Heart Failure - Primary Care Guideline for the Use of SGLT-2 Inhibitors in Reduced Ejection Fraction Heart Failure

Version Number	Date	Amendments made
1	May 2022	

SPECIALIST INITIATION OF TREATMENT

IMPORTANT- Stable heart failure patients (diabetic or not) in the community do not require dapagliflozin for the management of HF. Dapagliflozin is intended for patients still symptomatic on optimised standard care.

Patient diagnosed with NYHA II-IV Heart failure with reduced ejection fraction (HFrEF) ≤40% initiated and stabilised on treatment by the specialist heart failure MDT

If HF still symptomatic (as confirmed by HF specialist) on optimised standard care (see box 1) an SGLT-2 inhibitor (currently licensed – dapagliflozin/empagliflozin 10 mg*) once daily may be initiated/recommended by a HF specialist (or primary care clinician with special interest in HF in conjunction with HF specialist team) and prescribing may commence in primary care.

* Dapagliflozin starting dose of 5 mg if severe liver disease with T2DM

Before primary care prescribing commences specialist services should ensure that:

- the patient's heart failure and treatment regimen have been stabilised including reassessment of volume status, BP and U+E's.
- the patient has been counselled about what to do if they become dehydrated
- the T2DM patient has been counselled about sick day rules and the risk of DKA

BOX 1 – STANDARD CARE

1. ACEi/angiotensin receptor blocker with beta blocker and if tolerated a mineralocorticoid receptor antagonist (MRA) **OR**
2. Sacubitril/valsartan (if EF < 35%) with beta blockers, and, if tolerated, MRAs)

Patient must be taking optimised standard and symptomatic before dapagliflozin is considered

BOX 2 - CONTRAINDICATIONS

- < 18 years old
- Pregnancy
- T1DM/ latent autoimmune diabetes/ pancreatic disease
- Low BMI
- Ketogenic diet
- Poor compliance (alcoholic/ IV drug user)

In patients with heart failure and T2DM

- Past history of DKA
- HbA1C > 86 mmol/mol (10%)
- Rapid progression to insulin < 1 year

BOX 3 –STABILISATION

- It is the responsibility of the HF specialist MDT to ensure that the patient is haemodynamically stable before care is transferred to primary care.. In T2DM, adjustments to the diabetes treatment (if required) should be in coordination with the practice team or diabetes MDT (if under intermediate secondary care)
- If euvolaemic the HF specialist may consider reducing the furosemide/ bumetanide dose by half if > 80 mg/ 2 mg or withholding the dose if < 80 mg /2 mg.

PRESCRIBING OF DAPAGLIFLOZIN IN PRIMARY CARE

MONITORING

Renal Function

- If GFR ≥ 60 ml/min check at least annually
- If GFR < 60 mL/min, check at least 2 to 4 times per year
- Also prior to initiation of concomitant medicinal products that may reduce renal function and periodically thereafter.

Volume Depletion

- In case of intercurrent conditions that may lead to volume depletion (e.g. gastrointestinal illness), careful monitoring of volume status (e.g. physical examination, BP measurements, lab tests including haematocrit and electrolytes) is recommended.

HbA1c (if Co-Morbid T2DM)

- Measure within 3 months of changes, adjust therapy to achieve HbA1c target
- NICE recommend 3-6 monitoring intervals (tailored to individual needs) until HbA1c is stable

COUNSELLING AND REFERRAL

Renal Function

- May be prescribed for HFrEF in patients with GFR < 60 ml/min.
- If GFR drops below 30 ml/min recheck within 2 weeks and stop dapagliflozin if GFR persistently below 30 ml/min .
- If HFrEF, T2DM and GFR < 45 ml/min additional glucose-lowering treatment should be considered

DKA (in T2DM) and Volume Depletion

- Patients should be counselled on the signs and symptoms of DKA (N&V, abdominal pain, difficulty breathing, confusion, fatigue and drowsiness).
- Sick days rules e.g. withholding treatment in gastrointestinal illness
- Dapagliflozin should not be restarted following confirmed DKA

Other adverse reactions to dapagliflozin

- **UTIs** -temporary interruption of should be considered when treating pyelonephritis or urosepsis.
- **Fouriers gangrene in T2DM (Very rare)** - discontinue dapagliflozin and prompt treatment should be instituted.
- **Lower limb amputations** - It is important to counsel patients with T2DM on routine preventative foot care.