

Kent and Medway DOAC Monitoring Recommendations for Non-Valvular Atrial Fibrillation (NVAF) in Primary Care

- c) Dosage adjustments for DOACs should be based on creatinine clearance (CrCl) estimated using the Cockcroft-Gault (CG) formula (**Note: dose of Apixaban in NVAF is determined by serum creatinine, weight, age as well as CrCl- [See BNF](#)**)

The MDCalc Tool is recommended for Calculating Creatinine Clearance (CrCl)

This can be accessed using the link ([here](#)) or it can be downloaded as an app.

- MDCalc recognises the need to adjust bodyweight in obese individuals and will calculate a modified estimate of CrCl with a range that is based on ideal body weight, adjusted body weight and actual bodyweight
- *The creatinine clearance calculator on EMIS should only be used in patients with an active prescription for Apixaban, Rivaroxaban or Edoxaban or an issue of the above within the last 3 months, as then it will use actual body weight.*

- d) Measure actual body weight each time CrCl is calculated (The Cockcroft and Gault formula may not be accurate for estimation of CrCl at extremes of bodyweight, especially in obese patients. It is important to remember that the CrCl is an estimate and should not be considered in isolation.
- e) **Do not use eGFR except in exceptional circumstances where it is not possible to obtain a person's weight** as studies with DOACs have demonstrated that it overestimates renal clearance in comparison with CrCl. Actual body weight and CrCl was used in all the major DOAC clinical trials.
- f) In patients at extremes of body weight (<60kg or >120kg) refer to individual drug SPC and seek specialist advice where necessary.
- g) After a hospital admission or other transition of care, clinicians should aim to review the dose of a DOAC before issuing a first prescription in primary care. This is because renal function can alter during acute admissions, and it may not have been possible to calculate CrCl during admission.

Further Reading

- 1) [NICE Guidance: Atrial Fibrillation: Diagnosis and Management \(NG196\). 27th April 2021](#)
- 2) [NICE CKS Anticoagulation– oral.](#)
- 3) [Specialist Pharmacy Service: Direct Acting Oral Anticoagulants \(DOACs\) in Renal Impairment: Practice Guide to Dosing Issues.](#) Version 3 Feb 2020
- 4) [DOACs \(Direct Oral Anticoagulants\) monitoring – SPS - Specialist Pharmacy Service – The first stop for professional medicines advice](#)
- 5) [MHRA. DOACs- Reminder of bleeding risk including availability of reversal agents.](#) 29 June 2020.
- 6) [MHRA. Drug Safety Update. Prescribing medicines in renal impairment: using the appropriate estimate of renal function to avoid the risk of adverse drug reactions.](#) 18 October 2019.
- 7) [MHRA/CHM advice: Warfarin and other anticoagulants: monitoring of patients during the COVID-19 pandemic](#) (October 2020)
- 8) Electronic medicines compendium (summary of product characteristics SPC) for [apixaban](#), [dabigatran](#), [edoxaban](#) & [rivaroxaban](#)
- 9) British National Formulary (BNF) summaries for [apixaban](#), [dabigatran](#), [edoxaban](#) & [rivaroxaban](#)