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# FACTSHEET | OCTOBER 2023

# SGLT2 inhibitors - Diabetes

### **RSS Diabetes Service**

Diabetes is managed using a combination of lifestyle choices and medication.

Sodium Glucose Co Transporter 2 (SGLT2) inhibitors reduce glucose reabsorption by the kidneys, increasing the amount of glucose passed in urine, which in turn lowers 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

SGLT2 inhibitors are prescribed as either a single medication:

∽ Dapagliflozin (Forxiga®)

> Empagliflozin (Jardiance®)

or in fixed dose combination with other diabetes medications:

- > Dapagliflozin with Metformin (Xigduo<sup>®</sup>)
  > Dapagliflozin with Saxagliptin\* (Qtern<sup>®</sup>)
- > Empagliflozin with Metformin (Jardiamet<sup>®</sup>)
- > Empagliflozin with Linagliptin\* (Glyxambi®)

\*Saxagliptin, Linagliptin and Sitaglipin are dipeptidyl peptidase-4 (DPP-4) inhibitors

# What are the precautions?

Tell your health professional about all the medication you are taking (including prescription and over the counter medicines (herbal, 'natural', vitamins and minerals) as they may interact with diabetes medicines and alter your glucose levels. Only take a SGLT2 inhibitor as prescribed by your doctor.

If you are unwell, refer to *Hyperglycaemia / Sick Day Action Plan*. Even if your blood glucose is within or close to your target, you may still have ketones. Test your blood or urine for ketones if you have the supplies to do so.

SGLT2 inhibitors will cause you to pass larger amounts of urine or pass urine more frequently. Make sure you drink enough water to control your thirst and avoid dehydration.

## What about illness, surgery and fasting procedures?

Illness, surgery and fasting procedures may increase risk of urinary tract infection, dehydration and euglycaemic diabetic ketoacidosis.

Stop taking your SGLT2 inhibitor if you have been instructed by your doctor to do so. Reasons to stop are:

- > are unable to eat and/or drink (e.g. nausea, vomiting)
- > if you are on a very low carbohydrate diet (e.g. less than 60g of carbohydrate per day)
- > the day of your minor / day surgery or fasting procedure
- > 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.

#### Restart your SGLT2 inhibitor when you are:

- > well, eating and drinking
- > if you have been instructed by your doctor to do so.

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# What is euglycaemic diabetic ketoacidosis?

Euglycaemic diabetic ketoacidosis is a very rare side effect of SGLT2 inhibitor use. It is a medical emergency and must be diagnosed and treated promptly.

Symptoms 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 or present to the Emergency Department of your local hospital.

Tell Ambulance and Emergency Department staff that you are taking a SGLT2 inhibitor and prompt them to test your blood glucose and ketone levels.

## How is euglycaemic diabetic ketoacidosis treated?

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

- > stopping the SGLT2 inhibitor medication
- > an intravenous infusion (drip) for rehydration
- > an intravenous infusion (drip) for insulin therapy
- > blood glucose and ketone testing to guide your recovery.

## Are there any other side effects?

Other side effects reported in SGLT2 inhibitor use include:

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

## Where can I get more information?

- Australian Government (Medicine Line)
- Healthdirect Australia (24hr health advice line)
- National Diabetes Services Scheme

Phone: 1300 633 424 (1300 MEDICINE) Phone: 1800 022 222

www.ndss.com.au

#### For more information

Rural Support Service Diabetes Service PO Box 3017, Rundle Mall ADELAIDE SA 5000 Email: <u>Health.DiabetesService@sa.gov.au</u>

www.chsa-diabetes.org.au

www.sahealth.sa.gov.au/regionalhealth

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