

## **Package leaflet: Information for the user**

### **GLUCOPHAGE 500 mg powder for oral solution in sachets** metformin hydrochloride

#### **Read all of this leaflet carefully before you start taking this medicine**

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or pharmacist.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

#### **What is in this leaflet**

1. What Glucophage is and what it is used for
2. What you need to know before you take Glucophage
3. How to take Glucophage
4. Possible side effects
5. How to store Glucophage
6. Content of the pack and other information

#### **1. What Glucophage is and what it is used for**

Glucophage contains metformin, a medicine to treat diabetes. It belongs to a group of medicines called biguanides.

Insulin is a hormone produced by the pancreas that makes your body take in glucose (sugar) from the blood. Your body uses glucose to produce energy or stores it for future use.

If you have diabetes, your pancreas does not make enough insulin or your body is not able to use properly the insulin it produces. This leads to a high level of glucose in your blood. Glucophage helps to lower your blood glucose to as normal a level as possible.

If you are an overweight adult, taking Glucophage over a long period of time also helps to lower the risk of complications associated with diabetes. Glucophage is associated with either a stable body weight or modest weight loss.

Glucophage is used to treat patients with type 2 diabetes (also called 'non-insulin dependent diabetes') when diet and exercise alone have not been enough to control your blood glucose levels. It is used particularly in overweight patients.

Adults can take Glucophage on its own or together with other medicines to treat diabetes (medicines taken by mouth or insulin).

Children 10 years and over and adolescents can take Glucophage on its own or together with insulin.

#### **2. What you need to know before you take Glucophage**

##### **Do not take Glucophage**

- if you are allergic to metformin or any of the other ingredients of this medicine (listed in section 6)
- if you have liver problems or kidney problems (glomerular filtration rate below 45 ml/min)
- if you have uncontrolled diabetes, with e.g. severe hyperglycaemia (high blood glucose), nausea, vomiting, dehydration, rapid weight loss or ketoacidosis. Ketoacidosis is a condition in which substances called 'ketone bodies' accumulate in the blood and which can lead to diabetic

pre-coma. Symptoms include stomach pain, fast and deep breathing, sleepiness or unusual fruity odour of the breath

- if you lost too much water from your body (dehydration), such as due to long-lasting or severe diarrhoea, or if you have vomitted several times in a row. Dehydration may lead to kidney problems, which can put you at risk for lactic acidosis (see 'Warnings and precautions')
- if you have a severe infection, such as an infection affecting your lung or bronchial system or your kidney. Severe infections may lead to kidney problems, which can put you at risk for lactic acidosis (see 'Warnings and precautions')
- if you are treated for acute heart failure or have recently had a heart attack, have severe problems with your circulation (such as shock) or have breathing difficulties. This may lead to a lack in oxygen supply to tissue which can put you at risk for lactic acidosis (see "Warnings and precautions" )
- if you drink a lot of alcohol

If any of the above applies to you, talk to your doctor, before you start taking this medicine.

Make sure you ask your doctor for advice, if:

- you need to have an examination such as X-ray or scan involving the injection of contrast medicines that contain iodine into your bloodstream
- you need to have major surgery

You must stop taking Glucophage for a certain period of time before and after the examination or the surgery. Your doctor will decide whether you need any other treatment for this time. It is important that you follow your doctor's instructions precisely.

### **Warnings and precautions**

#### **Please note the following particular risk of lactic acidosis.**

Glucophage may cause a very rare, but very serious complication called lactic acidosis, particularly if your kidneys are not working properly. The risk of developing lactic acidosis is also increased with uncontrolled diabetes, prolonged fasting or alcohol intake, body fluid deficit (dehydration) due to severe diarrhoea or vomiting, liver problems and any medical conditions in which a region of the body is deprived with a lack of oxygen supply (such as acute severe heart diseases).

It is important to you to comply with your medication intake, dietary instructions and regular exercise program because this can reduce the risk of lactic acidosis.

The onset of lactic acidosis can be subtle and the symptoms can be non-specific such as vomiting, belly ache (abdominal pain) with muscle cramps, a general feeling of not being well with severe tiredness, and difficulty in breathing. Further symptoms are reduced body temperature and heart beat.

**If you experience some of these symptoms, you should seek immediately medical attention, as lactic acidosis may lead to coma. Stop taking Glucophage immediately and contact a doctor or the nearest hospital straight away.**

Glucophage on its own does not cause hypoglycaemia (a blood glucose level which is too low). However, if you take Glucophage together with other medicines to treat diabetes that can cause hypoglycaemia (such as sulphonylureas, insulin, meglitinides), there is a risk of hypoglycaemia. If you experience symptoms of hypoglycaemia such as weakness, dizziness, increased sweating, fast heart beating, visions disorders or difficulty in concentration, it usually helps to eat or drink something containing sugar.

### **Other medicines and Glucophage**

If you need to have an injection of contrast medicines that contain iodine into your bloodstream, for example for examinations such as X-ray or scan, **you must stop taking Glucophage for a certain period of time before and after (at least 48h) the examination** (see 'Make sure you ask your doctor for advice' above).

Tell your doctor if you take any of the following medicines and Glucophage at the same time. You may need more frequent blood glucose tests or your doctor may adjust the dosage of Glucophage:

- diuretics (used to remove water from the body by making more urine).
- beta-2 agonists such as salbutamol or terbutaline (used to treat asthma)
- corticosteroids (used to treat a variety of conditions, such as severe inflammation of the skin or in asthma)
- other medicines used to treat diabetes

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines.

### **Glucophage with food and drink**

Do not drink alcohol when you take this medicine. Alcohol may increase the risk of lactic acidosis especially if you have liver problems or if you are undernourished. This also applies to medicines that contain alcohol.

### **Pregnancy and breast-feeding**

During pregnancy, you need insulin to treat your diabetes. Tell your doctor if you are pregnant, think you may be pregnant or are planning to have a baby, so that he or she may change your treatment. This medicine is not recommended if you are breast-feeding or if you are planning to breast-feed your baby.

### **Driving and using machines**

Glucophage on its own does not cause hypoglycaemia (a blood glucose level which is too low). This means that it will not affect your ability to drive or use machines.

However, take special care if you take Glucophage together with other medicines to treat diabetes that can cause hypoglycaemia (such as sulphonylureas, insulin, meglitinides). Symptoms of hypoglycaemia include weakness, dizziness, increased sweating, fast heart beat, vision disorders or difficulty in concentration. Do not drive or use machines if you start to feel these symptoms.

### **Important information about some of the ingredients of Glucophage powder**

Glucophage powder for oral solution contains aspartame, a source of phenylalanine.

If you have phenylketonuria (a rare, hereditary disorder that unables your body to use phenylalanine), Glucophage powder for oral solution may be harmful for you. Talk to your doctor before you start taking this medicine.

## **3. How to take Glucophage**

Always take this medicine exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

Glucophage cannot replace the benefits of a healthy lifestyle. Continue to follow any advice about diet that your doctor has given you and get some regular exercise.

### **Recommended dose**

Children 10 years and over and adolescents usually start with 500 mg or 850 mg Glucophage once a day. The maximum daily dose is 2000 mg taken as 2 or 3 divided doses. Treatment of children between 10 and 12 years of age is only recommended on specific advice from your doctor, as experience in this age group is limited.

Adults usually start with 500 mg or 850 mg Glucophage two or three times a day. The maximum daily dose is 3000 mg taken as 3 divided doses.

In renal impaired patients with a GFR between 45 and 60 ml/min, the starting dose is 500 mg or 850 mg metformin hydrochloride, once daily. The maximum dose is 1000 mg daily, given as 2 divided doses. The renal function should be closely monitored (every 3 - 6 months).

If you take insulin too, your doctor will tell you how to start Glucophage.

### Monitoring

- Your doctor will perform regular blood glucose tests and will adapt your dose of Glucophage to your blood glucose levels. Make sure that you talk to your doctor regularly. This is particularly important for children and adolescents or if you are an older person.
- Your doctor will also check at least once a year how well your kidneys work. You may need more frequent checks if you are an older person or if your kidneys are not working normally.

### How to take Glucophage

Take Glucophage with or after a meal. This will avoid you having side effects affecting your digestion.

Pour the powder into a glass and add 150 ml water to get a clear to slightly cloudy solution. Drink the solution immediately after preparation. If necessary, stir the solution.

- If you take one dose a day, take it in the morning (breakfast)
- If you take two divided doses a day, take them in the morning (breakfast) and evening (dinner)
- If you take three divided doses a day, take them in the morning (breakfast), at noon (lunch) and in the evening (dinner)

If, after some time, you think that the effect of Glucophage is too strong or too weak, talk to your doctor or pharmacist.

### If you take more Glucophage than you should

If you have taken more Glucophage than you should have, you may experience lactic acidosis. Symptoms of lactic acidosis are non-specific such as vomiting, bellyache (abdominal pain) with muscle cramps, a general feeling of not being well with severe tiredness, and difficulty in breathing. Further symptoms are reduced body temperature and heart beat. **If you experience some of these symptoms, you should seek immediately medical attention, as lactic acidosis may lead to coma. Stop taking Glucophage immediately and contact a doctor or the nearest hospital straight away.**

### If you forget to take Glucophage

Do not take a double dose to make up for a forgotten dose. Take the next dose at the usual time.

If you have any further questions on the use of this medicine, ask your doctor or pharmacist.

## 4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them.

### Lactic acidosis

Lactic acidosis is a very rare side effect (may affect up to 1 in 10,000 people) but a serious complication particularly if your kidneys are not working properly. Symptoms of lactic acidosis are non-specific such as vomiting, bellyache (abdominal pain) with muscle cramps, a general feeling of not being well with severe tiredness, and difficulty in breathing. Further symptoms are reduced body temperature and heart beat. **If you experience some of these symptoms, you should seek immediately medical attention, as lactic acidosis may lead to coma. Stop taking Glucophage immediately and contact a doctor or the nearest hospital straight away.**

### Liver function

Abnormalities in liver function tests or hepatitis (inflammation of the liver; this may cause tiredness, loss of appetite, weight loss, with or without yellowing of the skin or whites of the eyes) are very rare side effects (may affect up to 1 in 10,000 people). If this happens to you, **stop taking Glucophage and talk to your doctor.**

### **Digestive problems**

Digestive problems, such as feeling sick (nausea), being sick (vomiting), diarrhoea, bellyache (abdominal pain) and loss of appetite are very common side effects (may affect more than 1 in 10 people). These side effects most often happen at the beginning of the treatment with Glucophage. It helps if you spread the doses over the day and if you take Glucophage with or straight after a meal. **If symptoms continue, stop taking Glucophage and talk to your doctor.**

### **Common side effects (may affect up to 1 in 10 people)**

- changes in taste.

### **Very rare side effects (may affect up to 1 in 10,000 people)**

- skin reactions such as redness of the skin (erythema), itching or an itchy rash (hives).
- low vitamin B12 levels in the blood.

### **Children and adolescents**

Limited data in children and adolescents showed that side effects were similar in nature and severity to those reported in adults.

### **Reporting of side effects**

If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via HPRA Pharmacovigilance, Earlsfort Terrace, IRL – Dublin 2; Tel: +353 1 6764971; Fax: +353 1 6762517. Website: [www.hpra.ie](http://www.hpra.ie); E-mail: [medsafety@hpra.ie](mailto:medsafety@hpra.ie).

By reporting side effects you can help provide more information on the safety of this medicine.

## **5. How to store Glucophage**

Keep this medicine out of the sight and reach of children. If a child is treated with Glucophage, parents and caregivers are advised to oversee how this medicine is used.

This medicine does not require any special storage conditions.

Do not use this medicine after the expiry date which is stated on the carton or the sachet after 'EXP'. The expiry date refers to the last day of that month.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

## **6. Contents of the pack and other information**

### **What Glucophage contains**

- The active substance is metformin hydrochloride. Each sachet contains 500 mg metformin hydrochloride corresponding to 390 mg metformin base.
- The other ingredients are acesulfame potassium, aspartame (E951), citric acid anhydrous, erythritol, maize starch, pullulan PI-20.

### **What Glucophage looks like and contents of the pack**

Glucophage 500 mg is a powder for oral solution in sachets, the powder is white and odourless. Each pack contains 20, 30 or 60 single-dose sachets. Not all pack sizes may be marketed.

**Marketing Authorisation Holder**

Merck Serono Limited  
Bedfont Cross  
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Feltham  
Middlesex  
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United Kingdom

**Manufacturer**

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Spain

or

Merck Santé s.a.s.  
2 rue du Pressoir Vert  
45400 Semoy  
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**This medicinal product is authorised in the Member States of the EEA under the following names:**

Glucophage: Cyprus, Czech Republic, Finland, France, Greece, Ireland, Italy, Malta, Portugal, United Kingdom

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