



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

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EPAR summary for the public

Translarna

ataluren

This is a summary of the European public assessment report (EPAR) for Translarna. It explains how the Agency assessed the medicine to recommend its authorisation in the EU and its conditions of use. It is not intended to provide practical advice on how to use Translarna.

For practical information about using Translarna, patients should read the package leaflet or contact their doctor or pharmacist.

What is Translarna and what is it used for?

Translarna is a medicine that is used to treat patients aged 5 years and older with Duchenne muscular dystrophy who are able to walk. Duchenne muscular dystrophy is a genetic disease that gradually causes weakness and loss of muscle function. Translarna is used in the small group of patients whose disease is caused by a specific genetic defect (called a 'nonsense mutation') in the dystrophin gene.

Because the number of patients with Duchenne muscular dystrophy is low, the disease is considered 'rare', and Translarna was designated an 'orphan medicine' (a medicine used in rare diseases) on 27 May 2005.

Translarna contains the active substance ataluren.

How is Translarna used?

Translarna can only be obtained with a prescription and treatment should be started by a specialist doctor experienced in the management of Duchenne/Becker muscular dystrophy.

Before starting treatment with Translarna, patients will have a genetic test to confirm that their disease is due to a nonsense mutation and that they are therefore suitable for treatment with Translarna.

Translarna is available as granules (125, 250 and 1,000 mg) to be taken by mouth after mixing them with liquid or semi-solid food (such as yogurt). Translarna is taken three times a day, and the



recommended dose is 10 mg/kg (10 mg per kilogram body weight) in the morning, 10 mg/kg at midday and 20 mg/kg in the evening (making a total daily dose of 40 mg/kg). For further information, see the package leaflet.

How does Translarna work?

Patients with Duchenne muscular dystrophy lack normal dystrophin, a protein found in muscles. Because this protein helps to protect muscles from injury as muscles contract and relax, in patients with Duchenne muscular dystrophy the muscles become damaged and eventually stop working.

Duchenne muscular dystrophy can be caused by a number of genetic abnormalities. Translarna is for use in patients whose disease is due to the presence of certain defects (called nonsense mutations) in the dystrophin gene which prematurely stop the production of a normal dystrophin protein, leading to a shortened dystrophin protein that does not function properly. Translarna works in these patients by enabling the protein-making apparatus in cells to move past the defect, allowing the cells to produce a functional dystrophin protein.

What benefits of Translarna have been shown in studies?

Translarna was first studied in one main study involving 174 patients with Duchenne muscular dystrophy who were able to walk, where two doses of Translarna (40 mg/kg daily and 80 mg/kg daily) were compared with placebo (a dummy treatment). The main measure of effectiveness was the change in the distance the patient could walk in six minutes after 48 weeks of treatment.

Although an initial analysis of the results of all the data from the study did not show a significant difference in the distances patients in the Translarna and placebo groups could walk, further analyses indicated that walking ability worsened to a lesser extent with 40 mg/kg daily Translarna than with placebo: after 48 weeks of treatment patients receiving 40 mg/kg daily Translarna could walk on average 31.7 metres more than those given placebo. A more pronounced effect was observed in a subgroup of patients whose ability to walk was worsening, where patients taking 40 mg/kg daily Translarna could walk on average 49.9 more than those taking placebo. The beneficial effect of the lower dose was also supported by improvements in other measures of effectiveness, including those directly linked to patients' daily activities. No improvement was seen with the higher dose (80 mg/kg/day).

A further study in 230 patients with worsening walking ability was completed after initial approval, but its results were considered inconclusive. However, data indicated that Translarna had a positive effect on different measures such as time to run/walk 10 metres, time to climb and descend 4 steps and time to loss of walking ability. In both studies, the beneficial effects of Translarna seemed to be more evident in those patients with moderate decline of their disease.

What are the risks associated with Translarna?

The most common side effects with Translarna (seen in more than 5 in 100 people) are vomiting, diarrhoea, nausea (feeling sick), headache, stomach ache and flatulence. Side effects are usually mild or moderate in severity.

Translarna must not be used at the same time as certain antibiotics known as aminoglycosides when these are given by injection into a vein.

For the full list of all side effects and restrictions with Translarna, see the package leaflet.

Why is Translarna approved?

The Agency's Committee for Medicinal Products for Human Use (CHMP) decided that Translarna's benefits are greater than its risks and recommended that it be approved for use in the EU.

Despite the need for further data, the CHMP considered that there is evidence suggesting that Translarna slows the progression of the disease and that its safety profile is not of major concern. The Committee also acknowledged the seriousness of Duchenne muscular dystrophy and the unmet medical need of patients with this condition.

Translarna has been given 'conditional approval'. This means that there is more evidence to come about the medicine, which the company is required to provide. Every year, the European Medicines Agency will review any new information that becomes available and this summary will be updated as necessary.

What information is still awaited for Translarna?

Translarna remains on a conditional approval, with the company that markets Translarna required to carry out a new study where Translarna is compared with placebo in order to confirm its effectiveness and safety.

What measures are being taken to ensure the safe and effective use of Translarna?

Recommendations and precautions to be followed by healthcare professionals and patients for the safe and effective use of Translarna have been included in the summary of product characteristics and the package leaflet.

Other information about Translarna

The European Commission granted a marketing authorisation valid throughout the European Union for Translarna on 31 July 2014.

The full EPAR for Translarna can be found on the Agency's website: [ema.europa.eu/Find/medicine/Human medicines/European public assessment reports](http://ema.europa.eu/Find/medicine/Human%20medicines/European%20public%20assessment%20reports). For more information about treatment with Translarna, read the package leaflet (also part of the EPAR) or contact your doctor or pharmacist.

The summary of the opinion of the Committee for Orphan Medicinal Products for Translarna can be found on the Agency's website: [ema.europa.eu/Find/medicine/Human medicines/Rare disease designation](http://ema.europa.eu/Find/medicine/Human%20medicines/Rare%20disease%20designation).

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