NICE guidance on SGLT2 inhibitor use in people with type 2 diabetes (adapted from NICE NG28)

First-line treatment Assess HbA, , cardiovascular risk and kidney function Chronic kidney disease (CKD) or diabetic kidney disease (DKD) Chronic heart failure or High risk of ASCVD (QRISK Not at high risk of ASCVD (eGFR <60 mL/min/1.73 m² or ACR ≥3 mg/mmol on two established ASCVD* ≥10% or elevated lifetime risk[¶] measurements at least 90 days apart) Offer Metformin Offer Metformin Offer Metformin (or if GI disturbance, Metformin MR) (or if GI disturbance, Metformin (or if GI disturbance, Offer ACE inhibitor (or if intolerant, an ARB) and titrate to MR) Metformin MR) maximum tolerated licensed dose If metformin is contraindicated or not tolerated, and only if a DPP-4i As soon as metformin tolerability As soon as metformin If ACR >30 mg/mmol and If ACR 3-30 mg/mmol and is confirmed, offer SGLT2i tolerability is confirmed, would otherwise be prescribed and meet eGFR criteria for SGLT2i meet eGFR criteria for SGLT2i with proven HF/CV benefit consider SGLT2i a sulfonylurea or pioglitazone is not use (see Need to know), use (see Need to know). with proven CV benefit appropriate, and diet and exercise offer SGLT2i licensed for consider SGLT2i licensed for provide inadequate control, CKD/DKD CKD/DKD If metformin is contraindicated or consider SGLT2i alone not tolerated. offer SGLT2i alone If metformin is contraindicated For guidance on dapagliflozin and empagliflozin for CKD, or not tolerated. see NICE TA1075 and TA942. For guidance on dapagliflozin and consider SGLT2i alone If CKD, chronic heart failure, ASCVD or high ASCVD risk develops at any empagliflozin for chronic HF, see NICE Canagliflozin is only licensed for use in those with type 2 diabetes. time, add SGLT2i according to the TA679, TA773, TA902 and TA929. For further guidance on managing kidney disease in adults with type 2 respective advice on the right diabetes, see NICE NG203. If HbA, not controlled below individually agreed threshold Treatment escalation

SGLT2is may be an option in dual therapy or triple therapy: see respective NICE Technology Appraisals alongside

Summary of NICE Technology Appraisal advice on use of canagliflozin, dapagliflozin, empagliflozin and ertugliflozin

Monotherapy

TA390, TA572

In the absence of the cardiorenal comorbidities shown above, use **only if**:

- Metformin is contraindicated or not tolerated
- Diet and exercise provide inadequate control
- A DPP-4i would otherwise be prescribed and an SU or pioglitazone is not appropriate

Dual therapy

TA315, TA288, TA336, TA572

- Dual therapy with metformin if SU is contraindicated or there is significant risk of hypoglycaemia or its consequences
- All except ertugliflozin:
 In combination with insulin
- If all four SGLT2is are appropriate, use the least expensive

Triple therapy

<u>TA315</u>, <u>TA418</u>, <u>TA336</u>, <u>TA583</u>

- Triple therapy with metformin and an SU
- Canagliflozin and empagliflozin: Triple therapy with metformin and pioglitazone
- All except ertugliflozin: In combination with insulin, with or without other antidiabetes drugs
- Ertugliflozin: Triple therapy with metformin and a DPP-4i, only if there is insufficient control with metformin/DPP-4i dual therapy and an SU or pioglitazone is not appropriate
- If all four SGLT2is are appropriate, use the least expensive

Note: There is no specific NICE guidance on use of SGLT2is with GLP-1 RAs, although they are commonly prescribed as part of the metformin and two-drug combination in people who meet the criteria for GLP-1 RAs.

- * Established ASCVD includes coronary heart disease, acute coronary syndrome, previous myocardial infarction, stable angina, prior coronary or other revascularisation, cerebrovascular disease (ischaemic stroke and transient ischaemic attack) and peripheral arterial disease.
- Elevated lifetime risk of ASCVD is defined as the presence of one or more cardiovascular risk factors in someone aged under 40 years. **Cardiovascular risk factors:** hypertension, dyslipidaemia, smoking, obesity and family history (in a first-degree relative) of premature cardiovascular disease.