SGLT2 inhibitors: the new standard of care for cardiovascular, renal and metabolic protection in Type 2 diabetes - narrative review

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SGLT2i PRESCRIBING DECISION TOOL FOR TYPE 2 DIABETES

ABBREVIATED VERSION

IMPROVING DIABETES STEERING COMMITTEE

Key practice points [1-53]:

- *Discuss the relative benefits and risks of SGLT2i therapy with the person you are treating.*
- *Use dual first-line SGLT2i therapy with metformin (unless contraindicated). Initiate 4 weeks after metformin, post-date the SGLT2i prescription and do not wait for HbA1c assessment at 3 months after metformin initiation.*
- *Emphasise the importance of ongoing hydration and good personal hygiene.*
- *Give written information/electronic resources to support advice on the management of T2DM medicines during periods of acute or dehydrating illness.*
- *If symptomatic of hyperglycaemia, start rescue therapy and then reassess initiation of SGLT2i when symptoms resolved.*
- *For planned surgery or procedures requiring nil by mouth, advise on the importance of pausing SGLT2i treatment 3–7 days prior to surgery or liaise with pre-operative team.*
- *Please refer to the relevant SmPC before prescribing any SGLT2i therapy.*
- *Discussion with an expert clinician is advisable for more complex cases.*

Initial assessment

- QRISK®3 calculator
- QRISK®3-lifetime calculator
- Kidney function (eGFR and UACR)

Consider SGLT2i therapy

- Frailty/older people/cognitive impairment
- Ketogenic/very low calorie/low carbohydrate diet
- BMI <25 kg/m² (adjust according to ethnic variation)
- Recurrent genital mycotic infections and UTIs
- Symptomatic hyperglycaemia
- History of PAD and/or lower limb amputation (discuss with local specialist foot team)
- QRISK®3 (where available or QRISK®2) <10%

Do not prescribe SGLT2i therapy

- Acute illness with risk of dehydration
- Current or previous diabetic ketoacidosis
- Low beta-cell function (low C peptide levels)
- Rapid progression to insulin (within 1 year)
- Excessive alcohol intake
- Suspected LADA or slowly evolving immune-related diabetes
- Chronic pancreatitis and/or PEI
- Type 3c diabetes
- Suspected pancreatic cancer
- Pregnancy/suspected pregnancy, planning pregnancy or breastfeeding
- Planned surgery or procedure requiring starvation/nil by mouth (3–7 days prior to planned surgery)
- Type 1 diabetes
- Unclear diagnosis of diabetes

Offer SGLT2i therapy

First-line combination therapy with metformin* or as monotherapy if metformin is contraindicated or not tolerated in people with one of the following:

- **QRISK®3 (where available or QRISK®2) >10%**
- **HF**
- **Established ASCVD**
- **CKD/DKD**

***If using with metformin, initiate metformin first and titrate over a 4-week period and then start SGLT2i therapy**

Combination therapy with other oral glucose-lowering therapies in people with:

- **QRISK®3 (where available or QRISK®2) >10%**
- **CVD**
- **HF**
- **CKD**

Young onset T2DM (aged 18–40 years), unless planning pregnancy

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Overweight or obesity in the absence of GLP-1 RA

Vulnerable to the effects of hypoglycaemia

IMPORTANT – this decision tool is for guidance only. The final clinical decisions are the responsibility of the prescriber.

References overleaf

Abbreviations: ASCVD; atherosclerotic cardiovascular disease; BMI, body mass index; CKD, chronic kidney disease; CVD, cardiovascular disease; DKD, diabetic kidney disease; eGFR, estimated glomerular filtration rate; GLP-1 RA, glucagon-like peptide-1 receptor agonist; HbA1c, glycated haemoglobin A1c; LADA, latent autoimmune diabetes in adult; PAD, peripheral arterial disease; PEI, pancreatic exocrine insufficiency; QRISK, cardiovascular risk score; SGLT2i, sodium glucose cotransporter-2 inhibitor; SmPC, summary of product characteristics; T2DM, Type 2 diabetes mellitus; UACR; urine albumin to creatinine ratio; UTIs, urinary tract infections.

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