



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

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## Questions and answers

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# Positive opinion on the marketing authorisation for Translarna (ataluren)

## Outcome of re-examination

On 22 May 2014, the Committee for Medicinal Products for Human Use (CHMP) recommended the granting of a conditional marketing authorisation for the medicinal product Translarna for the treatment of Duchenne muscular dystrophy. The company that applied for authorisation is PTC Therapeutics Limited.

On 23 January 2014, the CHMP had originally adopted a negative opinion for Translarna, but at the request of the applicant the CHMP started a re-examination of its opinion. Following the re-examination, the CHMP adopted a final positive opinion on 22 May 2014 recommending the granting of a conditional marketing authorisation for Translarna, while further confirmatory data on the benefits of this medicine are being generated.

## What is Translarna?

Translarna is a medicine that contains the active substance ataluren. It is to be available as granules for making a suspension to be taken by mouth.

## What is Translarna to be used for?

Translarna is to be 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 for use in the small group of Duchenne patients whose disease is caused by a specific genetic defect (called a 'nonsense mutation') in the dystrophin gene.

Translarna was designated an 'orphan medicine' (a medicine to be used in rare diseases) on 27 May 2005 for the treatment of Duchenne muscular dystrophy. For more information, see [here](#).



## **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 is thought to work in these patients by enabling the protein-making apparatus in cells to skip over the defect, allowing the cells to produce a functional dystrophin protein.

## **What did the company present to support its application?**

The effects of Translarna were first tested in experimental models before being studied in humans.

The company presented the results of one main study in 174 patients with Duchenne muscular dystrophy, where two doses of Translarna (40 mg/kg/day and 80 mg/kg/day) 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.

## **What were the CHMP's main concerns that led to the initial negative opinion?**

The CHMP noted that the main study failed to show that patients taking Translarna could walk a greater distance in six minutes than patients taking placebo. When other measures of effectiveness were considered, including those directly linked to patients' daily activities, these provided only limited supportive evidence of the beneficial effects of Translarna. Finally, insufficient data had been provided to determine how the medicine works in the body and how its effects change with the dose.

Therefore, at that point in time, the CHMP was of the opinion that the benefits of Translarna did not outweigh its risks and recommended that it be refused marketing authorisation.

## **What happened during the re-examination?**

During the re-examination the CHMP looked again at the data from the main study and also at additional analyses of these data provided by the company. The Committee re-considered whether enough data were available to support a conditional marketing authorisation, and whether it would be feasible to obtain further data from a confirmatory study which is currently recruiting patients.

## **What were the conclusions of the CHMP following the re-examination?**

During the re-examination, the CHMP took the view that there was some evidence of effectiveness when Translarna is used at a dose of 40 mg/kg/day, and that the way the medicine works is plausible. The CHMP considered that the data available are sufficient to recommend a conditional marketing authorisation. Under the terms of the authorisation, the company will be required to provide comprehensive data from an ongoing confirmatory study.

In recommending a conditional marketing authorisation, the CHMP also considered the safety profile of Translarna, which was not of concern, and acknowledged the seriousness of Duchenne muscular dystrophy and the unmet medical need of patients with this condition.

Therefore, the CHMP concluded that the benefits of Translarna outweigh its risks and recommended that the medicine be granted a conditional marketing authorisation.

The summary of the positive opinion of the CHMP is published on the Agency's website:  
[ema.europa.eu/Find medicine/Human medicines/Pending EC decisions](http://ema.europa.eu/Find%20medicine/Human%20medicines/Pending%20EC%20decisions).