

# Oral anticoagulation in CKD and dialysis

Welsh Kidney Club  
'Quick Guide'



Indication	Pre-dialysis CKD	Dialysis
AF	NOACs non-inferior to warfarin, and probably safer, if eGFR>15 <sup>1</sup> eGFR<15 = warfarin	Paucity of evidence. Some guidelines recommend no OAC. One study suggests Apixaban superior to warfarin <sup>2</sup>
VTE	Limited evidence, NOACs appear safe <sup>3</sup> at licensed doses.	No data for NOACs <sup>3</sup> , use warfarin with caution.

In dialysis patients before starting long term OAC remember:

- Risk of bleeding with any OAC > general population
- Consider additional benefit of maintaining access patency
- Requires individualised decision after discussion with patient

Choice of NOAC: consult local formulary. Currently Apixaban is licensed for widest GFR range (including on dialysis by FDA), so consider as first line.

Check drug interactions (relevant also for NOACs) including macrolides and CNIs<sup>4</sup>

Avoid “10,10,5” or similar regimes with warfarin initiation: start low and slow

Treatment in other situations e.g. valvular AF/ prosthetic valves, is best decided by the appropriate team (cardiology).

If sudden worsening in renal function after OAC commencement, consider anti-coagulation related nephropathy

Look out for RENAL-AF and AXADIA trials of Apixaban in ESRD completing in 2019

## Resources/References

1. 2016 ESC Guidelines for the management of atrial fibrillation developed in collaboration with EACTS.
2. Siontis KC et al. Outcomes Associated With Apixaban Use in Patients With End-Stage Kidney Disease and Atrial Fibrillation in the United States. *Circulation*. 2018;138(15):1519-1529.
3. Ha JT et al., Benefits and Harms of Oral Anticoagulant Therapy in Chronic Kidney Disease. *Ann Intern Med*. 2019;171(3):181.
4. Updated European Heart Rhythm Association practical guide on the use of non-vitamin-K antagonist anticoagulants in patients with non-valvular atrial fibrillation (see Executive Summary)
5. Stamellou E, Floege J. Novel oral anticoagulants in patients with chronic kidney disease and atrial fibrillation. *Nephrol Dial Transplant*. 2018;33(10):1683-1689.