Denosumab biosimilars

Information for patients

About denosumab

Denosumab is a biological medicine which means it is made or derived from living cells. It belongs to a group of medicines called monoclonal antibodies. Denosumab works by blocking a specific protein called RANKL. This protein usually helps certain cells (called osteoclasts) break down bone. By stopping RANKL, denosumab slows down bone destruction and can help reduce the risk of bones breaking.

Denosumab is injected under the skin (subcutaneously) and is available in 2 different strength products.

Denosumab 60 mg is used to treat:

- osteoporosis
- bone loss resulting from long-term glucocorticoid steroid use
- bone loss resulting from hormone treatment in men with prostate cancer

Denosumab 120 mg is used to:

- prevent complications caused by cancer spreading to the bone or due to radiation to the bone
- treat giant cell tumour of the bone if surgery is not an option

Versions of denosumab available in the UK

Initially, denosumab was produced by only one manufacturer (Amgen) with the brand names Xgeva® (120 mg) and Prolia® (60 mg). Now, biosimilar versions of denosumab are available from other manufacturers.

About biosimilar denosumab

Biosimilar denosumab is a highly similar copy of the original denosumab product. In the UK, the Medicines and Healthcare products Regulatory Agency (MHRA) ensure that biosimilars and their original licensed products meet the same high standards.

For every denosumab biosimilar available in the UK, it has been confirmed that there are no significant differences between the biosimilar and the original product with regard to:

- how well they work
- how safe they are
- how they react with the body's immune system

- their quality
- their biological activity (the effect on the body)

The NHS uses biosimilars because they deliver better value for money for certain conditions. The savings made will allow the NHS to treat more patients.

What treatment with biosimilar denosumab means for you

As the biosimilars all contain denosumab, you can expect the same results from treatment. Denosumab biosimilars that are the same strength are considered interchangeable which means that no difference is expected when swapping between denosumab products.

Biosimilar denosumab devices and packaging may look different from the ones you have previously been treated with. If you have been trained on how to inject yourself, ensure you know how to use the device and how often.

All versions of denosumab can cause similar side effects. If you experience any side effects from your denosumab treatment, report it to your doctor, nurse, or pharmacist. You can also use the Yellow Card app (download from Google Play or Apple App Store) or Yellow Card website to report side effects.

Further advice

If you have further queries about denosumab or biosimilar medicines in general, please discuss with your doctor, nurse or your pharmacist who can advise you on your treatment.

Mae'r daflen hon hefyd ar gael yn Gymraeg. This leaflet is also available in Welsh.

Access this leaflet online:

Denosumab (English)

Denosumab (Cymraeg)