Bedfordshire, Luton and Milton Keynes Health and Care Partnership

NHS Bedfordshire, Luton and Milton Keynes Integrated Care Board

BLMK Primary Care Prescribing Guidance for SGLT2 inhibitors in Heart Failure with Preserved Ejection Fraction (HFpEF) and Heart Failure with Mildly Reduced Ejection Fraction (HFmrEF)

Symptomatic chronic heart failure and HFpEF or HFmrEF

- **NYHA 2 or 3**
- **eGFR > 25mmol/ml**

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Consider initiation of ***dapagliflozin 10mg OD*** or ***empagliflozin 10mg OD***

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Contraindications:

- Allergy to SGLT2 inhibitors
- Type 1 diabetes
- Pregnancy

Avoid if:

- Previous diabetic ketoacidosis (DKA)
- High risk of DKA e.g. previous pancreatitis, starvation – see SPC for full details: dapagliflozin / empagliflozin.

Cautions:

- Previous urosepsis / recurrent genitourinary tracts infections
- Recurrent hypoglycaemia
- Peripheral vascular disease especially if previous amputation or foot ulcer
- Hypotension (SBP <95 mmHg)

Age:

- Empagliflozin is not recommended if patient is 85 years or older
- Elderly patients may be at increased risk of volume depletion.

Check baseline bloods: including **U&Es eGFR, FBC, LFTs** and **HbA1c**

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Assess Kidney Function (eGFR)

- **Limited experience in eGFR <25 ml/min:**
  - Refer to heart failure service for initiation.
- **eGFR: 25 to 45ml/min**
  - Correct volume depletion
  - Consider reducing co-prescribed loop diuretics.

**Dapagliflozin is licensed for eGFR >15ml/ min; Empagliflozin is licensed for eGFR >20ml/ min*

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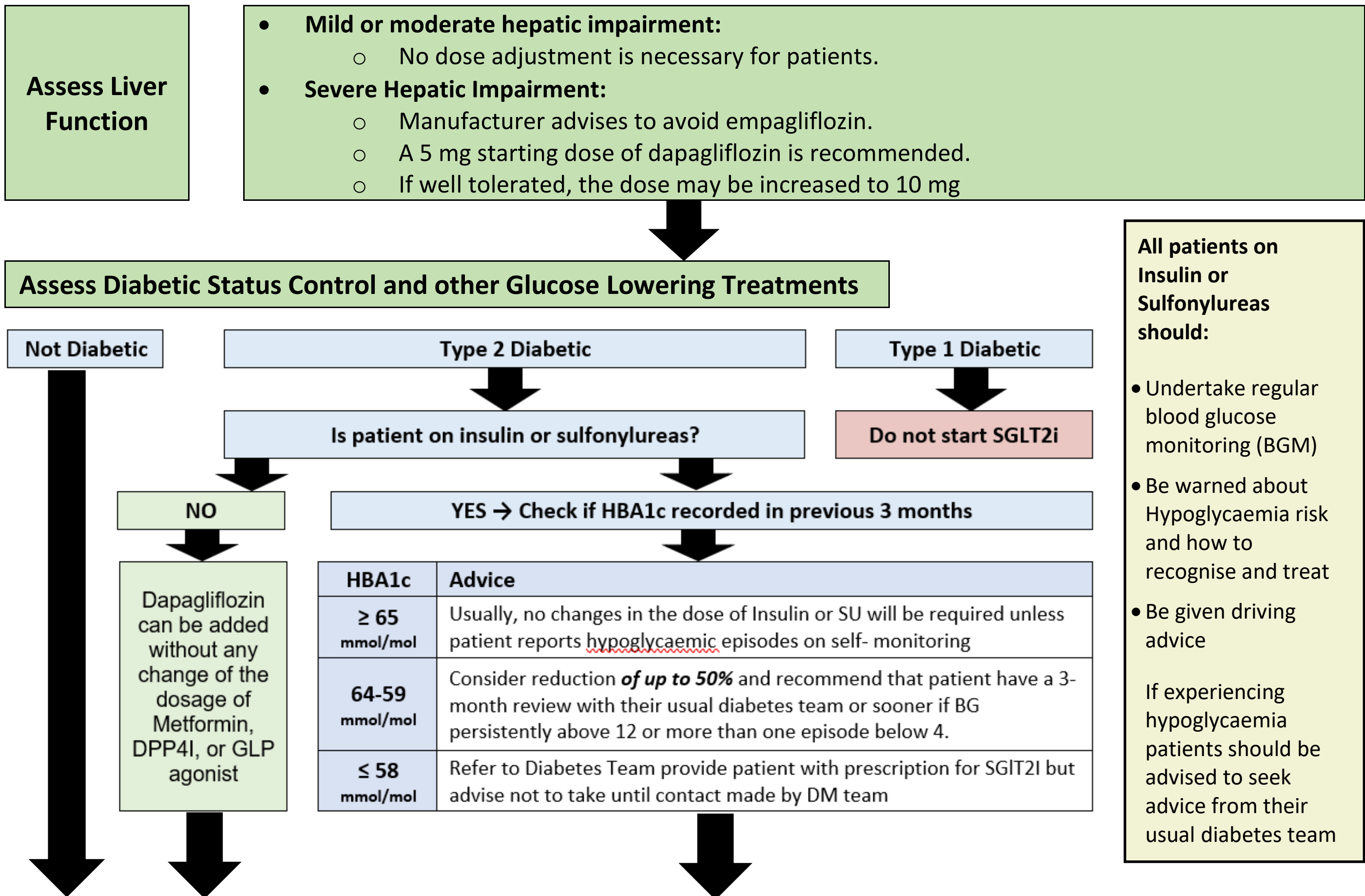
Assess Fluid Status and diuretic therapy

Volume status	
Euvolaemic	Review loop diuretic dose
Volume overload	Add SGLT2 inhibitor to existing diuretics and review diuretic plan
Hypovolaemia	Correct volume depletion before adding SGLT2 inhibitor
Thiazide diuretic for hypertension	SGLT2 inhibitors may cause a modest reduction in blood pressure – Review need for thiazide.
Thiazide in combination with a loop diuretic	Discuss with heart Failure Team

If in doubt, discuss with patient's heart failure specialist



Provide Patient Information

Provide manufacturer's patient information leaflet for people with Heart Failure and Preserved Ejection Fraction:

- Dapagliflozin and Heart Failure **without** Type 2 Diabetes or Dapagliflozin and Heart Failure **with** Type 2 Diabetes
- Empagliflozin and Heart Failure

Sick day rules for dapagliflozin / empagliflozin:

- Stop during acute illness especially if too unwell to eat and drink. Stop 3 days prior to major surgery. Restart when fully recovered and eating and drinking normally. **Leaflet on AKI and Sick day rules counselling available on SystmONE via SGLT2i Drug Review template**

Diabetic ketoacidosis:

- For patients with type 2 diabetes mellitus (T2DM), provide education on signs and symptoms of DKA and the need for ketones to be tested even if blood glucose is near normal. Importance of seeking medical help if any signs of DKA or feeling unwell.

Important side effects and additional Patient Counselling:

- Increased urination and dehydration
- Genital and urinary tract infection - **advise on increased risk of genital thrush and UTIs**
- Fournier's gangrene – **counsel on signs** (**Add SNOMED code: *Education about Fournier's gangrene (1659441000000104)***)
- Allergic reactions including rash / urticaria / angioedema.
- Transient rise in creatinine during initial treatment (up to 20%).
- Diabetic ketoacidosis in patient with diabetes - **discontinue immediately and DO NOT restart**

Monitoring

- Reassess tolerability, blood pressure and volume status in 2 to 4 weeks and consider diuretic adjustment if necessary.
- Renal function – check as clinically indicated and at least annually thereafter. A transient rise in creatinine (up to 20%) is expected in the first 2 weeks which should not lead to premature discontinuation.
- HBA1c glucose levels at 3 months if diabetic
- Liver function tests – if clinically indicated.