Greater Glasgow and Clyde Anticoagulation Service (GCAS)

Appropriate and safe conversion of NHSGGC Inpatients from warfarin to a DOAC during the Covid-19 pandemic

Any patient who is admitted to hospital during the Covid-19 pandemic and is taking warfarin* should be considered for switching to a direct oral anticoagulant (DOAC) to avoid the need for ongoing monitoring in hospital and community-based clinics.

Within NHSGGC, this will apply to approximately 30- 40 patients per week.

Suitable patients for switching from warfarin to a DOAC must meet both of the following criteria:

- The patient has an indication for anticoagulation with a DOAC
- The patient has no contraindications to receiving a DOAC

These criteria also apply to any patient who requires initiation of anticoagulation whilst an inpatient to reduce the need for ongoing monitoring on discharge.

Indications for which a DOAC can be used

- Non-valvular atrial fibrillation
- Pulmonary Embolism (PE)
- Deep vein thrombosis (DVT [upper or lower limb])

Contraindications to receiving a DOAC

- INR target > 2.5
- Pregnant or breastfeeding women
- Creatinine Clearance < 15ml/min (Use CrCl calculator on StaffNet or in GGC Handbook)
- Patients with venous thrombosis and active cancer (when LMWH is the preferred anticoagulant)
- Mechanical heart valves
- Severe mitral stenosis
- Liver disease associated with cirrhosis and/or coagulopathy
- Clear indication for easily reversible anticoagulant e.g. recent significant bleed
- Concurrent use of the following medications:
    - Triazole and imidazole antifungals (except fluconazole)**
    - Protease inhibitors***
    - Strong CYP3A4 inducers e.g. rifampicin, phenytoin, carbamazepine, phenobarbital and St John'sWort
    - Strong P-gp inducers

  Further information regarding interactions is available in the BNF and relevant SPC available from www.medicines.org.uk/emc/
- Triple positive antiphospholipid syndrome associated with venous thrombosis
  i.e. lupus anticoagulant (LA) + anticardiolipin (ACL) + anti beta 2 glycoprotein 1 (B2-GP1)
  (If a patient is LA and ACL positive, but anti B2-GP1 has not been measured, they should be considered triple positive)
- Patients previously switched from a DOAC to warfarin (or any other coumarin anticoagulant)
- Patients >120kg or BMI >40

*including any other coumarin anticoagulant e.g. phenindione, acenocoumarol
**reduce dose with edoxaban (see below)
***not studied in edoxaban

Class and dose of DOAC to be used

- **Non-valvular atrial fibrillation**
    - Use edoxaban 60mg od (30mg od for certain patient groups‡)
- **Venous thrombosis (first or recurrent event)**
    - Use apixaban 5mg bd ‡‡ for the first 3 months post thrombosis (a patient can be reduced to 2.5mg bd if the most recent venous thrombosis was >3 months previously)

‡ Edoxaban 30mg od should be used in the following situations

- Moderate or severe renal impairment (creatinine clearance (CrCL) 15 - 50 mL/min)
- Low body weight ≤ 60 kg
- Concomitant use of the following P-glycoprotein (P-gp) inhibitors: ciclosporin, dronedarone, erythromycin, or ketoconazole.

‡‡ Use apixaban with caution when CrCl 15-29 ml/min

Process of switching

- For Edoxaban - Discontinue warfarin and start edoxaban when the INR is ≤ 2.5
- For Apixaban - Discontinue warfarin and start apixaban when the INR is <2

If you have any questions regarding the process of converting patients from warfarin to a DOAC, please contact GCAS on 0141 232 0800.

If you have any questions regarding whether a patient can safely receive a DOAC, instead of warfarin, please contact either Dr Catherine Bagot or Dr Ryan Rodgers on 0141 211 5125.

Written by: **Dr Catherine Bagot, Clinical Lead for GCAS**
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COVID-19
CLINICAL GUIDELINE

Note: This guideline has been fast-tracked for approval for use within NHSGGC

Covid-19 Guidance for the safe switching of warfarin to direct oral anticoagulants (DOACs)

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

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