



# Pharmaceutical Benefits Scheme – Biosimilar Teriparatide

Terrosa® and Teriparatide Lupin® are biosimilar brands of teriparatide which were listed on the Pharmaceutical Benefits Scheme (PBS) on 1 October 2021 and 1 May 2024 respectively. These brands are listed under the PBS General Schedule.

## What are biological and biosimilar medicines?

Biological medicines, including biosimilars, contain substances made by living cells or organisms. They are more complex to make than synthetic chemical medicines.

A biosimilar medicine is a highly similar version of a reference biological medicine, which is invariably the first brand to market. Biosimilar medicines are used to treat the same diseases, in the same way, as the reference biological medicines.

Biosimilar medicines have been tested and shown to be as safe and effective as the reference biological medicines.

## How is biosimilarity determined?

Biosimilar medicines are designed and engineered to be as similar as possible to the reference biological medicine. There may be minor differences (known as molecular microheterogeneity) due to natural variability and the more complex manufacturing processes required for biological medicines. Importantly, these minor differences do not affect the safety, quality or effectiveness of the biosimilar medicine.

For a biosimilar medicine to be approved by the Therapeutic Goods Administration (TGA), the structural variability of the biosimilar medicine and the reference biological medicine, and all critical quality attributes (i.e. those important for the function of the molecule) must be highly similar. There must also be no clinically meaningful differences identified in clinical studies comparing the biosimilar and reference products.

Terrosa and Teriparatide Lupin have been assessed by the TGA on the basis of comparability and clinical studies to be highly similar to the reference brand, Forteo®. This means that Terrosa and Teriparatide Lupin provide the same health outcomes and are as safe and effective as Forteo.

### Forteo delisting

The reference brand Forteo was removed from the PBS from 1 January 2022 at the request of the sponsor.

## What is teriparatide?

Teriparatide is a biological medicine, produced in *Escherichia coli* (*E.coli*) using recombinant deoxyribonucleic acid (DNA) technology. It is used to treat:

- osteoporosis in postmenopausal women;
- primary osteoporosis in men when other agents are considered unsuitable and when there is a high risk of fracture; and
- osteoporosis associated with sustained systemic glucocorticoid therapy in women and men at high risk for fracture.

More information about this medicine is available by entering 'teriparatide' at the [NPS MedicineWise Medicine Finder](#).

## What are the PBS restrictions for teriparatide?

Teriparatide is available on the PBS as initial and continuing treatment for severe established osteoporosis under certain conditions. Treatment is limited to a maximum of 18 months therapy in a patient's lifetime.

Read the Schedule of Pharmaceutical Benefits for the [teriparatide](#) listings. The Schedule is also available via the [PBS publications page](#). The prescribing software contains further details of initial and continuing treatment phase criteria and eligibility details. Over time PBS listing details may change – please consult the Schedule for current information.

## Can PBS brands of teriparatide be substituted?

The Pharmaceutical Benefits Advisory Committee (PBAC), an independent, expert advisory body, recommended that Terrosa and Teriparatide Lupin be listed on the PBS as substitutable biosimilars of Forteo for all approved indications. Terrosa and Teriparatide Lupin remain as brands listed on the PBS following the removal of Forteo.

When PBS brands are listed as substitutable with each other, the pharmacist may dispense any brand in consultation with the patient, and provided the prescriber has not indicated 'brand substitution not permitted' on the prescription.

## Do biosimilar uptake drivers apply to teriparatide?

The Government has implemented policies to encourage greater use of biosimilar brands. Further information about the biosimilar uptake drivers is available on the [PBS website](#).

Following the removal from the PBS of the reference brand Forteo on 1 January 2022, biosimilar uptake drivers are no longer required for teriparatide.

## Why are biosimilar medicines important?

The PBS subsidises a range of biological medicines to treat cancers, immunological and degenerative disorders, which significantly affect the quality of life for affected individuals. These are generally innovative treatments and their increasing cost and utilisation across a range of disease indications continue to put pressure on the PBS. In 2022-23, biological medicines represented six of the ten PBS medicines which attracted the most Government subsidy, with a combined cost of \$2.25 billion. Biosimilar prescribing can help relieve this pressure.

## How can greater use of biosimilars benefit the PBS?

Brand competition can lead to lower PBS prices, due to Price Disclosure and other statutory price reductions to PBS medicines. Under Price Disclosure arrangements the PBS subsidy is adjusted twice a year to reflect average market prices. As these become lower through competition, the prices of medicines that have at least one other brand on the PBS can be reduced. A price reduction only occurs if the weighted average discounting across all brands of a drug is greater than set percentages.

Savings from statutory price reductions to PBS medicines are being re-invested in the PBS, ensuring all Australians continue to have the earliest possible access to new medicines. All Australian patients benefit from timely, equitable and sustainable access to the most effective medicines through the PBS.

Detailed information about PBS pricing, including Price Disclosure, is available on the [PBS website](#).

## More Information

For more information, read:

- Department of Health and Aged Care website [About medicines](#) page.
- Therapeutic Goods Administration website [biosimilars medicines regulation](#).
- PBS website – [PBAC Public summary document for Terrosa](#).
- PBS website – [PBAC Public summary document for Teriparatide Lupin](#).
- The [Biosimilar Education Hub](#) (Generic and Biosimilar Medicines Association Education website, originally funded by the Australian Government).

Further information for healthcare professionals regarding the use of [PBS Authorities](#) and [claiming of PBS benefits](#) is available at the [Services Australia](#) website.