

# SGLT2 Inhibitors – Medication for type 2 diabetes

Type 2 diabetes is managed using a combination of lifestyle changes and medication.

Sodium Glucose Co Transporter 2 (SGLT2) Inhibitors reduce glucose reabsorption by the kidney, increasing the amount of glucose passed in urine, which in turn lowers blood glucose levels.

This medication can also assist weight loss, lower your blood pressure and reduce your risk of kidney disease and hospital admission for heart failure.

## SGLT2 Inhibitors currently available in Australia

Currently SGLT2 Inhibitors are prescribed as either a single medication:

- > Dapagliflozin (Forxiga)
- > Empagliflozin (Jardiance)
- > Ertugliflozin (Steglatro)

or in fixed dose combination with other diabetes medications:

- > with Metformin (Xigduo, Jardiamet, Segluromet)
- > with Gliptins or DPP4 inhibitors (Glyxambi, Qtern, Steglujan).

## What are the unwanted medication interactions and side effects?

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

- > genital or urinary tract infections
- > low blood pressure
- > passing larger amounts of urine and passing urine more frequently
- > greater thirst
- > nausea or constipation

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

## What should you do if you take an SGLT2 Inhibitor?

- > 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 levels.
- > 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.

- > When to stop taking your SGLT2 Inhibitor:
  - > 3 days prior to any surgery requiring more than an overnight hospital stay
  - > 3 days prior to any day procedure requiring fasting and/or bowel preparation
  - > if you are unwell with an infection or illness
  - > if you are unable to eat and/or drink (eg nausea, vomiting)
  - > if you are on a very low carbohydrate diet (less than 60g of carbohydrate per day)
  - > if you have been instructed by your doctor to temporarily stop or lower your insulin doses.
- > Restart your SGLT2 Inhibitor when you are:
  - > well and eating/drinking normally
  - > instructed by doctor to do so. After a day procedure or day surgery, you may be instructed to wait a further 24hours.

### What is diabetic ketoacidosis (DKA)?

DKA is a serious complication of diabetes mellitus and needs urgent medical attention.

DKA is most commonly diagnosed by high blood glucose and/or ketones. When using a SGLT2 Inhibitor, the blood glucose may not be high and can be normal.

### What are the symptoms of diabetic ketoacidosis?

Symptoms of diabetic ketoacidosis include:

- > nausea and/or vomiting
- > abdominal pain
- > dehydration (symptoms of dehydration include dry tongue, dry lips, drowsiness and dizziness)
- > 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. Call 000 and present to the Emergency Department of your local hospital.

### 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 and to provide extra insulin
- > frequent blood glucose and ketone testing to guide your recovery.

This factsheet only provides brief information. Ask your health professional to download the Consumer Medicines Information at [http://www.nps.org.au/search\\_by\\_medicine\\_name](http://www.nps.org.au/search_by_medicine_name).

### For more information

**Diabetes Service**  
**Rural Support Service**  
 PO Box 287, Rundle Mall  
 ADELAIDE SA 5000  
 Telephone: (08) 8226 7168  
[www.chsa-diabetes.org.au](http://www.chsa-diabetes.org.au)  
[www.sahealth.sa.gov.au/regionalhealth](http://www.sahealth.sa.gov.au/regionalhealth)

