# Bisphosphonates – Oral medications

The bisphosphonate medications target the bone cells that are responsible for degradation and thinning of bone - the "osteoclasts". Treatment with these medications prevents bone loss and strengthens the bones. The bisphosphonates are available as daily, weekly, monthly or once-a-year intravenous injection. These medications are deposited in the skeleton, where they stay for months to years. These medications continue to prevent fractures for some time, even after people stop taking them.

## What are they called?

Alendronate (Fosamax®, Fosavance®) – weekly Risedronate (Actonel®, Actonel DR®) – weekly, monthly

These two medications are very similar.

#### What do they do?

These medications strengthen bones, prevent bone loss, and reduce risk of fractures.

#### How do I take them?

They come as an oral tablet that can be taken once a week or once a month. Take in the morning with a full glass of water. Avoid eating, drinking, and other medications for at least 30 to 60 minutes. Do not lie down for 30 minutes. Minerals such as calcium, iron, magnesium should be taken a different time of the day.

#### How long do I take them for?

Most major studies of the oral bisphosphonates have lasted for 3 to 5 years. However, these medications are shown to be largely safe and effective when taken for up to 10 years. How long you should take oral bisphosphonates will depend on your risk of breaking a bone, and this decision should be made jointly between you and your primary healthcare provider. In most cases, treatment will be recommended for 5 to 10 years, followed by 2 to 5 years off medication (also called a "drug holiday".

### Who should not take these medications?

Some people with kidney problems should not take oral bisphosphonates, and it is important that your primary healthcare provider is aware of your kidney function before prescribing these medications. Those who cannot sit or stand for 30 minutes after taking oral bisphosphonates should not take them.

## What side effects might I expect?

These tablets can cause stomach upset and can worsen heartburn. It is important to take them as directed by your primary healthcare provider or pharmacist.

In rare cases, people who are treated with these medications have developed jaw problems (also called 'osteonecrosis of the jaw') and fractures of the femur bone (also called 'atypical femoral fractures'). These problems are very rare, and the risk of having one of these problems is estimated to be less than 1 in 10,000 over 3 to 5 years of treatment. The risk seems to increase the longer you have been on treatment and seems to decrease after treatment is stopped. More detailed information about atypical femoral fractures and osteonecrosis of the jaw is available below.

#### What are the costs involved?

The generic forms of alendronate, risedronate and etidronate cost  $\sim$  \$20 - \$30 per month. These medications are covered by most drug plans and by Alberta Seniors Blue Cross.