

Patient Leaflet: SGLT2 Inhibitors

Why have I been sent this leaflet?

You received this leaflet because you're taking or about to take an SGLT2 inhibitor to help manage your diabetes, chronic kidney disease, or heart failure. These medications have names that end with “-gliflozin.”

- Examples include
- Dapagliflozin (Forxiga)
- Empagliflozin (Jardiance)
- Canagliflozin (Invokana)

What do they do?

SGLT-2 inhibitors work by increasing the amount of sugar passed in the urine. As a result, they also increase the amount of urine you pass. They are often prescribed for type 2 diabetes but offer additional benefits, such as protecting the kidneys and heart. These medications can reduce the risk of heart failure, heart attacks, and strokes, especially in those at higher risk.

Are there any side effects?

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

Common side effects include:

- Hypoglycaemia (low blood sugar) – this usually only occurs if taken in combination with other diabetes medicines. Your prescriber will advise you on any necessary changes to your diabetic medication.
- Dehydration – this medicine increases your urine volume so may cause dehydration. To reduce the risk of dehydration, ensure you drink fluids regularly throughout the day (unless directed otherwise).
- Genital infections (e.g. thrush) and urinary tract infections – as this medicine increases the glucose (sugar) in your urine, there is an increased risk of infection, such as genital thrush. Wash your genital area with warm water using non-perfumed soap and avoid wearing tight underwear to reduce the risk of infection.

In rare or very rare cases, SGLT2 Inhibitors can cause more serious side effects or complications, including:

- **Diabetic ketoacidosis (DKA)**, Please seek medical advice immediately if you have any of the following symptoms:
 - Rapid weight loss
 - Feeling or being sick, or stomach pain
 - Excessive thirst
 - Fast and deep breathing
 - Unusual sleepiness or tiredness

- Sweet or metallic taste in the mouth
- Different odour to your urine or sweat
- **Fournier's gangrene** is a rare, life-threatening bacterial infection of your scrotum, penis or perineum (the area between your genitals and rectum). It's an infection that worsens quickly and requires emergency care. Seek immediate medical advice if you develop pain, tenderness, redness, or swelling in the genital area, accompanied by fever or feeling unwell.
- **Lower limb amputation** (if taking canagliflozin) – seek immediate medical advice if you develop signs of a foot complication such as skin ulceration, discolouration, infection or new pain/tenderness.

If you are taking canagliflozin, or are diabetic, it is important you attend for regular foot checks whilst taking this medication.

Medicines and Dehydration “Medicine Sick Day Guidance”

Taking certain medicines when you are dehydrated or very unwell can result in you developing a more serious illness. If you are unwell (i.e., too unwell to go to work or carry out normal daily activities) and especially if you have **vomiting, diarrhoea, or fever**, you should temporarily stop taking the medicines listed below.

Once you are better and can drink normally you should re-start your medicine(s). If you remain unwell after 48 hours seek medical advice from your GP/Pharmacist/NHS 111/Specialist Nurse.

Medicines involved:

Class of medication	Risk if taken when dehydrated	Examples
ACE inhibitors	When dehydrated these medicines may impair kidney function which could lead to kidney failure.	Medicines ending in 'pril' Ramipril, lisinopril, perindopril
ARBs		Medicines ending in 'sartan' – Losartan, candesartan
Diuretics		Sometimes called water pills – Bendroflumethiazide, furosemide, indapamide, spironolactone, bumetanide
NSAIDs		Ibuprofen, naproxen, diclofenac
Metformin	Risk of lactic acidosis, a serious and potentially life-	

	threatening side effect of metformin.	
SGLT2 Inhibitors	Increased risk of developing euglycemic diabetic ketoacidosis	Names ending in 'flozin' dapagliflozin, empagliflozin,

Please see below for information you should carry with you at all times.

I am on the following medications that put me at risk of acute kidney injury/lactic acidosis or diabetic ketoacidosis (DKA) if I am dehydrated:

Please cut out the alert card below and place in your wallet

<p>“Medicine Sick Day Guidance” Alert Card</p> <p>When you are unwell with any of the following: Vomiting, diarrhoea (unless very minor), fevers, sweats and shaking</p> <p>Contact a medical professional, this may be your doctor, pharmacist, or nurse. If advised, STOP taking the medicines highlighted overleaf.</p> <p>Restart when you are well (usually 24-48 hours of eating and drinking normally)</p>	<p>Medicines that need advice if you are ill:</p> <table><tr><td>ACE inhibitors</td><td>Medicines ending in “pril” e.g. Lisinopril, perindopril, ramipril</td></tr><tr><td>ARBs</td><td>Medicines ending in “sartan” e.g. Candesartan, losartan</td></tr><tr><td>Diuretics</td><td>Sometimes called “Water pills” e.g. Furosemide, spironolactone, bendroflumethiazide, indapamide</td></tr><tr><td>NSAID</td><td>Anti-inflammatory pain killers e.g. ibuprofen, naproxen,</td></tr><tr><td>Metformin</td><td></td></tr><tr><td>SGLT2 inhibitors</td><td>Medicines ending in “gliflozin” e.g. dapagliflozin, empagliflozin</td></tr></table>	ACE inhibitors	Medicines ending in “pril” e.g. Lisinopril, perindopril, ramipril	ARBs	Medicines ending in “sartan” e.g. Candesartan, losartan	Diuretics	Sometimes called “Water pills” e.g. Furosemide, spironolactone, bendroflumethiazide, indapamide	NSAID	Anti-inflammatory pain killers e.g. ibuprofen, naproxen,	Metformin		SGLT2 inhibitors	Medicines ending in “gliflozin” e.g. dapagliflozin, empagliflozin
ACE inhibitors	Medicines ending in “pril” e.g. Lisinopril, perindopril, ramipril												
ARBs	Medicines ending in “sartan” e.g. Candesartan, losartan												
Diuretics	Sometimes called “Water pills” e.g. Furosemide, spironolactone, bendroflumethiazide, indapamide												
NSAID	Anti-inflammatory pain killers e.g. ibuprofen, naproxen,												
Metformin													
SGLT2 inhibitors	Medicines ending in “gliflozin” e.g. dapagliflozin, empagliflozin												