

## Finerenone for treating Chronic Kidney Disease (stage 3 and 4 with albuminuria) associated with Type 2 diabetes in adults

- Finerenone is a non-steroidal, selective mineralocorticoid receptor antagonist
- Clinical study showed that in patients with CKD (chronic kidney disease) and type 2 diabetes, treatment Finerenone resulted in **lower risks of CKD progression and cardiovascular events than placebo.**
- NICE [TA877] recommends Finerenone as an add-on to optimised standard care, if:
  - **Type 2 diabetes AND**
  - **Chronic Kidney Disease with eGFR between 25 to < 60 ml/min/1.73m<sup>2</sup> AND**
  - **Urine albumin-creatinine ratio (uACR) > 3mg/mmol AND**
  - **On both maximally tolerated ACEi/ARB plus SGLT2 inhibitor unless they are unsuitable/intolerant**
- **UK Kidney Association and Drug Licencing** suggests can be initiated if eGFR >60ml/min/1.73m<sup>2</sup>

### Treatment initiation

Serum potassium level (mmol/L)	
≤ 4.8	Start finerenone 10mg daily
4.9 to 5.0	Finerenone may be considered with additional serum potassium monitoring within the first 4 weeks, based on the patient's co-morbidities and subsequent potassium levels.
> 5.0	Do not start finerenone
eGFR (mL/min/1.73m <sup>2</sup> )	
> 60	Start 20mg daily
≥ 25 to < 60	Start 10mg daily
< 25	Do not start finerenone

The starting dose is 10mg once daily. The recommended target dose is 20mg once daily.

### Treatment continuation and dose adjustment

Serum potassium K+ (mmol/L)	Finerenone dose (once daily)	
	10mg	20mg
≤4.8	Consider increasing to 20mg OD	Maintain 20mg OD
>4.8 to 5.5	Maintain 10mg OD	Maintain 20mg OD
>5.5	Withhold Finerenone Consider restarting at 10mg once daily when serum K+ ≤5.0 mmol/L. If K+ is above 5.5 on re-challenge you may use K+ chelating agents to achieve target eg Lokelma or Patiromer <a href="#">lokelma   Search results   NICE</a> <a href="#">Patiromer for treating hyperkalaemia   Search results   NICE</a>	
eGFR		
If eGFR decrease is > 30% from the previous measurement, to recheck U+E in 5-7 days. If further decline of eGFR on repeat U+E, to stop Finerenone. If eGFR < 15 ml/min, to stop Finerenone		

A transient decline in eGFR ((mean 2 mL/min/1.73 m<sup>2</sup>) and a drop in blood pressure (2-4 mm Hg) may be observed upon initiating treatment. Both are reversible during continuous treatment.

Due to limited clinical data, Finerenone should be discontinued in patients who have progressed to end-stage renal disease (eGFR < 15 ml/min/1.73m<sup>2</sup>).

### Monitoring

- serum potassium and eGFR must be rechecked **4 weeks after**: initiation of treatment, increment of dose or restarting of treatment.
- Thereafter, serum potassium should be re-measured periodically and as needed based on patient characteristics and serum potassium levels.
- Consider stopping with AKI 2 or more and using the sick day rules – [sick-day-rules.pdf \(nottsapc.nhs.uk\)](https://www.nottsapc.nhs.uk/sick-day-rules.pdf)
- Utilise potassium chelating agents to achieve satisfactory potassium levels.

### Contraindications

- An eGFR of less than 25 mL/min/1.73m<sup>2</sup>.
- Serum potassium level greater than 5.0 mmol/L.
- Severe hepatic impairment.
- Addison's disease
- Finerenone should not be used during pregnancy unless there has been careful consideration of the benefit for the mother and the risk to the foetus

### Drug interactions

Finerenone should not be taken concomitantly with

- Grapefruit or grapefruit juice
- Strong CYP3A4 inhibitors (i.e., clarithromycin, ritonavir, itraconazole)
- Strong CYP3A4 inducers (i.e., rifampicin, carbamazepine, phenytoin, phenobarbital, St John's Wort)

### References

- 1) Bakris G, Agarwal R and Anker S et al. Effect of Finerenone on Chronic Kidney Disease Outcomes in Type 2 Diabetes. *N Engl J Med* 2020;383:2219–2229
- 2) NICE TA – Finerenone for treating CKD in type 2 diabetes. Technology appraisal guidance [TA877] Published: 23 March 2023
- 3) SPC for Kerendia 10 mg film-coated tablets. Last updated on 21MAR2023. Accessed via <https://www.medicines.org.uk/emc/product/13437/smpc#gref>
- 4) Pitt B, Filippatos G, Agarwal R, Anker SD, Bakris GL, Rossing P, et al. Cardiovascular events with Finerenone in kidney disease and type 2 diabetes. *New England Journal of Medicine*. 2021;385(24):2252–63.