

Extra-Glycaemic Indications of SGLT2 Inhibitors

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** ● **Not recommended**

SGLT2	Indication	CKD stage (mL/min/1.73 m ²)				
		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			If urinary ACR ≥30 mg/mmol, continue 100 mg and continue dosing until dialysis or renal transplantation. Do not initiate if eGFR <30	
	Treatment of symptomatic chronic heart failure regardless of ejection fraction (HFrEF and HFpEF) in adults with or without T2D	Initiate or continue 10 mg			No dose adjustment is required based on renal function. It is not recommended to initiate if eGFR <15	
Dapagliflozin	Treatment of CKD in adults with or without T2D	Initiate or continue 10 mg*			No dose adjustment is required based on renal function. It is not recommended to initiate if eGFR <15	
	Treatment of symptomatic chronic heart failure regardless of ejection fraction (HFrEF and HFpEF) in adults with or without T2D	Initiate or continue 10 mg			Not recommended if eGFR <20	
Empagliflozin	Cardiovascular risk reduction as add-on to standard of care in adults with T2D and established cardiovascular disease	Initiate or continue 10 mg			Not recommended if eGFR <30	

- The glucose-lowering efficacy of all SGLT2 inhibitors is dependent on renal function and is reduced when eGFR <45 and likely absent in people with severe renal impairment. Therefore, if eGFR falls <45, additional glucose-lowering treatment should be considered in people living with T2D.
- SGLT2 inhibitors are not recommended for people living with T1D.

* NICE TA775 and SMC2428 advise initiation in people with eGFR 25–75 and type 2 diabetes or ACR ≥22.6 mg/mmol (≥23 mg/mmol in SMC2428)

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

Abbreviations: **ACR:** albumin/creatinine ratio; **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; **SGLT2:** sodium–glucose cotransporter 2; **SMC:** Scottish Medicines Consortium; **T1D:** type 1 diabetes; **T2D:** type 2 diabetes.

References

1. Electronic Medicines Compendium. *Invokana 100 mg film-coated tablets*. [medicines.org.uk/emc/product/8855/smpc](https://www.medicines.org.uk/emc/product/8855/smpc) (accessed 19 January 2023).
2. Electronic Medicines Compendium. *Forxiga 10 mg film-coated tablets*. [medicines.org.uk/emc/product/7607/smpc](https://www.medicines.org.uk/emc/product/7607/smpc) (accessed 19 January 2023).
3. Electronic Medicines Compendium. *Jardiance 10 mg film-coated tablets*. [medicines.org.uk/emc/product/5441/smpc](https://www.medicines.org.uk/emc/product/5441/smpc) (accessed 19 January 2023).

© WebMD, LLC 2023. All rights reserved.