



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

EMA/667689/2012
EMA/H/C/002110

EPAR summary for the public

Trajenta

linagliptin

This is a summary of the European public assessment report (EPAR) for Trajenta. It explains how the Committee for Medicinal Products for Human Use (CHMP) assessed the medicine to reach its opinion in favour of granting a marketing authorisation and its recommendations on the conditions of use for Trajenta.

What is Trajenta?

Trajenta is a medicine that contains the active substance linagliptin. It is available as tablets (5 mg).

What is Trajenta used for?

Trajenta is used to treat type 2 diabetes with the following antidiabetes medicines when blood sugar levels are not already adequately controlled by diet, exercise and these antidiabetes medicines taken alone:

- metformin;
- metformin and a sulphonylurea;
- insulin, either on its own or together with metformin.

Trajenta is also used on its own in patients whose blood sugar levels are not adequately controlled by diet and exercise alone and who cannot be treated with metformin because they cannot tolerate it or because they have kidney problems.

The medicine can only be obtained with a prescription.

How is Trajenta used?

The recommended dose of Trajenta is one tablet once a day. When added to metformin the dose of metformin should remain unchanged, however when combined with a sulphonylurea or insulin, a lower



dose of the sulphonylurea or insulin may be considered because of the risk of hypoglycaemia (low blood sugar).

How does Trajenta work?

Type 2 diabetes is a disease in which the pancreas does not make enough insulin to control the level of glucose (sugar) in the blood or when the body is unable to use insulin effectively. The active substance in Trajenta, linagliptin, is a dipeptidyl peptidase 4 (DPP-4) inhibitor. It works by blocking the breakdown of 'incretin' hormones in the body. These hormones are released after a meal and stimulate the pancreas to produce insulin. By prolonging the action of incretin hormones in the blood, linagliptin stimulates the pancreas to produce more insulin when blood glucose levels are high. Linagliptin does not work when the blood glucose is low. Linagliptin also reduces the amount of glucose made by the liver, by increasing insulin levels and decreasing the levels of the hormone glucagon. Together, these processes reduce blood glucose levels and help to control type 2 diabetes.

How has Trajenta been studied?

Five main studies in patients with type 2 diabetes were carried out with Trajenta, comparing the medicine with placebo (a dummy treatment) in combination with metformin (701 patients), in combination with metformin plus a sulphonylurea (1,058 patients), in combination with another antidiabetes medicine pioglitazone (389 patients) and in combination insulin with or without metformin and/or pioglitazone (1235 patients). Trajenta was also compared with placebo when used on its own in 503 patients.

In all studies, the main measure of effectiveness was the change in blood levels of a substance called glycosylated haemoglobin (HbA1c) after 24 weeks of treatment. This gives an indication of how well blood glucose is controlled.

What benefit has Trajenta shown during the studies?

Trajenta was shown to be more effective than placebo at reducing HbA1c levels in all combinations studied:

- when used in combination with metformin, a reduction of 0.56 percentage points was seen with Trajenta compared with a rise of 0.10 percentage points with placebo;
- when used in combination with a metformin plus a sulphonylurea, a reduction of 0.72 percentage points was seen with Trajenta compared with a reduction of 0.10 percentage points with placebo;
- in combination with pioglitazone, a reduction of 1.25 percentage points was seen with Trajenta compared with a reduction of 0.75 percentage points with placebo;
- in combination with insulin with or without metformin and/or pioglitazone, a reduction of 0.55 percentage points was seen with Trajenta compared with a rise of 0.10 percentage points with placebo.

Trajenta was also more effective than placebo when used on its own, reducing HbA1c levels by 0.46 percentage points compared with a rise of 0.22 percentage points seen with placebo.

What is the risk associated with Trajenta?

Results from studies show that the overall risk of side effects were similar between Trajenta and placebo: (63% versus 60%). The most frequently reported side effect, seen in around 6 out of 100 patients taking Trajenta, was hypoglycaemia. Most cases were mild and none were severe.

Hypoglycaemia was seen in around 15 out of 100 patients treated with the triple combination of Trajenta with metformin and a sulphonylurea (around twice as many as the placebo group). For the full list of all side effects reported with Trajenta, see the package leaflet.

Trajenta must not be used in people who are hypersensitive (allergic) to linagliptin or to any of the other ingredients.

Why has Trajenta been approved?

Based on the results of the main studies, the CHMP concluded that significant benefits in controlling blood glucose levels were seen in the combinations of Trajenta with metformin, with metformin plus a sulphonylurea, and with insulin with or without metformin. Trajenta on its own was also shown to be effective compared with placebo and was considered appropriate for patients who cannot take metformin either due to intolerance or because they have kidney problems. However the benefit of adding Trajenta to pioglitazone treatment was not considered to have been sufficiently established.

The overall risk of side effects with Trajenta was mostly comparable to placebo and the medicine's safety is similar to that of other dipeptidyl peptidase 4 (DPP-4) inhibitor medicines.

The Committee therefore concluded that the benefits of Trajenta outweigh its risks and recommended that it be granted marketing authorisation.

Other information about Trajenta

The European Commission granted a marketing authorisation valid throughout the European Union for Trajenta on 24 August 2011.

The full EPAR for Trajenta can be found on the Agency's website: ema.europa.eu/Find_medicine/Human_medicines/European_Public_Assessment_Reports. For more information about treatment with Trajenta, read the package leaflet (also part of the EPAR) or contact your doctor or pharmacist.

This summary was last updated in 10-2012.