



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

EMA/309991/2021  
EMA/H/C/005089

## Imcivree (*setmelanotide*)

An overview of Imcivree and why it is authorised in the EU

### What is Imcivree and what is it used for?

Imcivree is a medicine used to treat obesity and help control hunger caused by certain genetic conditions that affect how the brain controls feelings of hunger. It is used in adults and children aged 6 years and older who have pro-opiomelanocortin (POMC) deficiency or leptin receptor (LEPR) deficiency, resulting from changes (mutations) in both copies of the genes responsible for making POMC or LEPR..

Pro-opiomelanocortin deficiency and leptin receptor deficiency are rare, and Imcivree was designated an 'orphan medicine' (a medicine used in rare diseases). Further information on the orphan designations can be found on the European Medicines Agency's website ([pro-opiomelanocortin deficiency](#): 14 July 2016; [leptin receptor deficiency](#): 19 November 2018).

Imcivree contains the active substance setmelanotide.

### How is Imcivree used?

Imcivree can only be obtained with a prescription and treatment should be prescribed and supervised by a doctor with expertise in treating obesity caused by genetic conditions.

Imcivree is given once a day as an injection under the skin, at the beginning of the day. The starting dose is 1 mg daily and is increased to 2 to 3 mg daily, depending on how well the treatment is tolerated and how well it works. After being trained patients or carers can inject the medicine themselves.

For more information about using Imcivree, see the package leaflet or contact your healthcare provider.

### How does Imcivree work?

People with POMC deficiency have low levels of pro-opiomelanocortin, a substance that is converted into several hormones, including melanocyte-stimulating hormone (MSH). Low levels of MSH lead to loss of feeling of fullness after eating. In people with LEPR deficiency, the receptor (target) for the hormone leptin does not work properly so signals to the nerves that make the body feel full and control feelings of hunger cannot be sent. People with POMC and LEPR deficiency feel continuously hungry and quickly put on weight.

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**Official address** Domenico Scarlattilaan 6 • 1083 HS Amsterdam • The Netherlands  
**Address for visits and deliveries** Refer to [www.ema.europa.eu/how-to-find-us](http://www.ema.europa.eu/how-to-find-us)  
**Send us a question** Go to [www.ema.europa.eu/contact](http://www.ema.europa.eu/contact) **Telephone** +31 (0)88 781 6000

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The active substance in Imcivree, setmelanotide, attaches to a receptor called melanocortin receptor 4, which is normally activated through leptin and MSH and promotes a feeling of fullness after eating. By attaching to this receptor directly, Imcivree is expected to reduce excessive food intake and obesity.

## **What benefits of Imcivree have been shown in studies?**

In 2 main studies, Imcivree was shown to be effective at reducing body weight by at least 10% in people with POMC and LEPR deficiency.

The first study was carried out in 10 patients with obesity due to POMC deficiency resulting from mutations in both copies of the genes for either POMC or PCSK1. After one year of treatment, 8 out of 10 people achieved at least a 10% reduction in the body weight.

In the second study carried out in 11 patients with obesity due to LEPR deficiency caused by mutations in both copies of the gene for LEPR, 5 people out of 11 achieved at least a 10% reduction in the body weight after one year.

The studies also looked at the effects of Imcivree on the feeling of hunger as measured using a questionnaire: the percentage of patients who achieved at least a 25% reduction in hunger scores was 50% in the first study, and 73% in the second study.

Imcivree was not compared to another medicine in these studies.

## **What are the risks associated with Imcivree?**

The most common side effects with Imcivree (which may affect more than 1 in 10 people) are hyperpigmentation (coloration of the skin), injection site reaction, nausea (feeling sick), and headache.

For the full list of side effects and restrictions of Imcivree, see the package leaflet.

## **Why is Imcivree authorised in the EU?**

The number of people with POMC and LEPR deficiency is extremely small so the number of people included in the studies was very limited. However, the studies showed that Imcivree helps to reduce bodyweight and feelings of hunger in these patients. These benefits are considered significant considering that there are no other medicines for these patients. Imcivree's side effects are manageable and long-term safety will be monitored in a dedicated study after authorisation.

The European Medicines Agency therefore decided that Imcivree's benefits are greater than its risks and it can be authorised for use in the EU.

## **What measures are being taken to ensure the safe and effective use of Imcivree?**

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

As for all medicines, data on the use of Imcivree are continuously monitored. Suspected side effects reported with Imcivree are carefully evaluated and any necessary action taken to protect patients.

## **Other information about Imcivree**

Imcivree received a marketing authorisation valid throughout the EU on 16 July 2021.

Further information on Imcivree can be found on the Agency's website:  
[ema.europa.eu/medicines/human/EPAR/imcivree](https://ema.europa.eu/medicines/human/EPAR/imcivree).

This overview was last updated in 07-2021.