## What can I do if I have osteoporosis?

There are effective treatments to improve bone strength, microstructure, and reduce fracture risk. Some medications slow bone loss, while others help build new bone. Your doctor will discuss the best options for you. Because bone rebuilds slowly, improvements usually take one year or more to be seen.

Alongside treatment, **lifestyle changes may help:**

- ***Keep active**. Weight-bearing exercise, like jogging, dance, strength training, and Pilates can help keep bone and muscle strength. Balance-based exercise like yoga can help to prevent falls.*
- ***Eat a nutritious diet**. Ensure you have enough protein, calories, and especially calcium and vitamin D. Dairy products, leafy greens, and oily fish are good sources. Your doctor may advise supplements.*
- ***Avoid smoking and limit alcohol**. Both can weaken your bones over time.*
- ***Review medications with your doctor** to check for effects on your bone health.*
- ***Connect with support groups**. Patient organisations and national societies offer resources, guidance, and community support.*
- ***Engage with follow-up appointments** to track your response to treatment and adjust your care plan if needed.*

Taking these steps, with your physician's advice can help protect your bones and lower your fracture risk.

### Did you know ?

TBS is included in the FRAX tool, which means your fracture risk can be assessed not only with bone density and clinical risk factors, but also taking into account **your bone quality**. This provides a more complete picture of your bone health.

## TBS Osteo report

If you have a DXA scan with TBS Osteo software installed, the software will make a report, and you may receive a copy. If your next DXA is at the same centre, you may receive a 'trending report' that shows how your bone health is changing over time. This report allows you and your clinician to track your BMD and your TBS.

The TBS Osteo report (accesible via the QR code below) shows a patient's progress over four DXA scans. This helps support informed decisions about your treatment plan and gives a clearer picture of how your bones are responding to your osteoporosis management strategy.

Scan me to access
**to the report**

MEDIMAPS
We understand bone health

### About Medimaps

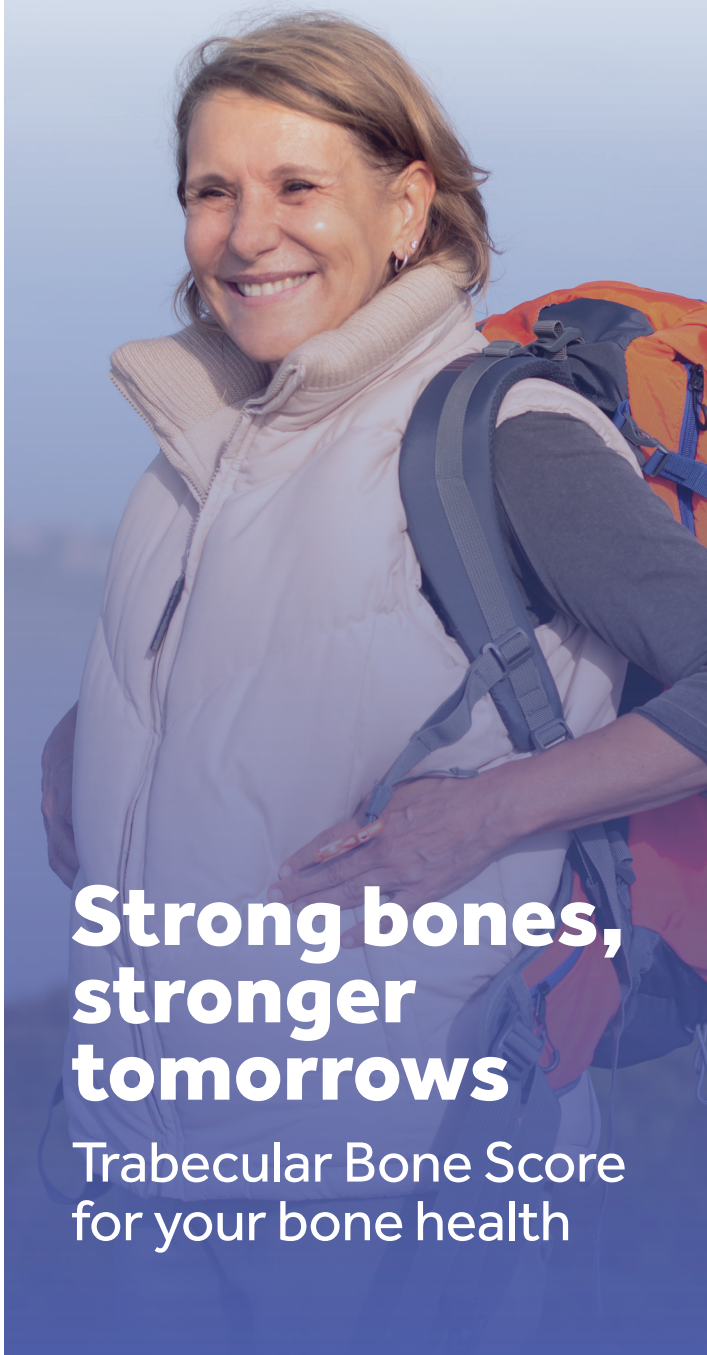
*We provide healthcare professionals worldwide with advanced AI-driven software that enable comprehensive bone microarchitecture assessment.*
*Our passion for musculoskeletal health is underpinned by scientific knowledge, collaborations with world-class academics, clinicians, industry partners, and direct patient engagement. The science behind our cutting-edge imaging applications and clinical evidence forms the core of our company's DNA.*

**For more information, please visit our website www.medimaps.ai MM-BR-1311-MIG-EN-01--USA**

*Illustrations and reports in this material are fictional and intended for explanatory purposes; they are not derived from real patients or clinical cases

*1.https://www.osteoporosis.foundation/patients/about-osteoporosis*

TBS Osteo™



# Strong bones, stronger tomorrows

Trabecular Bone Score
for your bone health

## What is TBS Osteo?

TBS Osteo, is an **AI-ready software for a bone scanning machine called a DXA** (Dual-energy X-ray Absorptiometry) that computes your Trabecular bone score (TBS).

## What is a DXA scan?

A DXA scan is **a fast, low-dose X-ray that measures how dense or strong your bones are**. It is often used to look for osteoporosis.

The scan usually takes a few minutes, and scans the spine and hips, and sometimes the forearm.

## How does TBS Osteo help?

TBS looks at **the texture of your lower spine** on the scan used to measure bone density.

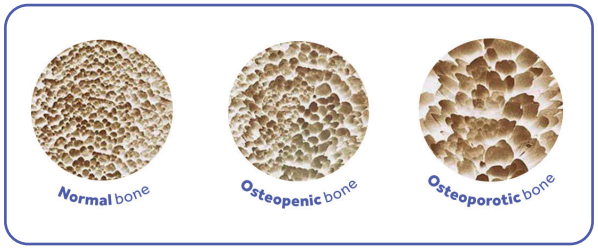
While DXA shows how much bone you have (BMD), **TBS shows a measure of the internal microstructure** ('quality') **of the bone** - how strong and well-connected the inside of the bone is.

This extra detail helps your doctor assess your risk of fracture.



## Why is it important?

Osteoporosis is a common condition, affecting **around 1 in 3 women and 1 in 5 men aged 50 or over**[1]. There is a gradual loss of bone strength, which increases fracture risk - even from a low-impact fall, such as from standing. Women are often more at risk after the menopause, due to hormonal changes that affect bone health.




Osteoporosis develops gradually, weakening the bone structure and making fracture more likely. There is a visible difference between healthy bone, osteopenia (early bone loss), and osteoporosis.

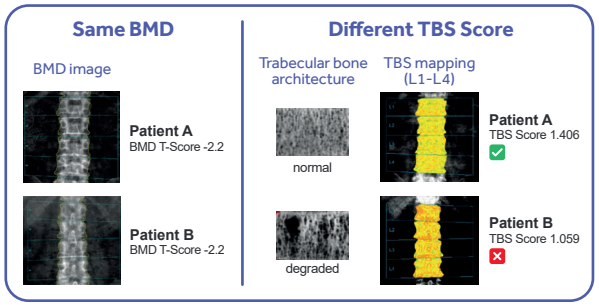
Risk factors include:

- ***Age***
- ***Family history of osteoporosis***
- ***Smoking***
- ***Low body weight***
- ***Certain long-term medications*** (such as steroids)
- ***Some medical conditions***

After a fragility fracture, your risk of another fracture is higher, **so early detection is important**. With the right tests and timely treatment, your risk can be reduced.

## How does TBS Osteo work?

**TBS Osteo examines the tiny dots** (pixels) in your scan image, **to see how similar or varied their shades are**. A consistent pattern - like the example below - suggests strong, well-connected bone, while more variation between dark and light variation, can show weaker internal support.




Think of the Golden Gate Bridge: if you remove the beams inside but keep the outer frame, it may look the same from afar, but be less stable. **TBS helps detect these changes in your bone.**

## Do I have osteoporosis?

Only your general practitioner or specialist can diagnose osteoporosis. **If you are concerned, have risk factors or past fractures, you can request a DXA scan**. You can also ask if the clinic uses TBS Osteo software, to provide additional bone microstructure insight during the scan.

Your doctor may use a tool called **FRAX**, to assess your risk of fracture in the next 10 years. FRAX considers factors such as your age, body weight, smoking, alcohol intake, and family history, and helps your doctor decide if treatment is needed.