

# Guide for non-diabetes specialist physicians and primary care teams for cardiovascular risk optimisation in patients with Type 2 diabetes and atherosclerotic cardiovascular disease (coronary artery disease, peripheral arterial disease, cerebrovascular disease)



Use available opportunities to review diabetes management and optimise cardiovascular risk – see Box 1

**Newly diagnosed T2DM or established T2DM but treatment naive**

Metformin first line (if eGFR>30)

**T2DM on oral therapy only**

Discuss complex cases with specialist diabetes team (e.g. if on 3 or more agents)

**T2DM on insulin therapy**

Involve specialist diabetes team in prescribing decisions-

## Box 1: Healthcare essentials for Diabetes

**Add in SGLT2 inhibitor or GLP1 receptor agonist with proven benefit in cardiovascular disease. See Box 2 for drug options and Boxes 3-4 for cautions in prescribing.**

- Consider patient risk profile, preferences and drug characteristics when selecting between SGLT2i and GLP1-RA – see box 3 and box 4.
- Defer initiation until patient is stable following acute vascular events
- Counsel on omitting therapy when unwell – ‘sick day guidance’ and review after changing medication to assess tolerability and adherence

- Add the other class (SGLT2i or GLP1-RA) with cardiovascular benefit when treatment escalation is required
- Review HbA<sub>1c</sub>, risk of hypoglycaemia (HbA<sub>1c</sub> < 53 mmol/mol on insulin and/or SU), eGFR (check within current prescribing threshold) and cardiovascular risk factor profile
- Consider influence of diabetes therapies on cardiovascular risk when escalating treatment – see Box 5.
- Consider virtual multi-disciplinary team discussion in complex cases with multimorbidity



HbA<sub>1c</sub>  
Blood pressure  
Lipid check  
Eye screening  
Foot screening  
Kidney function (eGFR and ACR)

Advice on diet  
Emotional & psychological support  
Diabetes education  
Care from diabetes specialists  
Flu jab  
Good care in hospital  
Support with sexual problems  
Help to stop smoking  
Specialist care if planning pregnancy

| Box 2                | SGLT2 inhibitors (listed in alphabetical order)   | GLP1 receptor agonists (listed in alphabetical order)  |
|----------------------|---|--|
| 1 <sup>st</sup> line | Canagliflozin 100-300 mg daily<br>Dapagliflozin 5- 10 mg daily<br>Empagliflozin 10 -25 mg daily | Dulaglutide 0.75 - 1.5mg/weekly<br>Liraglutide 0.6-1.8 mg daily<br>Semaglutide 0.25-1.0mg/weekly |
| 2 <sup>nd</sup> line | Ertugliflozin 15mg daily  | Exenatide slow release (Bydureon) 2mg /weekly<br>Lixisenatide 10-20 microg daily                 |

### Box 3 – SGLT2 inhibitors.

Greatest impact on heart failure and kidney disease outcomes and cardiovascular death. Modest BP and weight reduction. Good choice in patients with existing left ventricular dysfunction or kidney disease.

- Refer to current prescribing information for eGFR thresholds for initiation & continuation – likely to change to > 30 ml/min
- Provide education and advice leaflet. Counsel on risk of DKA, mycotic genital infections, UTI and importance of foot health (avoid in active foot sepsis-vascular disease).
- Avoid if previous or high risk for DKA (excess alcohol consumption, low body mass, ketogenic diet, pancreatic disease, eating disorder, recreational drug use, possible type 1 diabetes or LADA) or active foot complications.
- Avoid in women of childbearing age and advanced frailty or cognitive impairment
- If concern about volume depletion, consider diuretic dose reduction

### Box 4 – GLP1 receptor agonists

Greatest impact on risk of stroke, myocardial infarction and cardiovascular death. Can lead to important weight loss – good choice in people with CVD and obesity.

- Requires education on injectable therapy.
- Avoid Semaglutide in severe retinopathy.

### Box 5– effects of drugs on risk of cardiovascular events

|                              |  |
|------------------------------|--|
| Metformin                    | reduces                                      |
| SGLT2 inhibitors             | reduces                                      |
| GLP1-receptor agonists       | reduces                                      |
| Pioglitazone                 | reduces (avoid in heart failure)             |
| Sulphonylureas (SU)          | neutral (risk of hypoglycaemia)              |
| DPP4 inhibitors ('gliptins') | neutral (avoid saxagliptin in heart failure) |