

SGLT2 Inhibitors - medication for type 2 diabetes

Type 2 diabetes is managed using a combination of lifestyle modifications and medication. The use of medication as soon as it is needed reduces the risk of developing complications caused by diabetes.

Sodium Glucose Co Transporter 2 (SGLT2) Inhibitors are a new class of diabetes medication for people with type 2 diabetes. SGLT2 Inhibitors can be added to other diabetes medication and/or insulin.

SGLT2 Inhibitors lower blood glucose as they reduce glucose reabsorption by the kidney and increase the amount of glucose excreted in urine.

Special care is needed to avoid unwanted drug interactions and side effects.

Together you and your doctor will choose the best medications for you.

What SGLT2 Inhibitors are available?

Currently, the SGLT2 Inhibitors available in Australia are:

- > Dapagliflozin (Forxiga)
- > Empagliflozin (Jardiance).

What are the unwanted drug interactions and side effects?

Common side effects (but less than 1%) include:

- > genital or urinary tract infections
- > passing larger amounts of urine
- > passing urine more frequently
- > greater thirst
- > nausea or
- > constipation.

A very rare but potentially serious side effect of SGLT2 Inhibitors is diabetic ketoacidosis.

What is diabetic ketoacidosis?

Diabetic Ketoacidosis (DKA) is a life threatening complication of diabetes mellitus and needs urgent medical attention.

DKA most commonly occurs in type 1 diabetes but occasionally occurs in people with type 2 diabetes in certain circumstances. For example, if the person is taking a SGLT2 Inhibitor and has a severe infection or illness.

DKA is most commonly diagnosed by high blood glucose and/or ketones. If the person is taking an SGLT2 inhibitor, the blood glucose may not be high making DKA more difficult to diagnose.



What are the symptoms of diabetic ketoacidosis?

Symptoms of diabetic ketoacidosis include:

- > nausea and/or vomiting
- > abdominal pain
- > dehydration
- > blurred vision
- > fever
- > sweet smell of ketones on breath
- > shortness and/or difficulty in breathing.

If you experience any of these symptoms, seek emergency medical attention.

How are ketones tested?

Ketones can be tested using a blood or urine sample

How is diabetic ketoacidosis treated?

The treatment of diabetic ketoacidosis usually requires a hospital admission and involves:

- > an intravenous infusion (drip) for re-hydration
- > an insulin infusion (drip) to provide extra insulin on top of what you are making for yourself.
- > frequent blood glucose and ketone testing to guide your recovery.

What should you do if you take an SGLT2?

- > Tell your health professional about all the medication you are taking - including prescription, over the counter and complementary medicines (herbal, 'natural', vitamins and minerals) - as they may interact with diabetes medicines and affect your blood glucose levels.
- > When seeking urgent medical attention, it is extremely important to tell your health care professional that you are taking a SGLT2 Inhibitor and prompt them to test your blood glucose and ketone level.
- > Remember you may have ketones even if your blood glucose is within or close to your target.
- > Only take the SGLT2 Inhibitor dose as prescribed by your doctor. Stop taking your SGLT2 when:
 - > fasting for surgery or a procedure
 - > unwell with an infection or illness
 - > unable to eat and/or drink (eg nausea, vomiting).
- > The SGLT2 Inhibitor may be restarted when you are well and eating/ drinking normally.

This factsheet only provides brief information. Ask your health professional to download the Consumer Medicines Information for your medications or go to

http://www.nps.org.au/search_by_medicine_name.

For more information

CHSA Diabetes Service
Country Health SA LHN
PO Box 287, Rundle Mall
ADELAIDE SA 5000
Telephone: (08) 8226 7168
www.chsa-diabetes.org.au

