



## Zoledronate (Zoledronic Acid) **Informational Handout for Patients & Families**

### **What is Zoledronate?**

Zoledronate belongs to a family of medicines called Bisphosphonates. Bisphosphonates slow down the rate of bone breakdown. Zoledronate increases bone strength, decreases bone pain & may help reduce the chance of developing fractures in children who have certain type of bone conditions such as osteogenesis imperfecta, osteoporosis or who have fragile bones from other causes, such as long-term steroid treatment.

### **How is this medication given?**

Zoledronate is given as an IV infusion over 30 minutes. This most commonly occurs in the Medical Day Unit on 4C in the hospital. Children do not stay overnight at the hospital. It is usually about a 4-hour day in the hospital.

The first infusion dose is split in half and administered 6 weeks apart. Afterwards, your child will receive one infusion every 3-6 months. However, your doctor will let you know if your child has a different schedule.

Your child will be given a prescription for a medication called Calcitriol or Alfacalcidol. This medication is to be taken for the 3 days before, day of, and 3 days after **every infusion**. This helps to decrease the risk of low calcium levels after the Zoledronate infusion.

### **What are the possible side effects?**

#### **- Flu-like Symptoms**

The most common side effects are flu-like symptoms (fever, body aches, fatigue, nausea). Fever should resolve within 48 hours. These symptoms often only occur with the first two doses of the Zoledronate. They usually do not occur with subsequent treatments. Acetaminophen (Tylenol) and/or Gravol may help with these symptoms.

#### **- Low Calcium Levels**

Zoledronate lowers the amount of calcium in the blood. For this reason, your child should take extra calcium (either through diet or supplements, such as TUMS) in addition to the calcitriol for the 3 days before, the day of, and 3 days after every infusion. Symptoms of low calcium:

- Tingling, pins and needles, or numbness around the mouth, fingers or toes
- Muscle cramps or spasms

#### **- Other Uncommon Possible Side Effects**

- Rash, itchiness, eye redness or irritation
- Rhabdomyolysis (muscle breakdown – dark coloured urine) only reported in children with muscular dystrophy
- **For patients with Duchenne Muscular Dystrophy – you will need to stress dose with Deflazacort if you experience fever, vomiting or dark coloured urine (see attached handout)**

Call your doctor or nurse should your child develop any of these symptoms.



### **How will I know if the Zoledronate is working?**

Most children will have an improvement in bone pain

We monitor the response to Zoledronic acid by DEXA (Bone Mineral Density) scans which look at the density of your child's bones and x-rays of your child's spine.

### **Before your child receives this medicine...**

1. Please tell your doctor if your child has any of the following:

- Had a bad or allergic reaction to Zoledronate or any other bisphosphonate medication before
- Kidney problems – Zoledronate may build up in the bloodstream, which may increase the chance of side effects
- Dental problems or is planning to have any dental procedures in the future.

2. Your child may need to have a dental examination before starting the Zoledronate. This is needed because some patients who have dental infections may be at risk of problems with their jawbone following dental procedures (such as tooth extraction) while on Zoledronate.

3. Your child will need to be taking enough vitamin D and calcium from either their diet or supplements. Please discuss your child's requirements with your doctor.

### **How do I book my appointment?**

We ask the family to contact 4C at 416-813-7654 x 206583 to book the infusions. The infusions are administered during the week (Monday – Friday).

For any urgent issues, please call the endocrine fellow on call at 416-813-7500