

Dapagliflozin for chronic kidney disease in adults

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Dapagliflozin for Chronic Kidney Disease in Adults

What is Chronic Kidney Disease (CKD)?

- A reduction in kidney function and/or damage to structure that persists for more than 3 months with associated health implications
- Albuminuria and reduced eGFR are commonly recognised markers of damage to kidney structure and function

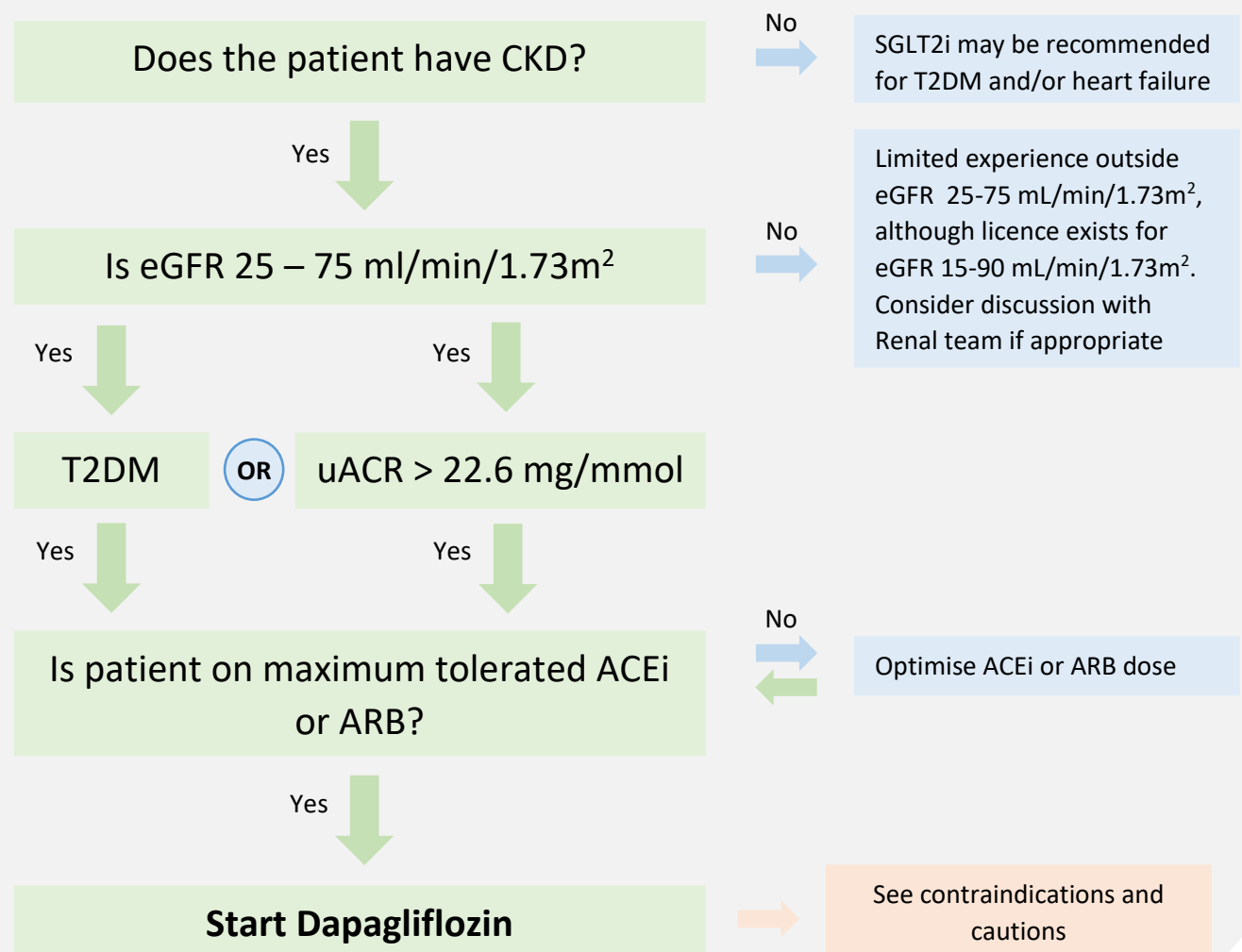
Diagnose CKD in adults with:

- Urine uACR > 3 mg/mmol
- eGFR < 60 ml/min/1.73m²
- eGFR > 60 ml/min/1.73m² and another marker of kidney damage

Markers of kidney damage: albuminuria (or proteinuria), urine sediment abnormalities e.g. haematuria, structural abnormalities detected by imaging, electrolyte abnormalities secondary to renal tubular disorders, abnormalities detected by histology, history of kidney transplantation

Dapagliflozin for Chronic Kidney Disease in Adults - Flowchart

- Identify patients with CKD or at risk of CKD and obtain up-to-date eGFR and uACR
- Optimise standard of care



In adults with CKD, optimise standard of care

- Give lifestyle advice e.g. weight management, exercise, smoking cessation
- Consider introducing a statin if not already prescribed
- Consider ACE-inhibitor or ARB and titrate to maximum tolerated licensed dose in proteinuric kidney disease
- Consider Dapagliflozin for CKD according to NICE recommendation (*NICE TA775*)
- Optimise blood pressure control: See NICE guidance (*NICE NG 203 NG 136*)

When to prescribe Dapagliflozin for CKD

Dapagliflozin (Forxiga®) is currently the only sodium-glucose co-transporter 2 inhibitor recommended by NICE for the treatment of CKD with or without type 2 diabetes (*NICE TA775*). Adding dapagliflozin to current standard of care has been shown to reduce the risk of decline in kidney function, end-stage kidney disease and all-cause mortality in the DAPA-CKD trial.

Dapagliflozin is recommended as an add-on to optimised standard of care including highest tolerated dose of ACE-inhibitor or ARB, unless these are contraindicated, if:

- eGFR 25 – 75 ml/min/1.73m² (once initiated can continue up to eGFR 15 ml/min/1.73m²)
and
- Patient has type 2 diabetes **or**
- uACR ≥ 22.6 mg/mmol

Dosage: Dapagliflozin 10 mg once daily (in severe hepatic impairment, dose is 5mg once daily)

Monitoring requirements

- Monitoring of renal function not required after initiation of dapagliflozin - check as clinically indicated. Dapagliflozin can be continued up to eGFR 15 ml/min/1.73m²
- Blood pressure: Caution in people at risk of hypotension. Consider adjusting antihypertensive medications. Monitor as clinically indicated.
- Blood glucose: consider adjusting antidiabetic medication if risk of hypoglycaemia (note – when eGFR < 45 ml/min/1.73m² blood sugar lowering effect of dapagliflozin is reduced)

Contraindications and cautions

Note: this is not an exclusive list – refer to BNF for an up-to-date list

- Currently not recommended for adults with type 1 diabetes and use in pregnancy
- Avoid if previous history of diabetic ketoacidosis
- Counsel patient about sick-day rules – dapagliflozin should be temporarily withheld if acutely unwell and unable to maintain adequate hydration, in severe sepsis, peri-operatively
- Counsel patient about potential side effects: hypotension (risk of volume depletion), urogenital infections, diabetic ketoacidosis (may be euglycaemic), hypoglycaemia, Fournier's gangrene
- There is a lack of evidence in the following patient groups: kidney transplant recipients, polycystic kidney disease, lupus nephritis, ANCA-associated vasculitis, and those receiving immunological therapy for renal disease in the last 6 months

Abbreviations: CKD – chronic kidney disease; SGLT2i – Sodium-Glucose Cotransporter 2 (SGLT2) Inhibitor; eGFR – estimated Glomerular Filtration Rate; uACR – urine Albumin-to-Creatinine ratio; ACE - Angiotensin Converting Enzyme; ACEi – Angiotensin Converting Enzyme inhibitor; ARB – Angiotensin Receptor Blocker (Angiotensin II Receptor Antagonist); T2DM – Type 2 Diabetes Mellitus; NICE – National Institute for Health and Care Excellence; ANCA – Antineutrophil Cytoplasmic Antibodies