

EMA/476561/2019 EMEA/H/C/002672

# Xigduo (dapagliflozin / metformin)

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

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

Xigduo is a diabetes medicine used, together with diet and exercise in adults with type 2 diabetes. It contains the active substances dapagliflozin and metformin.

Xigduo is used:

- on its own in patients whose disease is not controlled well enough with metformin alone;
- in combination with other diabetes medicines when these medicines together with metformin are not controlling the diabetes well enough.

Xigduo can also be used to replace dapagliflozin and metformin taken as separate tablets.

#### How is Xigduo used?

Xigduo is available as tablets containing 5 mg of dapagliflozin with 850 mg of metformin and as 5 mg of dapagliflozin with 1,000 mg of metformin. The recommended dose is 1 tablet taken twice a day with a meal; the strength should be chosen so that in total, patients receive 10 mg of dapagliflozin each day and the same (or almost the same) dose of metformin they were taking before starting Xigduo.

When Xigduo is added to treatment with insulin or a medicine that helps the body to produce insulin, such as a sulphonylurea, the doctor may need to lower the dose of insulin or sulphonylurea to prevent hypoglycaemia (low blood sugar levels).

The medicine can only be obtained with a prescription. For further information about using Xigduo, see the package leaflet or contact your doctor or pharmacist.

### How does Xigduo work?

Type 2 diabetes is a disease in which the pancreas does not make enough insulin to control the amount of glucose (sugar) in the blood or when the body cannot use insulin effectively. This leads to high levels of glucose in the blood.

Xigduo contains two different active substances, which work in different ways:



- dapagliflozin blocks the action of a protein in the kidneys called sodium-glucose co-transporter 2
  (SGLT2). As blood is filtered by the kidneys, SGLT2 stops glucose in the bloodstream from being
  passed out into the urine. By blocking the action of SGLT2, dapagliflozin causes the kidneys to pass
  out more glucose in the urine, thereby reducing the levels of glucose in the blood. Dapagliflozin has
  been authorised in the European Union (EU) as Forxiga since 2012;
- metformin works mainly by reducing glucose production and reducing its absorption from the gut.
   It has been available in the EU since the 1950s.

As a result of the action of both active substances, the blood glucose is reduced and this helps to control type 2 diabetes.

# What benefits of Xigduo have been shown in studies?

Dapagliflozin in combination with metformin was evaluated in 6 main studies involving 3,200 adults with type 2 diabetes. The majority of these data had already been used in the authorisation of Forxiga.

In one main study, when dapagliflozin was used at a dose of 5 mg twice a day in addition to metformin (the same combination as in Xigduo), it decreased HbA1c levels by 0.65 percentage points after 16 weeks, compared with a reduction of 0.30 percentage points with placebo (a dummy treatment) and metformin. HbA1c (glycosylated haemoglobin) is a substance in the blood which gives an indication of how well the blood glucose is controlled.

Two other studies showed that dapagliflozin taken with metformin and another diabetes medicine, sitagliptin or insulin, for 24 weeks, further decreased HbA1c: the dapagliflozin combination decreased HbA1c levels by 0.40 percentage points more than placebo and metformin when added to sitagliptin, and by 0.61 percentage points more than placebo and metformin when added to insulin.

Further studies confirmed that different doses of dapagliflozin with metformin decreased HbA1c more than placebo plus comparable doses of metformin, and that dapagliflozin plus metformin was at least as effective in reducing HbA1c levels as the diabetes medicine glipizide (a type of medicine known as a sulphonylurea).

A sixth study showed that after 24 weeks of treatment, patients taking dapagliflozin plus metformin had an average reduction in body weight of around 2 kg more than those taking placebo plus metformin.

A long-term study, involving over 17,000 patients with type 2 diabetes, looked at the effects of dapagliflozin on cardiovascular (heart and circulation) disease. The study indicated that dapagliflozin's effects were in line with those of other diabetes medicines that also work by blocking SGLT2.

#### What are the risks associated with Xigduo?

The most common side effects with Xigduo (which may affect more than 1 in 10 people) are hypoglycaemia (when used together with insulin or a sulphonylurea) and gastrointestinal symptoms (symptoms affecting the stomach and gut). For the full list of side effects of Xigduo, see the package leaflet.

Xigduo must not be used in:

 patients with any form of acute metabolic acidosis (build up of acid in the blood), such as diabetic ketoacidosis (high blood levels of acids called 'ketones') or lactic acidosis (build-up of lactic acid in the body);

- patients with diabetic precoma (a dangerous condition that can occur in diabetes);
- patients with reduced liver function;
- patients with severe reduction in kidney function or with conditions that could alter kidney function, such as dehydration, severe infection or shock;
- patients with diseases that could cause tissue hypoxia (reduced levels of oxygen in body tissues) such as heart or lung failure (the heart and lungs not working as well as they should), recent heart attack or shock:
- patients who are intoxicated with alcohol (drunkenness) or who regularly drink excessive amounts of alcohol.

For the full list of restrictions, see the package leaflet.

# Why is Xigduo authorised in the EU?

The European Medicines Agency decided that Xigduo's benefits are greater than its risks and recommended that it can be authorised for use in the EU. The Agency considered Xigduo to be effective for treating type 2 diabetes; it also leads to weight loss, which is considered beneficial in patients with diabetes. The Agency also noted that giving the combination of dapagliflozin and metformin as a single tablet could provide an additional treatment option for patients with type 2 diabetes, and may improve adherence to treatment. Regarding its safety profile, this was considered similar to the safety profile of dapagliflozin.

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

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

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

#### Other information about Xigduo

Xigduo received a marketing authorisation valid throughout the EU on 16 January 2014.

Further information on Xigduo can be found on the Agency's website: ema.europa.eu/medicines/human/EPAR/xigduo.

This overview was last updated in 08-2019.