# Tablet Press EXTRA

The prescribing newsletter for GPs, nurses and pharmacists
NHS Northamptonshire

16th April 2020


# Switching warfarin to direct oral anticoagulants (DOACs) in patients with non-valvular AF and venous thromboembolism (DVT/PE) during the COVID-19 pandemic.

The recently published "RCGP Guidance on workload prioritisation during COVID-19" suggests switching warfarin to a DOAC if possible. NHSE/I have produced comprehensive guidance that can be found for reference here.

https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/C0077-Specialty-guide_Anticoagulant-services-and-coronavirus-v1-31-March.pdf

The following is a summary of this guidance. The medicines management team would like to thank Dr Yassir Javaid (Cardiovascular Lead East Midlands Clinical Network) and Dr Karyn Longmuir (Consultant Haematologist, KGH) for their contribution.

## Which patients should be considered for switching to a DOAC?

Northamptonshire CCG has over 4000 patients currently taking warfarin. It would therefore be appropriate to prioritise initially and then roll out further if needed (and adequate supplies of DOACs exist). Suggested priority patients include:

- Vulnerable and shielded patients
- Those with poor INR control, as these need most frequent monitoring (need to address non-adherence if this is the reason for poor control)
- Housebound patients

## Indications suitable for switching (ensure there is still a need for oral anticoagulation)

- Patients with non-valvular AF
- Patients on treatment for or secondary prevention of DVT/PE

## Cautions and Contra-indications to a DOAC (these patients should NOT be offered a switch)

- Prosthetic mechanical valve
- Moderate to severe mitral stenosis
- Antiphospholipid syndrome
- Pregnant or breastfeeding
- Severe renal impairment. (Rivaroxaban, Apixiban and Edoxaban C/I for creatinine clearance (CrCl) <15ml/min, Dabigatran C/I for CrCl <30ml/min). Dose reductions may apply for CrCl <50 ml/min).
- Patients with active malignancy or on chemotherapy should not be switched
- Patients with a target INR above the standard 2.5 should not be switched
- Prescribed interacting drugs
- Discuss with specialists any patients on antiepileptics or triple therapy (dual antiplatelet plus warfarin)
- Body weight above 150kg – contraindicated.
- Body weight above 120kg: Seek advice from Anticoagulation clinic as DOAC levels may be advised
- VTE in unusual sites. Only switch on the advice of a haematologist.
- Caution in liver disease as per the SPC

## REINFORCE THE IMPORTANCE OF MAINTAINING METICULOUS COMPLIANCE USING THE NATIONAL DOAC COUNSELLING CHECKLIST AT THE END OF THIS DOCUMENT

**TO PROTECT THE SUPPLY CHAIN FOR ALL PATIENTS - take a phased approach over the 12 week cycle of INR monitoring**

## How to switch virtually (this may not be in strict accordance with the DOAC SPCs but is compromise guidance in view of the current situation).

1. Ideally an up to date FBC, LFT and renal function, but a normal/stable result within the last 3 months is acceptable.
2. Ask patient to weigh themselves (or best estimate if not possible)
3. Calculate Cockcroft Gault Creatinine Clearance using actual body weight (if between 50Kg and 120Kg).
4. Check INR to determine when to start the DOAC
   **4a**. **If possible take blood sample to obtain an INR reading** (request FBC, LFT and renal function at the same time) and follow the table below.
   **4b. If it is not possible to take a blood sample and the patient's INR is normally in range and stable** then stop warfarin and start DOAC the following day
   **4c. If it is not possible to take a blood sample and patient's INR not stable** then stop warfarin and start DOAC in 2 days.

| INR | Instruction - stop warfarin and... |
|---|---|
| **<2** | Start DOAC immediately |
| **2-2.9** | Start DOAC following day |
| **3-3.5** | Start DOAC in 2 days |
| > 3.5 | Recheck INR 2-3 days* |

Ref: Guys and Thomas' Thrombosis and Thrombophilia centre
* if very high or active bleeding follow usual protocol

5. Prescribe correct dose of DOAC - see algorithm on next page.

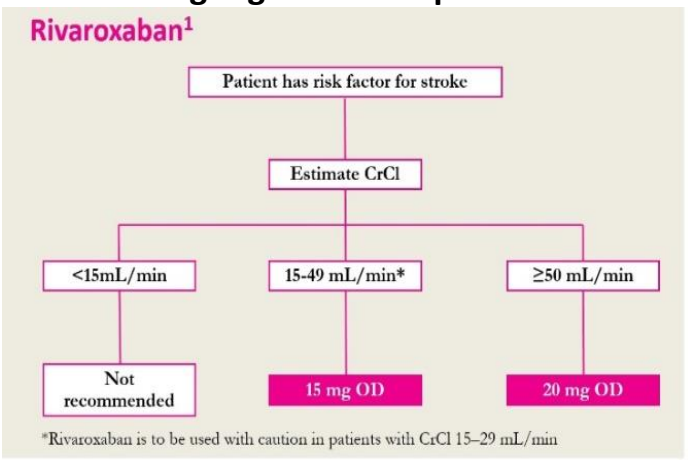
6. **Monitoring requirements:**
   a. Annual FBC
   b. Annual LFT
   c. Cockcroft-Gault Creatinine Clearance (need up to date weight)
      - If > 60 ml/min then recheck in 1 year
      - If 31-60 ml/min then recheck in 6 months
      - If < 31 ml/min recheck in 3 months

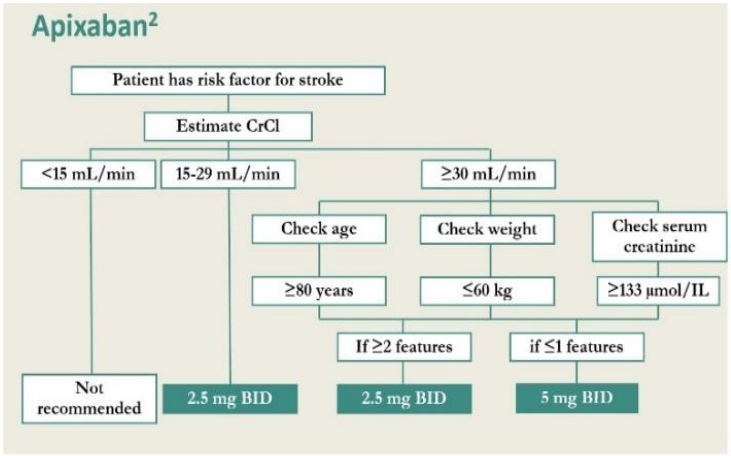
**Choice of DOAC**

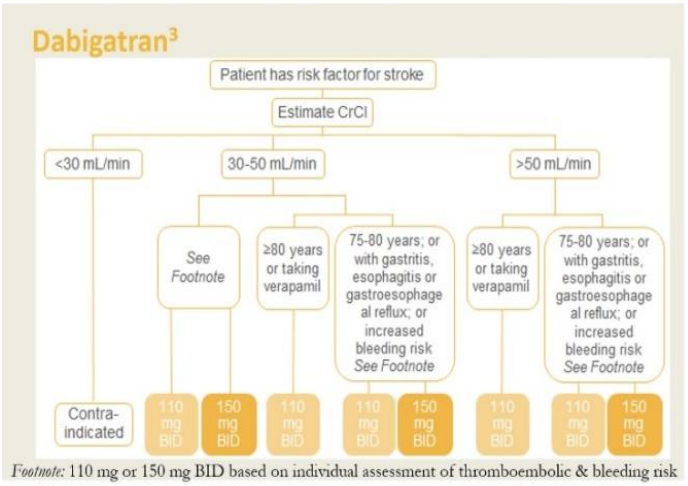
National guidance, in line with NICE, states that where more than one product is suitable (taking into account renal function, drug interactions, risk of GI bleed etc) the one with the lowest acquisition cost should be used (Edoxaban).

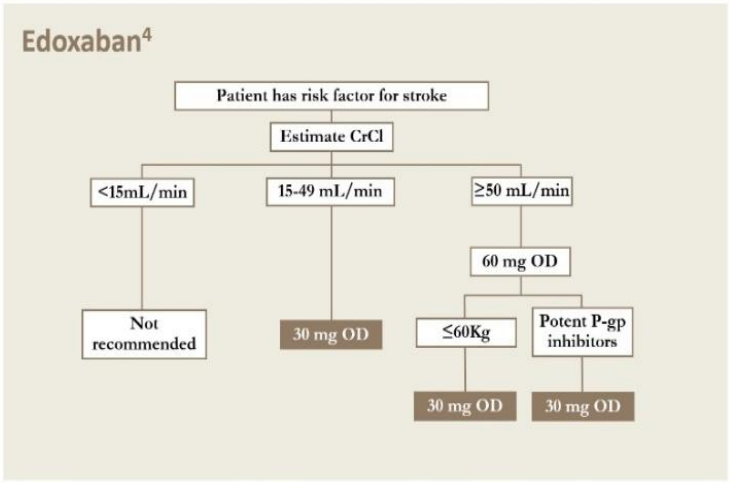
To reduce risk associated with incorrect dosage and monitoring it would be sensible for most GPs to limit their prescribing to two DOACs for the majority of patients. Suggest prescribing the DOAC you are most familiar with, potentially one OD and one BD preparation.

## DOAC Dosing Algorithm for patients with non-valvular Atrial Fibrillation




## DOAC Dosing Table for patients with DVT/PE

| DOAC | Apixaban | Edoxaban | Rivaroxaban | Dabigatran |
|---|---|---|---|---|
| Dosing in patients with DVT/PE (loading doses are not required if patient has been stabilised on warfarin) | Dose is 5mg twice daily (use with caution if CrCl <30ml/min).<br>For long term prevention of recurrence 2.5mg twice daily after 6 months' treatment dose. | Dose is 60mg once daily<br>Reduce dose to 30mg once daily if: Body weight <61kg, or CrCl <50ml/min, or co-prescribed with ciclosporin, dronedarone, erythromycin or ketoconazole. | Dose is 20mg daily<br>Consider 15mg dose if CrCl <50ml/min and bleeding risk outweighs VTE risk<br>For long term prevention of recurrence 10mg daily could be considered. | Dose is same as for AF (see table above)<br>. |
| Duration of therapy | **Check intended duration of therapy**<br>For a provoked DVT/PE: 3 months treatment if provoking factors have been addressed.<br>For unprovoked DVT/PE or recurrent DVT/PE: At least 6 months treatment dose followed by prophylaxis dosing as indicated/advised. | | | |

**This edition is also available on GP Portal**

## DOAC Counselling Checklist

Apixaban (Eliquis®), Dabigatran (Pradaxa®), Edoxaban (Lixiana®), Rivaroxaban (Xarelto®)

DOAC Agent Counselled: ……..……

| Counseling points | Sign |
|---|---|
| Explanation of an anticoagulant (increases clotting time and reduces risk of clot formation) and explanation of indication for therapy (AF and stroke risk reduction/DVT/PE) | |
| Differences between DOAC and warfarin (if applicable for patients converting from warfarin to DOAC therapy or offering choice of anticoagulation agent)<br>□ No routine INR monitoring<br>□ Fixed dosing<br>□ No dietary restrictions and alcohol intake permitted (within national guidelines)<br>□ Fewer drug interactions | |
| Name of drug: generic & brand name | |
| Explanation of dose: strength & frequency | |
| Duration of therapy: lifelong for AF or explain course length for DVT / PE treatment or prevention | |
| To take with food (dabigatran and rivaroxaban). Not required for apixaban or edoxaban | |
| Missed doses:<br>□ Apixaban and dabigatran can be taken within 6 hours of missed dose, otherwise omit the missed dose<br>□ Edoxaban and rivaroxaban can be taken within 12 hours of missed dose, otherwise omit the missed dose | |
| Extra doses taken: obtain advice immediately from pharmacist/GP/NHS Direct (111) | |
| Importance of adherence: short half-life and associated risk of stroke and/or thrombosis if non-compliant | |
| Common and serious side-effects and who/when to refer: symptoms of bleeding/unexplained bruising. Avoidance of contact sports.<br>□ Single/self-terminating bleeding episode – routine appointment with GP/pharmacist<br>□ Prolonged/recurrent/severe bleeding/head injury – A&E<br>Major bleeds managed/reversed by supportive measures, Prothrombin Complex Concentrate (PCC), and availability of antidote | |
| Drug interactions and concomitant medication: avoid NSAIDs. Always check with a pharmacist regarding OTC/herbal/complementary medicines | |
| Inform all healthcare professionals of DOAC therapy: GP, nurse, dentist, pharmacist e.g. prior to surgery | |
| Pregnancy and breastfeeding: potential risk to foetus – obtain medical advice as soon as possible if pregnant/considering pregnancy. Avoid in breastfeeding | |
| Storage: dabigatran must be kept in original packaging – moisture sensitive. All other DOAC are suitable for standard medication compliance aids/ dosette boxes if required | |
| Follow-up appointments, blood tests, and repeat prescriptions: where and when | |
| Issue relevant patient information AF booklet/leaflet and anticoagulant patient alert card | |
| Give patient opportunity to ask questions and encourage follow up with community pharmacist (NMS – New Medicine Service) | |