

Patients with Type 2 Diabetes on Sodium-Glucose Co-Transporter 2 (SGLT2) Inhibitors

Information for patients with type 2 diabetes on SGLT2 inhibitors. This leaflet provides information regarding benefits, possible side effects including DKA and circumstances in which patients need to seek medical advice.

What are SGLT2 inhibitors?

- SGLT2 inhibitors are a class of drugs used in the treatment of diabetes.
- They are available in tablet form and usually taken once daily.
- They may be prescribed on their own or in combination with other diabetes medications including insulin.
- They help lower blood glucose level by reducing the reabsorption of glucose in the kidneys and allowing glucose to be passed out in the urine.

The name of these drugs end with 'gliflozin'. Examples include: empagliflozin, canagliflozin, dapagliflozin, ertugliflozin

What are the possible side effects of SGLT2 inhibitors?

Very common ($\geq 1/10$)

An increase in the risk of hypoglycaemia when used in combination with other diabetes medication (insulin/sulfonylurea).

Common ($\geq 1/100$ to $< 1/10$)

- Developing genital or urinary tract infections.
- Passing more urine more often.
- Increased thirst.
- Itching/rash.

Uncommon ($\geq 1/1,000$ to $< 1/100$)

- Getting low blood pressure and dehydration.
- Difficulty passing urine (dysuria).

Rare ($\geq 1/10,000$ to $< 1/1,000$)

- Diabetic ketoacidosis
- Necrotising fasciitis of the perineum (Fournier's gangrene)



What is diabetic ketoacidosis (DKA)?

- DKA is rare but serious condition that can develop in people taking SGLT 2 inhibitor. It is a serious condition which requires urgent medical treatment.
- DKA usually occurs when the body does not have enough insulin, this result in the formation of ketone bodies leading to increasing levels of acid in the blood.

What are the symptoms of DKA?

- Nausea and vomiting.
- Abdominal/stomach pain.
- Rapid breathing.
- Dehydration e.g. dizziness and excessive thirst, a sweet or metallic taste in the mouth or a different odour to urine or sweat.
- Drowsiness or tiredness.
- Confusion.
- In some cases of DKA blood glucose levels maybe in the normal range in people using SGLT2 inhibitors.

What is Fournier's gangrene?

- Fournier's gangrene is a very rare and severe spreading skin infection in the genital or groin area which leads to abscesses and skin destruction. If treatment is delayed it can be fatal.
- Symptoms are severe pain, tenderness, redness, or swelling in the genital or groin area accompanied by fever or malaise.

Should I stop taking these tablets if I become unwell?

You should not take the tablets if unwell, especially in the presence of vomiting, diarrhoea or fever. You should also give your SGLT-2 inhibitor a miss if you are fasting (e.g. before an elective surgical operation). You can restart them when you are better, however if you remain unwell for longer than 48 hours we advise you seek medical advice from your GP/Pharmacist/NHS 111.

See your doctor urgently:

- *If you have a severe illness*
- *If you are very dehydrated.*
- *If you have had significant weight loss and have poor appetite.*
- *If there is excess alcohol use.*
- *If you are on insulin treatment and there is a sudden reduction in insulin doses.*

