

Sodium-glucose co-transporter 2 Inhibitors (SGLT2i)

What are SGLT2 inhibitors?

Sodium-glucose co-transporter-2 inhibitors, often called SGLT2 inhibitors, are used in the treatment of type 2 diabetes, heart failure and chronic kidney disease.

SGLT2 inhibitors reduce blood sugar levels as they help the kidneys to remove excess glucose or sugar, which is passed out through your urine. With heart failure, some SGLT2 inhibitors can also improve the symptoms, such as breathlessness, and reduce the risk of your heart becoming weaker. They can also slow down chronic kidney disease, or CKD, by reducing pressure and swelling in the kidneys.

Examples include:

- Dapagliflozin (Forxiga®)
- Empagliflozin (Jardiance®)
- Canagliflozin (Invokana®)
- Ertugliflozin (Steglatro®)

What are the side effects?

As with all medications, side effects can occur, although not everyone will experience them, and for most people the benefits will outweigh the potential side effects.

Common side effects include:

- Peeing more than usual
- Genital infections (e.g. thrush) or urinary tract infections (UTIs)
- Feeling dizzy or light-headed
- A mild skin rash

If you're concerned about any of the side effects above, please contact your GP or discuss with your pharmacist.

In rare, or very rare cases, SGLT2 inhibitors can cause more serious side effects or complications. You should be aware of these so they can be identified early. They include:

Diabetic ketoacidosis (DKA)

A serious condition where a harmful substance, known as ketones, builds up in the blood. This is rare event in people with diabetes and is extremely rare in people treated with an SGLT2 inhibitor who do not have diabetes. DKA can happen when your blood glucose levels are normal.

The following symptoms might indicate diabetic ketoacidosis:

Feeling thirsty, needing to pee more often, stomach pain, feel sick or being sick, diarrhoea, breathing more deeply than usual, breath that smells fruity (like pear drop sweets or nail polish remover), feel tired, sleepy or confused, blurred vision.

Fournier's gangrene

An extremely rare but life-threatening bacterial infection of the tissue under the skin that surrounds muscles, nerves, fat, and blood vessels around the genital area. In this case includes the testicles, penis, and the perineum (which is the area between the scrotum and anus for a man, or the area between the anus and vulva for a woman). This is more likely to affect men than woman.

The following symptoms might indicate Fournier's gangrene:

Tenderness, redness, or swelling of the genitals or the area from the genitals back to the rectum and have a fever above 38°C (100.4F) or a general feeling of being unwell.

If you believe you are experiencing symptoms of **diabetic ketoacidosis (DKA) or Fournier's gangrene**. Please contact a medical professional, such as a doctor or nurse **immediately, even if your blood sugars are normal**. If your GP practice is closed, please call the **NHS 111** service, by dialling **111**, for more advice. Tell them you are worried about one of the conditions above.
Stop this medication until you have further medical advice.