



**PRIMARY CARE PHARMACY MEDICINE OPTIMISATION
PROTOCOL 2025-26**

**SGLT2 INHIBITOR SWITCH TO
DAPAGLIFLOZIN**

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Switch from Empagliflozin and Canagliflozin to Dapagliflozin

To switch patients prescribed empagliflozin or canagliflozin to dapagliflozin.

There is minimal therapeutic difference between the SGLT2 inhibitors for their licensed indications. As generic dapagliflozin is the most cost-effective option, practices are being asked to support a move from empagliflozin and canagliflozin to generic dapagliflozin to ensure cost-effective use of medicines.

Background

Dapagliflozin, empagliflozin and canagliflozin are Sodium-Glucose Linked Transporter 2 (SGLT2) inhibitors that reversibly inhibit SGLT2 in the renal proximal convoluted tubule to reduce glucose reabsorption and increase urinary glucose excretion ^(1,2,3).

SGLT2 inhibitors are used in type 2 diabetes mellitus to reduce blood sugar levels, can be used in chronic heart failure to improve symptoms and reduce the risk of the heart becoming weaker, as well as being used to slow down chronic kidney disease by reducing pressure and swelling in the kidneys ⁽⁴⁾.

Licensing and Scottish Medicines Consortium (SMC) Advice

- Dapagliflozin and empagliflozin are licensed in type 2 diabetes mellitus (T2DM), chronic heart failure (CHF), and chronic kidney disease (CKD) ^(5,6).
- Canagliflozin is only licensed for T2DM ⁽⁷⁾.
- The SMC advice and restrictions are the same for dapagliflozin and empagliflozin in CKD, CHF, and T2DM, and for dapagliflozin and canagliflozin in T2DM ⁽⁸⁾.

Comparative Clinical Effectiveness

- Dapagliflozin, empagliflozin, and canagliflozin have all been shown to reduce HbA1c and promote weight loss. In the treatment of T2DM, no single SGLT2 inhibitor has demonstrated clear superiority over another ⁽⁹⁾.
- In the management of CHF, in line with the European Society of Cardiology guidelines, dapagliflozin and empagliflozin can be used interchangeably ^(10,11).
- In the management of CKD, NICE considers dapagliflozin and empagliflozin to have a similar effectiveness and safety profile ⁽¹²⁾.

Prescribing and Dosing Considerations

Dapagliflozin ⁽⁵⁾:

- Fixed dose: 10mg once daily regardless of indication.
- No dose adjustment required for renal impairment or mild/moderate hepatic impairment.
- Severe hepatic impairment: starting dose of 5mg is recommended, increasing to 10mg if well tolerated.

Empagliflozin and Canagliflozin ^(6,7):

- Available in two strengths for the treatment of T2DM.
- Dose limited to 10mg for empagliflozin and 100mg for canagliflozin if eGFR < 60 mL/min/1.73 m².
- No dose adjustment required for mild to moderate hepatic impairment.
- Not recommended in severe hepatic impairment.

Cost Effectiveness

- With the loss of dapagliflozin's patent, generic versions are now available at a lower price than branded empagliflozin and canagliflozin.
- Dapagliflozin is the first of the SGLT2 inhibitors to become available as a generic product.

Summary

SGLT2	Licensed Indications	Renal Impairment Guidance
Dapagliflozin	Symptomatic HF, CKD and T2DM	Avoid initiation if eGFR less than 15 mL/minute/1.73 m ² .
Empagliflozin	Symptomatic HF, CKD and T2DM	Avoid initiation if eGFR less than 20 mL/minute/1.73 m ² .
Canagliflozin	T2DM	Caution if eGFR less than 60 mL/minute/1.73 m ² , Avoid initiation when baseline eGFR less than 30 mL/minute/1.73 m ²

Reference BNF <https://bnf.nice.org.uk/> accessed 14/01/26

Guidance for Switching Dosages and Formulations

Inclusion Criteria

- Patients aged 18 years or older prescribed branded dapagliflozin as Forxiga[®] 5mg or 10mg, empagliflozin (Jardiance[®]) 10mg or 25mg tablets, or canagliflozin (Invokana[®]) 100mg or 300mg tablets for either chronic heart failure, type 2 diabetes, or chronic kidney disease. See [appendix 3](#) for proposed switches.

Exclusion Criteria

- Previous hypersensitivity, intolerance or treatment failure with dapagliflozin.
- Patients with an eGFR less than 15ml/min, those on dialysis, and individuals who have had a kidney transplant should all be excluded from this switch.
- Patients without a current eGFR. See [Appendix 4](#) for guidance on current “eGFR” – if current eGFR not available request this before making the switch. Refer to pharmacist / GP.
- **All patients currently prescribed branded Forxiga[®] should be switched to generic dapagliflozin, with no**

Cautions

exclusions.

- Back pain is a recognised side effect of dapagliflozin ⁽⁵⁾. Some patients who have previously trialled dapagliflozin and experienced this side effect will have been changed to empagliflozin. For patient’s previously prescribed dapagliflozin, it is important to carefully check the patient’s notes to ensure these patients are excluded from the switch.
- Inform local community pharmacies that the switch project is commencing to allow them to adjust stock levels.

Procedure for Undertaking Switch

- Assess patient records against the inclusion/exclusion criteria to confirm suitability for switching to dapagliflozin. Excel template available.
- Please note that the cardiology/heart failure specialists, renal specialists and diabetes specialists should not be contacted to ask about specific patients regarding this workstream. If there are any concerns regarding a patient’s suitability to switch to dapagliflozin, please exclude from the switch.
- Patient or carer should be informed of the change in medication. The outcome should be recorded in the patient’s notes.
 - It is at the practice's discretion to decide how best to communicate the change to their patients.
 - To aid practices, suggested discussion/counselling points and a sample patient letter are included below – [see appendices](#).

- SMS messaging may also be considered to inform patient of change.
- No patient communication is required if simply changing from Forxiga[®] branded dapagliflozin to generic, though clinicians may choose to counsel patients about sick day guidance and dietary changes.
- Amend the patient's prescription to include dapagliflozin as per appendix 3. Ensuring previous SGLT2 inhibitor is removed.
- The patient should be advised to start taking dapagliflozin the day after the last dose of their current medication to avoid any unnecessary waste.
- No additional monitoring is required following the change to dapagliflozin from their current SGLT2 inhibitor.
- Update data collection sheet with changes made (for practice use only).
- **Once switch project is complete the complete the activity spreadsheet**

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Appendix 1: Suggested Discussion/Counselling Points

Reasons for switching

- **Similar Effectiveness:** Dapagliflozin works just as well as empagliflozin and canagliflozin for type 2 diabetes and is considered interchangeable with empagliflozin for chronic heart failure and chronic kidney disease.
- **Clinically Supported:** The change to dapagliflozin is supported by local specialists in diabetes, heart failure and kidney disease.
- **Better Value for the NHS:** Dapagliflozin is the first of this class of medicine to lose its patent exclusivity and become available as a non-branded product. This means that it is significantly more affordable for the NHS to prescribe this medicine compared to other medicines within the same class.
- **Supports NHS Services:** By using this more cost-effective option, it saves NHS Lothian money and allows continued funding of treatments and services for patients across the health board.

How to switch

- Patients should be advised to use up supplies of their current empagliflozin/canagliflozin before commencing dapagliflozin. This is to reduce medicine waste.
- You can start taking dapagliflozin the day after your last dose of your current medication.
- We would advise that on receipt of your new medication that you take some time to read and familiarise yourself with the patient information leaflet.
- If you experience any side effects after the change you should seek medical advice.
- No additional monitoring or follow-up is required when switching to dapagliflozin from the patient's existing 'flozin'.

How to take

- Dapagliflozin is taken once daily at any time of day with or without food. Tablets should be swallowed whole.
- Sick Day Guidance**⁽¹³⁾

Other key counselling points

As with your previous 'flozin' medicine, if you become unwell with any of the following:

- Vomiting or diarrhoea (unless only minor)
- Fevers, sweats and shaking (unless only minor)

Then **STOP** taking your dapagliflozin. Your dapagliflozin can be restarted when you are well (after 24-48 hours of eating and drinking normally). If you are in any doubt, then seek medical advice.

Dietary Changes

^(14,15)

Before making changes to your dietary intake e.g. commencing a low carbohydrate diet or entering a fasting period, you should first seek medical advice to review the appropriateness of your dapagliflozin. Individuals who take 'flozin' medications and commence a low carbohydrate diet or begin fasting are at a higher risk of a serious condition called diabetic ketoacidosis.

Appendix 2: Sample Information for Patient (For SMS / letter)

Practice Headed Paper

Patient Details

Dear Patient,

Change from **XXXX** to Dapagliflozin

We are committed to ensuring that all our patients receive effective, high-quality medications whilst also making the best use of NHS resources. Dapagliflozin is a Sodium-Glucose Linked Transporter 2 (SGLT2) inhibitor, or 'flozin' for short, which is the same type of medicine as your current **XXXX**.

Dapagliflozin is considered equally effective as your current 'flozin' medication, but it is available at a considerably lower cost to the NHS. The change to dapagliflozin from your current 'flozin' medication is supported by local cardiology, renal and diabetes specialists within Lothian.

We have carefully reviewed your medical records and confirmed that this change is appropriate for you.

Your current prescription for:

XXXX

Has been stopped and replaced with:

Dapagliflozin 10mg tablets

To prevent waste, please continue to use any remaining 'flozin' medication that you have before requesting a new prescription for dapagliflozin tablets.

Key Points to remember

How to take your dapagliflozin

- Dapagliflozin is taken once daily, at any time of day, with or without food. Tablets should be swallowed whole.
- You can start taking dapagliflozin the day after your last dose of your current medication.
- We would advise that on receipt of your new medication that you take some time to read and familiarise yourself with the patient information leaflet.

Sick Day Guidance

As with your previous 'flozin' medicine, if you become unwell with any of the following:

- Vomiting or diarrhoea (unless only minor)
- Fevers, sweats and shaking (unless only minor)

Then **STOP** taking your dapagliflozin. Your dapagliflozin can be restarted when you are well (after 24-48 hours of eating and drinking normally). If you are in any doubt, then seek medical advice.

Dietary Changes



Before making changes to your dietary intake e.g. commencing a low carbohydrate diet or entering a fasting period, you should first seek medical advice to review whether dapagliflozin remains appropriate for you. Individuals who take 'flozin' medications and commence a low carbohydrate diet or begin fasting are at a higher risk of a serious condition called diabetic ketoacidosis.

If you have any questions about this change or would like to discuss it further, please contact the practice to speak with a member of the pharmacy team.

We appreciate your support in making the best use of NHS resources.

Yours sincerely,

Appendix 3: Summary of switches to be made

<u>Currently Prescribed Medicine</u>		<u>Switch to</u>
Jardiance 10mg tablets		Dapagliflozin 10mg tablets
Jardiance 25mg tablets		
Empagliflozin 10mg tablets		
Empagliflozin 25mg tablets		
Invokana 100mg tablets		
Invokana 300mg tablets		
Canagliflozin 100mg tablets		
Canagliflozin 300mg tablets		
Forxiga 10mg tablets		Dapagliflozin 5mg tablets
Forxiga 5mg tablets		

Appendix 4: Guidance on Current eGFR

- Summary Table for “Current” eGFR

CKD Stage	(ml/min)	Out-of-date if older than
G1–G2	≥60	>12 months
G3a	45–59	>12 months
G3b	30–44	>6 months
G4	15–29	>3 months
G5	<15ml	Excluded from project

[Management of patients with CKD | UK Kidney Association](#) (used in NICE guidance)