



What is osteoporosis?

Osteoporosis occurs when the struts which make up the mesh-like structure within bones become thin causing them to become fragile and break easily, often following a minor bump or fall. These broken bones are often referred to as 'fragility fractures'. The terms 'fracture' and 'broken bone' mean the same thing. Although fractures can occur in different parts of the body, the wrists, hips and spine are most commonly affected. It is these broken bones or fractures which can lead to the pain associated with osteoporosis. Spinal fractures can also cause loss of height and curvature of the spine.

What is strontium ranelate?

Strontium ranelate is a drug treatment for osteoporosis which reduces the risk of broken bones. It comes as granules in a sachet which you take mixed with water on a daily basis. Your doctor will only recommend strontium ranelate if the other drug treatments for osteoporosis are unsuitable for you.

Is strontium ranelate Aristo different to Protelos?

No, strontium ranelate Aristo is the same drug as Protelos. It is a generic (non-branded) version of the drug that used to be called Protelos.

Why do I need a drug treatment for osteoporosis and how does strontium ranelate work?

Drug treatments are prescribed if you have osteoporosis and are at a high risk of broken bones. These treatments help strengthen your bones and reduce your risk of having fractures. They do not help the pain that occurs when bones break. Although it works in a different way from other treatments for osteoporosis, strontium ranelate does not appear to be any better than other treatments in its ability to reduce the risk of broken bones.

Which products contain strontium ranelate?

Strontium ranelate Aristo

Dose 2g sachet of granules mixed with water daily

Licensing details F M S H*

* There may be some restrictions on its use in Scotland and Wales.

Key

F = Post-menopausal women **M** = Men

S = shown to reduce the risk of broken bones in the spine

H = shown to reduce the risk of a broken hip

GIOP = shown to reduce the risk of broken bones in people who have osteoporosis caused by glucocorticoid ("steroid") medication

A licensed drug has been checked for safety and effectiveness and can be prescribed by a doctor for a specific condition. Sometimes an unlicensed drug will be given at the discretion of your doctor.

How can I get the most out of my drug treatment?

1. Be informed

Find out about your drug treatment so that you can be involved in decisions being made and you will know what to expect. Talk to your doctor and/ or contact the Helpline at the National Osteoporosis Society if you have any questions or concerns.

2. Make sure the drug is properly absorbed

Strontium ranelate is taken once daily preferably at bedtime at least two hours after eating, and at least two hours before any food or drink, other than water. This is because the absorption of the drug may be affected if food or drink other than water is present in the stomach at the same time. If you are taking a calcium supplement, it is particularly important that you do not take it at the same time of day as your strontium ranelate as calcium will prevent its absorption. Some other medications can be taken at the same time as strontium ranelate. Check with your doctor or pharmacist if you are planning to take any other medicines around the same time as your strontium ranelate.

3. Make sure strontium ranelate is the treatment for you

There are some conditions which may mean strontium ranelate is not suitable for you. These are:

- **A history of blood clots.** If you are over the age of 80 and at risk of blood clots (see risk factors below) speak to your doctor about a treatment review to make sure the medicine is appropriate for you. Strontium ranelate is now not considered appropriate if you have had a blood clot or are immobile or likely to be, e.g. after an operation. Travelling that involves long periods of immobility (more than five hours) can increase the risk of serious side-effects and, in rare cases, may lead to blood clots. You would usually be advised to take appropriate exercise during the journey and possibly wear elastic hosiery as this can reduce this risk. If you would like specific medical advice about this, speak with your doctor or pharmacist.
- **A history of heart problems.** This includes ischemic heart disease, peripheral arterial disease, cerebrovascular disease or uncontrolled blood pressure. Your doctor will monitor you regularly for such problems and the treatment will be stopped should they occur.
- **If you are pregnant or breast feeding** (although only licensed for post-menopausal use, occasionally strontium ranelate may be prescribed by specialists for younger women).

4. Continue to take your treatment regularly for the correct length of time

Strontium ranelate is generally prescribed long term so you need to be happy with the treatment. Although it is important that you take the treatment as instructed, missing the odd sachet will probably not have an impact on your bone health in the long run but you should avoid this if you can. If you continually forget or struggle to take your medication it would be sensible to speak to your doctor about other treatment options that you may find easier to take.

Although there is no formal guidance about how long you should take strontium ranelate it is considered good practice for your doctor to review your treatment after a few years.

At this review your doctor will make sure that the drugs are still needed and that they aren't causing side effects. Your doctor will be able to advise you on what is best for you based on your individual circumstances.

5. Lead a healthy lifestyle to keep your bones strong

Factors that can help to maintain healthy bones are a well-balanced diet with adequate calcium rich foods, safe exposure to sunlight to obtain vitamin D, regular weight bearing exercise, avoiding smoking and keeping alcohol consumption within the recommended limits.

If you have been diagnosed with osteoporosis and are taking a drug treatment, you may need to boost your calcium intake up to around 1000mg a day. Your doctor can prescribe supplements of calcium and/or vitamin D if you need them.

6. Understand the risk of side effects and what can be done to reduce them

As with any drug there are potential side effects with strontium ranelate. It is important to remember that:

- Most people will not experience side effects or if they do, they are short lived.
- If you experience problems with the first sachet it is usually worth persevering for a while.
- Not all the side effects you may read about online or see listed on your patient information are necessarily caused by the drug. This is because symptoms that have been reported by patients taking part in the research trials may be included as possible side effects even if they were seen in as many people who took the placebo (dummy pill) as those taking strontium ranelate. So, common conditions such as bone, muscle and joint pain will often be reported in this way and people may think they are due to their treatment. We can only be sure that such symptoms are likely to be caused by strontium ranelate if they were seen in more patients treated with strontium ranelate than with placebo. The symptoms overleaf are those that can be thought of as "true side effects"

If you are taking medications for other conditions it is important to establish that it is not these that are causing your side effects. Talk to your doctor who may be able to suggest ways of investigating this further.

The full list of possible side effects can be found in the leaflet that accompanies the strontium ranelate sachets. If you experience these or any other symptoms which you think may be due to this medicine, speak with your doctor or pharmacist about other treatment options.

As more research findings become available more symptoms may be found to be “true side effects” so information could change in the future.

What side effects does strontium ranelate cause?

Potential side effect	How common was it?	What can i do to reduce the side effects or the risk of them occurring?
Nausea and diarrhoea	7 in 100 in the treatment group compared to 5 in 100 in the placebo group	Side effects reported were mild and short-lived and generally experienced at the beginning of treatment so it is worth persisting to see if your symptoms improve.

Other health risks associated with Strontium ranelate

Deep Vein Thrombosis (DVT)	Affected less than 1 in 100 people in the study and was slightly more common in those taking strontium ranelate	See section 3
Heart Attack	Affected less than 2 in 100 people in the study and was slightly more common in those taking strontium ranelate. It is uncertain how common heart attacks are - maybe higher than the early studies showed. New advice was issued, some time after the drug was first launched, saying people who are already at an increased risk of heart disease shouldn't take it.	See section 3
Severe allergic reaction. A rare type of severe allergic reaction to strontium ranelate has been reported. This is a serious hypersensitivity reaction, which can also occur with a number of other drugs. It usually develops within 3-6 weeks of starting strontium ranelate, but generally resolves when you stop and is usually treated with steroids.	Although rare, if you develop a skin rash with fever or swollen glands whilst taking strontium ranelate, the recommendation is to stop the treatment immediately and seek advice from your doctor. You would not be advised to restart the treatment even after the symptoms have resolved.	

The **National Osteoporosis Society** is the only UK-wide charity dedicated to improving the prevention, diagnosis and treatment of osteoporosis and fragility fractures. The Charity receives no Government funding and relies on the generosity of individuals to carry out its vital work.

For osteoporosis information and support contact our Helpline:

 **0808 800 0035**

 **nurses@nos.org.uk**

To become a member or make a donation:

 **01761 473 287**

 **join online at www.nos.org.uk**

To order an information pack or other publications:

 **01761 471 771**

 **info@nos.org.uk**

or download from our website at www.nos.org.uk

For further information on drug treatments for osteoporosis, such as how to decide which drug to take, see our booklet *All About Osteoporosis*. Factsheets are available on each osteoporosis drug.

This fact sheet is one of a range of publications produced by The National Osteoporosis Society. If you would like more general information about osteoporosis see our booklet *All about Osteoporosis*.

This information reflects current evidence and best practice but is not intended to replace the medical advice provided by your own doctor or other health professional.