



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.* If using 300 mg, 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 and continuation to eGFR ≥ 30 in those with T2D and established CVD, and is licensed for initiation and continuation to eGFR ≥ 20 in those with heart failure, with or without T2D |
| | 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 | If using 25 mg, reduce to 10 mg if eGFR <60 Stop if eGFR $<45^{\dagger}$ | |
| | 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 \ddagger 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 heart failure | 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 |
| | 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; T2D=type 2 diabetes.

Information correct on 11th January 2023. **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 (2023) SGLT2 inhibitors: Indications, doses and licences in adults. Updated January 2023. *Diabetes & Primary Care* 25: 9–10

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 $\geq 30^*$ 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 | *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 $\geq 15^\dagger$ | 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 $\geq 15^\ddagger$ | 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 T2D or ACR ≥ 22.6 mg/mmol |
| | Symptomatic chronic HF | 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 $\geq 60^\P$ eGFR ≥ 60 | Reduce to 10 mg if eGFR < 60 Stop if eGFR $< 45^\P$ | [¶] Licensed for initiation and continuation to eGFR ≥ 30 in those with T2D and established CVD, 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; T2D=type 2 diabetes.

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