treated for osteoporosis or Paget's disease.
- 2. Atrial fibrillation (an abnormal heart rhythm) was reported by one group of overseas investigators but has not been seen in any other clinical trials.

If you have any other questions about this medicine, or your bone condition, you should feel free to ask the doctors or nurses in Bone Clinic. If you need to contact them after you have left Bone Clinic, you can phone 307-4949, extension 26871.

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