## Extra-Glycaemic Indications of SGLT2 Inhibitors

## Medscape # UK X Guidelines Primary Care Hacks

Author: Dr Kevin Fernando, GP Partner, North Berwick Health Centre and Content Advisor, Medscape Global and UK. Email: kfernando@webmd.net

Initiate or continue as described

Continue as described

SGLT2 Inhibitor	Indication	CKD stage (eGFR in ml/min/1.73 m²)					
		Stages G1 and G2 eGFR ≥60	Stage G3a eGFR 45–59	Stage G3b eGFR 30–44	Stage G4 eGFR 15–30		Stage G5 eGFR <15
Canagliflozin	Treatment of diabetic kidney disease in adults with T2D as add-on to standard of care	Initiate or continue 100 mg od; if patient is taking >100 mg od, dose should be limited to 100 mg when their eGFR drops below 60			If urinary ACR >30 mg/mmol (300 mg/g), continue 100 mg od and continue dosing until dialysis or renal transplantation. Do not initiate if eGFR <30		
	T						
Dapagliflozin	Treatment of symptomatic chronic heart failure regardless of ejection fraction (HFrEF and HFpEF) in adults with or without T2D	Initiate or continue 10 mg od					No dose adjustment is required based on renal function. It is not recommended to initiate if eGFR <15
	Treatment of CKD in adults with or without T2D <sup>[A]</sup>						
Empagliflozin	Treatment of symptomatic chronic heart failure regardless of ejection fraction (HFrEF and HFpEF) in adults with or without T2D	Initiate or continue 10 mg od				Continue 10 mg od in patients already started, but due to limited experience, it is not recommended to initiate if eGFR <20	
	Treatment of CKD in adults with or without T2D <sup>[8]</sup>						

- The glucose-lowering efficacy of all SGLT2 inhibitors is dependent on renal function and is reduced when eGFR <45 ml/min/1.73 m<sup>2</sup> and likely absent in people wit severe renal impairment. Therefore, if eGFR falls <45 ml/min/1.73 m<sup>2</sup>, additional glucose-lowering treatment should be considered in people living with T2D.
- SGLT2 inhibitors are not recommended for people living with T1D.
- These patient-facing YouTube videos on SGLT2 inhibitors may be a useful reference for patients
- This open-access narrative review also offers practical case vignettes that help to answer many of the common queries about SGLT2 inhibitors.
- [A] NICE TA775 and SMC2428 advise initiation in people with eGFR 25–75 ml/min/1.73 m² and T2D or ACR ≥22.6 mg/mmol (≥23 mg/mmol in SMC2428), only as an add-on to optimised standard care involving an ACEi or ARB (unless contraindicated or not tolerated)
- [B] NICE TA942 and SMC2642 advise initiation in people with eGFR 20–44 ml/min/1.73 m², or with eGFR 45–90 ml/min/1.73 m² and either T2D or a urinary ACR ≥22.6 mg/mmol, only as an add-on to optimised standard care involving an ACEi or ARB (unless contraindicated or not tolerated).

Table based on author's interpretation of relevant summaries of product characteristics. At time of publication, ertugliflozin has no extra-glycaemic indications.

ACEi=angiotensin-converting enzyme inhibitor; ACR=albumin/creatinine ratio; ARB=angiotensin-receptor blocker; CKD=chronic kidney disease; eGFR=estimated glomerular filtration rate; HFpEF=heart failure with preserved ejection fraction; HFrEF=heart failure with reduced ejection fraction; NICE TA=NICE technology appraisal; od=once daily; SGLT2=sodium=glucose cotransporter 2; SMC=Scottish Medicines Consortium; T1D=type 1 diabetes; T2D=type 2 diabetes.

## References

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@drkevinfernando

