Drug treatments for osteoporosis: Ibandronate

Ibandronate (also known as ibandronic acid or Bonviva®) is a drug treatment for osteoporosis. It can help to strengthen bones, making them less likely to break. It is available as a monthly tablet, or as an injection every three months. Ibandronate isn't usually given as a first treatment for osteoporosis. It'll probably only be an option if you've already tried one of the more common drug treatments, or if other treatments aren't suitable for you.

Why is this fact sheet for?
This information may be helpful if you (or someone close to you):

• have osteoporosis or a high risk of fractures (broken bones), and want to know how ibandronate can help
• want to understand the advantages and disadvantages of ibandronate, including the possible side effects.

It includes the following information:

• What is ibandronate?
• Why do I need a drug treatment?
• What does ibandronate do and how does it work?
• Who can have ibandronate?
• How do I take ibandronate?
• How will my treatment be monitored?
• What are the possible side effects?
• Making a decision about treatment
• More ways to look after your bones
• Getting more information and support

What is osteoporosis?
Osteoporosis is a condition where the bones become weaker and break easily, even after a minor bump or fall. You might hear these breaks described as fragility fractures. The terms ‘fracture’ and ‘broken bone’ mean the same thing.

Fractures can affect almost any bone, but they are most common in the wrists, hips and spine. It’s these broken bones that can cause pain, rather than osteoporosis itself. Spinal fractures can also cause height loss and a curved spine.

What is ibandronate?
Ibandronate (sometimes known as the brand name Bonviva®) is a drug treatment for osteoporosis. It is a type of medication called a bisphosphonate. These are the most common treatments for osteoporosis.

Why do I need a drug treatment?
Doctors follow guidelines when deciding whether to offer treatments. If your doctor has recommended ibandronate, this means your risk of breaking a bone is high enough to need a drug treatment. Ibandronate can help to strengthen and protect your bones, making you less likely to break a bone in the future.

It's your choice whether to have ibandronate or not. There’s information on page 5 to help you decide.

What does ibandronate do and how does it work?
Ibandronate can help to make your bones stronger and reduce your risk of broken bones.

Bones are made up of living tissue. The inside of our bones is constantly being broken down and rebuilt by specialist bone cells. As long as this process is in balance, your bones should stay healthy and strong.
But if the process becomes out of balance, our bodies can start to break down more bone than we build. This can cause the bones to become weaker and more likely to break easily.

Ibandronate works by slowing down the cells that break down bone. This helps to restore the balance and make your bones stronger.

You may still break a bone while taking ibandronate. If this happens, it doesn't necessarily mean the drug isn't working. No medication can stop all fractures, but taking ibandronate will make them much less likely.

Ibandronate is not a pain-relieving medicine, so it won't reduce the pain caused by broken bones. But there are other treatments and ways to manage pain. There's information about these on our website at theros.org.uk/info

Who can have ibandronate?
Ibandronate may be suitable if you have osteoporosis, or if your risk of breaking a bone is high enough to need a drug treatment. You might be offered it as a first treatment. But it will usually only be an option if you've already tried a different drug treatment for your bones, or if other drugs aren't suitable for you.

It is only licensed for use in women who have been through the menopause. But doctors will sometimes offer ibandronate to men, and occasionally to younger women.

When is ibandronate not suitable?
Ibandronate may not be suitable if you:
- have severe kidney problems
- have a low blood calcium level (hypocalcaemia) – you'll need to increase your intake of calcium and vitamin D before you can start ibandronate
- are pregnant or breast-feeding
- have a high risk of breaking a hip – because it isn't clear if ibandronate reduces the risk of hip fractures as much as other drugs.

In addition, the tablet form of ibandronate may not be suitable if you:
- can't swallow tablets
- have a problem with your oesophagus (gullet or food pipe), such as Barrett's oesophagus
- can't stand or sit up for at least an hour (see below).

How do I take ibandronate?
Ibandronate is available as either:
- tablets
- injections.
Both are effective at lowering your risk of breaking a bone.

Tablets
You'll take one tablet (150mg) each month. This is the most common way to have ibandronate.

Make sure you take your tablet regularly and correctly – ideally on the same date each month. It's a good idea to make a note in your diary or set a reminder on your phone, to help you remember.

The following steps are important for ensuring the treatment works properly. They will also help to make side effects less likely (see page 3).

Take your tablet as soon as you wake in the morning
It's very important to take ibandronate on an empty stomach. Swallow the tablet whole, with a glass of plain tap water. It's important not to crush, chew or suck it.

Then wait at least an hour before having your first food or drink of the day (other than plain tap water). This is to make sure your body can absorb and use the drug.

If you forget to take your tablet, wait until the next morning before taking it.

Don't take other medications or supplements during this time
If you take calcium supplements, wait at least an hour after taking ibandronate. This is because calcium can affect how well the drug is absorbed. Some doctors suggest waiting up to four hours, to leave even more time for the drug to be absorbed.

Stay upright for one hour afterwards
You must not lie down for one hour after taking your tablet. This helps the tablet go down quickly into the stomach where it is absorbed. Your food pipe is more likely to become irritated if you lie down straightaway.

Injections
You'll have an injection every three months, usually at the hospital. It takes about 15-30 seconds to give the injection slowly through a needle into a vein. You can eat and drink as normal on the day of your injection.
How will my treatment be monitored?

When you start on ibandronate, you may have an appointment after around three months, and again after one year. This is to check you’re taking your treatment properly and not having any problems. Tell the doctor, nurse or pharmacist if you have any side effects (see below). They may be able to suggest ways to help manage them.

If you break a bone while having ibandronate, speak to your GP. Breaking a bone doesn't necessarily mean your treatment isn't working. But it may be a good idea to have a bone health assessment.

After about five years on ibandronate tablets – or around three years if you're having injections – you should have a formal treatment review. Ask your doctor when this should happen if you’re unsure.

At this review, your doctor will check if you still need a drug treatment, and that ibandronate is still the right treatment for you.

You may have a bone density scan as part of your review, which will give your doctor some information about your bone strength. But they will need to consider other things as well, such as whether you’ve broken any bones since starting on ibandronate.

While there’s no clear way to prove for certain that your treatment is working, research has shown that osteoporosis drug treatments like ibandronate are effective at lowering the risk of broken bones.

Following your review, your doctor may advise you to:
• stay on ibandronate for another 3-5 years
• stop treatment for a year or two, if this is safe for you – this is known as a treatment pause
• start a different drug treatment instead of ibandronate
• stop having any treatment.

Ibandronate is a long-lasting treatment and should keep helping your bones for about 1-2 years after you stop having it. Your doctor can advise you on what’s best for you, based on your own situation.

What are the possible side effects?

As with any drug, ibandronate can sometimes cause side effects. The most common side effects are listed on page 4, along with some rare problems that might very occasionally happen after several years of treatment.

It is important to remember that in general, side effects are less common than many people think. Most people on ibandronate don't have any problems. Even if you do get side effects at first, they usually improve quickly and there are ways to manage them.

For a full list of possible side effects, look at the patient information leaflet that comes with your treatment. If you don’t have a copy, ask your doctor or pharmacist for one.

It’s important to understand that many of these problems aren’t actually caused by the drug. When a medicine is first tested, the people taking it have to report anything unusual to the researchers. The problems they report are often just as common in people who aren’t taking the drug.

The problems listed on page 4 are the main side effects that were seen more often in people taking ibandronate, rather than a dummy drug.

If you do get any side effects that don’t go away, it may help to:
• make sure the problem isn't caused by any other medication you are taking
• tell your doctor or pharmacist, who may be able to help find out what is causing the problem
• ask your doctor or pharmacist about other treatments that may suit you better.
Possible side effects of ibandronate:
The following table has information on the main side effects and how common they are. For example, fewer than 1 person in every 10 people who have ibandronate tablets will get problems with their oesophagus (food pipe) or heartburn. The other 9 in every 10 people who use the drug will not have this problem.

<table>
<thead>
<tr>
<th>Side effect</th>
<th>How common is it?</th>
<th>What can I do about it?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tablets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflamed oesophagus (food pipe), sore throat, difficulty swallowing. A painful, burning feeling in your chest (heartburn)</td>
<td>Less than 1 in 10</td>
<td>Take the tablet with a full glass of tap water. Stay upright and avoid bending forward for at least an hour afterwards. This should stop the tablet from sticking in your food pipe. If the problem doesn’t improve, tell your doctor.</td>
</tr>
<tr>
<td><strong>Injections</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flu-like symptoms (such as fever, chills, muscle or joint pain, headache)</td>
<td>Up to 3 in 10 after the first injection</td>
<td>This can happen in the first 24 hours after an injection. Symptoms are usually mild to moderate and go away in days. A simple pain-relieving medication, such as ibuprofen or paracetamol, can help. You may want to avoid anything very active in the days after each injection, in case you get these symptoms.</td>
</tr>
<tr>
<td></td>
<td>Falls to less than 1 in 10 after later injections</td>
<td></td>
</tr>
<tr>
<td><strong>Both tablets and injections</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone, joint or muscle pain</td>
<td>Less than 1 in 10</td>
<td>This usually improves as your body gets used to the new medicine. A simple pain-relieving medication, such as paracetamol, may help.</td>
</tr>
<tr>
<td>Eye inflammation, causing pain or blurred vision</td>
<td>Less than 1 in 100</td>
<td>Tell your doctor if you already have an inflammatory eye condition or develop symptoms such as a painful red eye.</td>
</tr>
<tr>
<td><strong>Rare health risks:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atypical (unusual) thigh bone fracture</td>
<td>Less than 1 in 1,000</td>
<td>This is a rare type of thigh bone fracture that can occasionally happen after many years of treatment, even with little or no force.</td>
</tr>
<tr>
<td>Osteonecrosis of the jaw</td>
<td>Less than 1 in 1,000</td>
<td>This is an extremely rare problem where healing inside the mouth is delayed, usually after major dental treatment. The general advice is to maintain good oral hygiene and have regular dental check-ups.</td>
</tr>
</tbody>
</table>

For more information on these very rare conditions, read our fact sheets, ‘Atypical (unusual) thigh bone fractures’ and ‘Osteonecrosis of the jaw (ONJ),’ or visit our website at theros.org.uk/info
Making a decision about treatment

Some people worry about starting a new drug treatment and find it hard to make a decision. You might be concerned about possible side effects or health risks, or wonder if you really need treatment. Or you might not like taking medication in general.

It’s important to learn all you can about your treatment options, so you can decide what’s right for you. Talk to your doctor so that you fully understand your situation. Make sure you read – and understand – any information they give you, as well as the leaflet that comes with the treatment.

No-one can make you have treatment if you don’t want it. But do take the time to understand the benefits and possible risks – both of taking ibandronate, and of not taking ibandronate.

Take care when visiting online forums or chat groups on social media. Reading about other people’s experiences can be helpful. But you may not always see a balance of views online. People are more likely to seek support for bad experiences than good ones. This can make it seem that everyone has problems with drug treatments. In reality, most people have no side effects at all.

If you do feel worried, before or during your treatment, talk to your doctor or pharmacist, or contact our specialist Helpline nurses.

Why have I been offered ibandronate?

If you’ve been offered ibandronate, this means your risk of breaking a bone is high enough that your bones would benefit from a drug treatment. For you, the benefits of taking this drug are likely to outweigh any possible risks. In other words, your risk of health problems if you do have treatment is smaller than your risk of breaking a bone if you don’t have treatment.

Your doctor will have considered lots of things before recommending ibandronate, including:

- how likely you are to break a bone without treatment
- whether tablets or injections would be suitable for you
- any other health problems you have
- any other medications you take
- the treatments available at your local hospital or GP surgery
- your own thoughts and feelings about treatment.

There are other treatments available for osteoporosis, but they may not all be suitable for you. For example, some tablets have to be taken daily, which isn’t ideal for everyone. Some drugs – including ibandronate – are usually only available if you’ve already tried other drug treatments, or if other medications aren’t suitable for you. And in some areas, local guidance means doctors can only prescribe certain drugs.

If you have any questions about the treatment you’ve been offered, speak to your doctor. They can explain why they’ve recommended ibandronate and tell you about any other treatments that might be suitable.

Think about the advantages and disadvantages

As with any treatment, there are advantages and disadvantages to using ibandronate. You should think about these when deciding whether to have ibandronate, and about what’s important to you.

Here are some of the main things to consider.

Advantages

- It can help to reduce your risk of broken bones, particularly in your spine.
- If you are prescribed tablets, you’ll only take one a month. This is less than other bisphosphonates, making it more convenient for many people.
- It’s also available as an injection, which is helpful if tablets are a problem for you.
- It starts to work quickly and is effective for at least five years of use.
- It keeps helping your bone strength for a while, even after you stop taking it.

Disadvantages

- As with all medications, some people get side effects (see page 3).
- There are some possible health risks after several years of use, but these are rare (see page 4).
- The tablet form won’t be suitable for everyone.
- If your doctor prescribes injections, you’ll need to visit the hospital every three months for these.
What will happen if I don’t have a drug treatment?  
If you decide not to take a drug treatment, it is likely that your bones will get weaker over time. This means your chance of breaking a bone will increase.

Some people may never break any bones, while others may break several. Everyone’s risk is different, so it’s important to understand your own situation and make the decision that’s right for you.

Is there a natural alternative to medication?  
People often want to know if they can improve their bone strength without taking a drug treatment. The lifestyle changes listed below are all important for your bones. But if you have a high risk of broken bones, there isn’t good evidence that any non-drug approaches will improve your bone strength enough to reduce the chance of breaking a bone.

More ways to look after your bones  
As well as taking medication, a healthy lifestyle is important for your bone health. This includes:

• a well-balanced, varied and calcium-rich diet
• safe exposure to sunlight, so that your skin makes vitamin D
• regular weight-bearing impact exercise and muscle-strengthening exercise
• not smoking
• not drinking more than the recommended levels of alcohol
• taking steps to lower your risk of falling, as falls can lead to broken bones.

Calcium and vitamin D  
Getting enough calcium and vitamin D is very important for your bones. While you’re having a drug treatment, your doctor may advise you to:

• aim to consume around 1,000mg of calcium a day
• take a daily 20 microgram (20µg or 800 IU) supplement of vitamin D.

This is more than the usual recommended amount, to make sure you are getting enough for your bones. Your doctor may sometimes recommend higher or lower doses, depending on your own situation.

For more information on healthy living, including our calcium and vitamin D-rich food choosers, tips for preventing falls, and films and fact sheets on exercising safely for your bones, visit theros.org.uk/healthy-bones

Getting more information and support  
We hope this fact sheet will help you feel more informed and confident when discussing your bone health with your medical team. For more information about osteoporosis and bone health, including fact sheets on all available drug treatments, visit our website at theros.org.uk/info or order more of our printed publications.

If you need more information or support, talk to your healthcare professional. You can also call our specialist Helpline nurses with any questions or concerns about bone health or living with osteoporosis, for free, on 0808 800 0035 or email them at nurses@theros.org.uk