



SGLT2 inhibitors: Indications, doses and licences in adults

Indications, doses and licences of SGLT2 inhibitors, by indication.

Indication	Drug and dose	Initiate	Stop/reduce	Notes
Insufficiently controlled type 2 diabetes (as an adjunct to diet and exercise)	Canagliflozin 100 mg Increase to 300 mg if required	eGFR $\geq 30^*$ eGFR ≥ 60	Stop if eGFR persistently <30 and ACR <30 mg/mmol.* Can continue to dialysis/transplant if ACR ≥ 30 mg/mmol.* Reduce to 100 mg if eGFR <60	*All four SGLT2 inhibitors are licensed for use at eGFR <45 ; however, due to their mode of action, they have reduced glucose-lowering effects at eGFR <45. Add another glucose-lowering drug if HbA_{1c} is above the agreed, individualised, target †Empagliflozin is licensed for initiation to eGFR ≥ 30 in those with established CVD and can be continued down to eGFR 30
	Dapagliflozin 10 mg	eGFR $\geq 15^*$	No lower eGFR limit for continuation.* Specialist discussion as dialysis/transplant approaches	
	Empagliflozin 10 mg Increase to 25 mg if required	eGFR $\geq 60^\dagger$ eGFR ≥ 60	Reduce to 10 mg if eGFR <60 Stop if eGFR <45 (T2D alone) or $<30^*$ (T2D and CVD)	
	Ertugliflozin 5 mg Increase to 15 mg if required	eGFR ≥ 45 eGFR ≥ 45	Stop if eGFR persistently $<30^*$	
Diabetic kidney disease/chronic kidney disease (DKD/CKD)	Dapagliflozin 10 mg	eGFR $\geq 15^\ddagger$	No lower eGFR limit for continuation. Specialist discussion as dialysis/transplant approaches	Use with other CKD therapies With or without type 2 diabetes ‡ 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)
Diabetic kidney disease (DKD)	Canagliflozin 100 mg	eGFR ≥ 30	Stop if eGFR persistently <30 and ACR <30 mg/mmol. Can continue to dialysis/transplant if ACR ≥ 30 mg/mmol	Add on to standard of care (e.g. ACEi or ARB) for DKD
Symptomatic chronic HF	Empagliflozin 10 mg	eGFR ≥ 20	Stop if eGFR <20 ; should not be used in those with end-stage renal disease or on dialysis	With or without type 2 diabetes
Symptomatic chronic HFrEF	Dapagliflozin 10 mg	eGFR ≥ 15	No lower eGFR limit for continuation. Specialist discussion as dialysis/transplant approaches	With or without type 2 diabetes

eGFR presented in mL/min/1.73 m².

ACEi=angiotensin-converting enzyme inhibitor; ACR=albumin:creatinine ratio; ARB=angiotensin receptor blocker; CVD=cardiovascular disease; eGFR=estimated glomerular filtration rate; HF=heart failure; HFrEF=heart failure with reduced ejection fraction.

Information correct on 6th July 2022. **Licence amendments frequent – view most recent version.**

Always consult the electronic BNF or the Summaries of Product Characteristics (SPCs) prior to prescribing any drug.

SPCs: [Canagliflozin](#) | [Dapagliflozin](#) | [Empagliflozin](#) | [Ertugliflozin](#)**Author:** Pam Brown, GP, Swansea**Citation:** Brown P (2022) SGLT2 inhibitors: Indications, doses and licences in adults. Updated July 2022. *Diabetes & Primary Care* 24: 111–12

Indications, doses and starting/stopping recommendations of SGLT2 inhibitors, by drug name.

Drug	Indication	Drug and dose	Initiate	Stop/reduce	Notes
Canagliflozin	Insufficiently controlled type 2 diabetes	Canagliflozin 100 mg Increase to 300 mg if required	eGFR ≥30* eGFR ≥60	Stop if eGFR persistently <30 and ACR <30 mg/mmol.* Can continue to dialysis/transplant if ACR ≥30 mg/mmol.* Reduce to 100 mg if eGFR <60	*Licensed for initiation to eGFR ≥30 but reduced glucose lowering below eGFR 45; add another glucose-lowering drug if needed
	Diabetic kidney disease (DKD)	Canagliflozin 100 mg	eGFR ≥30	Stop if eGFR persistently <30 and ACR <30 mg/mmol. Can continue to dialysis/transplant if ACR ≥30 mg/mmol	Add on to standard of care (e.g. ACEi or ARB) for DKD
Dapagliflozin	Insufficiently controlled type 2 diabetes	Dapagliflozin 10 mg	eGFR ≥15 [†]	No lower eGFR limit for continuation. [†] Specialist discussion as dialysis/transplant approaches	[†] Licensed for initiation to eGFR ≥15 but reduced glucose lowering below eGFR 45; add another glucose-lowering drug if needed
	Diabetic/chronic kidney disease (DKD/CKD)	Dapagliflozin 10 mg	eGFR ≥15 [‡]	No lower eGFR limit for continuation. Specialist discussion as dialysis/transplant approaches	Use with other DKD/CKD therapies With or without type 2 diabetes [‡] NICE TA775 and SMC2428 advise initiation in people with eGFR 25–75 and T2DM or ACR ≥22.6 mg/mmol
	Symptomatic chronic HF _{rEF}	Dapagliflozin 10 mg	eGFR ≥15	No lower eGFR limit for continuation. Specialist discussion as dialysis/transplant approaches	With or without type 2 diabetes
Empagliflozin	Insufficiently controlled type 2 diabetes	Empagliflozin 10 mg Increase to 25 mg if required	eGFR ≥60 [¶] eGFR ≥60	Reduce to 10 mg if eGFR <60 Stop if eGFR <45 (T2D alone) or <30 (T2D+CVD) [¶]	[¶] Licensed for initiation to eGFR ≥30 in those with established CVD and can be continued to eGFR 30, but reduced glucose lowering below eGFR 45; add another glucose-lowering drug if needed
	Symptomatic chronic HF	Empagliflozin 10 mg	eGFR ≥20	Stop if eGFR <20; should not be used in those with end-stage renal disease or on dialysis	With or without type 2 diabetes
Ertugliflozin	Insufficiently controlled type 2 diabetes	Ertugliflozin 5 mg Increase to 15 mg if required	eGFR ≥45 eGFR ≥45	Stop if eGFR persistently <30**	** Licensed for continuation to GFR ≥30 but reduced glucose lowering below eGFR 45; add another glucose-lowering drug if needed

eGFR presented in mL/min/1.73 m².

ACEi=angiotensin-converting enzyme inhibitor; ACR=albumin:creatinine ratio; ARB=angiotensin receptor blocker; CVD=cardiovascular disease; eGFR=estimated glomerular filtration rate; HF=heart failure; HF_{rEF}=heart failure with reduced ejection fraction.

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SPCs: [Canagliflozin](#) | [Dapagliflozin](#) | [Empagliflozin](#) | [Ertugliflozin](#)