York Teaching Hospital NHS
NHS Foundation Trust

Anticoagulant Clinic – York Hospital

Non-Valvular AF : Warfarin to Direct Acting Oral Anticoagulants (DOAC) switch check list

Patient Name:

DOB: Age:

NHS number:

Reason for switch to new oral anticoagulant: (Tick)

- ○ % INR < 50% in range based on six months warfarin
- ○ Time in therapeutic range <65% based on six months warfarin
- ○ Patient allergic or intolerant to warfarin
- ○ Potential/actual problems with INR monitoring
- ○ Patient preference after informed discussion

Prior to starting check:

- ☐ U &Es
- ☐ LFT
- ☐ FBC (If platelets <70 x 10^9/L not recommended)
- ☐ Weight …….. kg

Contraindications to anticoagulation

Tick if any of the following are present

- ☐ Active bleeding potential or significant risk of major bleeding
- ☐ Active peptic ulcer, oesophageal varices, aneurysm
- ☐ Recent stroke (usually < 2 weeks)
- ☐ Recent brain, spine or ophthalmic surgery
- ☐ Recent intracranial haemorrhage, malignant neoplasms
- ☐ Uncontrolled hypertension

Do not prescribe if any boxes are ticked, anticoagulation is contraindicated

Before switching to new oral anticoagulant for NVAF:

Apixaban & dabigatran INR to be < 2.0: Advise to **miss two days** of warfarin and then have an INR taken the next morning. The anticoagulant clinic will then advise the patient if the new oral anticoagulant is to start or if further INRs are required.

Edoxaban INR to be ≤ 2.5 Advise to **miss one day** of warfarin and then have an INR taken the next morning. The anticoagulant clinic will then advise the patient if the new oral anticoagulant is to start or if further INRs are required.

Rivaroxaban INR to be ≤ 3.0 : Take an INR then the anticoagulant clinic will advise if new anticoagulant is to start or if further INRs are required.

Date INR test due: ……..

Other considerations:

Annual Review: FBC/U&E/ LFT / Bleeding risk / Compliance (including review of number of scripts collected)

Blister packs / Compliance aids: Dabigatran not stable in blister packs. Rivaroxaban, apixaban & edoxaban have not been tested in blister packs but are stable out of the original packs.

Tick to confirm choice of new oral anticoagulant to switch to: *(& **issue prescription to the patient**)*

○	***Apixaban***	**(Eliquis)**	See section A (Hospital preferred agent for AF)
○	Dabigatran	(Pradaxa)	See section B overleaf
○	Edoxaban	(Lixiana)	See section C overleaf
○	Rivaroxaban	(Xarelto)	See section D overleaf

Prescribed by: …… **Review patient's regular medications for interactions**

Care should also be taken with NSAIDs, aspirin & other antiplatelet drugs due to increased risk of bleeding.

Section A – Apixaban (Hospital preferred agent for AF)

AF Dose:	**5mg twice daily** Or **2.5mg twice daily** if at least two of the following characteristics: age ≥ 80 years, body weight ≤ 60 kg, or serum creatinine ≥ 133 micromol/l or if exclusive criteria of CrCl of 15 – 29 mL/min.
Contraindicated:	Hepatic disease associated with coagulopathy & clinically relevant bleeding risk (Raised LFTs : ALT/AST twice the upper level of normal or bilirubin 1.5 times the upper level of normal – not included in clinical trials, use with caution) CrCl< 15mL/min or on dialysis –not recommended.
Concurrent medication (See SPC for full details)	Ketoconazole, itraconazole, voriconazole, posaconazole, ritonavir - not recommended Rifampicin, phenytoin, carbamazepine, phenobarbital, St. John's Wort – Use with caution
Common side-effects:	Epistaxis, contusion, haematuria, haematoma, haemorrhage (eye, gastrointestinal).
Missed doses:	Take as soon as realise and continue to take twice daily thereafter.
Administration:	Swallow whole with or without food

Section B – Dabigatran

AF Dose:	**150mg twice daily** if aged <75 years, CrCl> 50mL/min, low risk of bleeding (weight <50kg with close clinical surveillance) **110mg twice daily** if aged > 80 years or prescribed verapamil Or Consider **110mg twice daily** based on individual assessment of thrombotic risk and the risk of bleeding in patients aged between 75 – 80 year or with CrCl<50 mL/min or with increased risk of bleeding (including gastritis, oesophagitis, gastrooesophageal reflux).
Contraindicated :	Hepatic impairment or liver disease expected to have impact on life expectancy LFTs twice the upper limit of normal – dabigatran is not recommended. CrCl< 30ml/min – dabigatran contraindicated.
Concurrent medication: (See SPC for full details)	Ketoconazole, ciclosporin, itraconazole, tacrolimus, dronedarone - contraindicated Rifampicin, St Johns Wort, carbamazepine, phenytoin –should be avoided. Amiodarone, quinidine, ticagrelor, posaconazole – Use with caution. Verapamil (use reduced dose). Selective serotonin re-uptake inhibitors, selective serotonin norepinephrine re-uptake inhibitors – increased bleeding risk demonstrated in clinical trials
Common side-effects:	Nausea, dyspepsia, diarrhoea, abdominal pain, anaemia, epistaxis, haemorrhage (gastrointestinal, genitourological or skin).
Missed doses:	May still be taken up to 6 hours prior to the next scheduled dose. Do not double up on same day.
Administration:	Swallow whole with water, with or without food. Do not open the capsules. Do not put in blister pack

Section C – Edoxaban

AF Dose:	**60mg once daily** Or **30mg once daily** if one or more of the following: CrCl 15 – 50mL/min, body weight ≤60kg, also taking ciclosporin, dronedarone, erythromycin, ketoconazole.
Contraindicated if:	Hepatic disease associated with coagulopathy and clinically relevant bleeding risk Raised LFTs (ALT/AST twice the upper level of normal or bilirubin 1.5 times the upper level of normal) – not included in clinical trials, use with caution CrCl<15mL/min or on dialysis – edoxaban contraindicated
Concurrent medication: (See SPC for full details)	Rifampicin, phenytoin, carbamazepine, phenobarbital or St. John's Wort – use with caution Ciclosporin, dronedarone, erythromycin, ketoconazole – reduce dose as above
Common side-effects:	Nausea, anaemia, epistaxis, haemorrhage (gastrointestinal, genitourological or skin), rash, pruritus, abnormal LFTs, raised gammaglutamyltransferase, raised blood bilirubin.
Missed doses:	Take immediately and continue on the following day with the once daily dose as recommended. The dose should not be doubled within the same day to make up for a missed dose.
Administration:	Swallow whole with or without food

Section D – Rivaroxaban

AF Dose:	**20mg once daily** Or **15mg once daily** if CrCl< 49mL/min
Contraindicated:	Patients with hepatic disease associated with coagulopathy & clinically relevant bleeding risk. CrCl< 30ml/min – use with caution, if Cr Cl< 15mL/min – use not recommended.
Concurrent medication: (See SPC for full details)	Ketoconazole, itraconazole, voriconazole, posaconazole ritonavir, dronedarone – not recommended Rifampicin, phenytoin, carbamazepine, phenobarbital, St. John's Wort – Should be avoided
Common side-effects:	Dizziness, headache, haematoma, dyspepsia, nausea, anaemia, hypotension, epistaxis, abdominal pain, haemorrhage (eye, gastrointestinal, urogenital tract), pruritus, rash, increase in transaminases
Missed doses:	Take immediately and continue on the following day with the once daily dose as recommended. The dose should not be doubled within the same day to make up for a missed dose.
Administration:	Take with food

References:
British National Formulary. Sept 2015. www.bnf.org
Summary of Product Characteristics (SPC).www.medicines.org.uk/emc

Written by : Jayne Knights/ Vicky Abbott, October 2016
Checked by : Jane Crewe
Approved by : York and Scarborough Medicines Commissioning Committee
Review Date : October 2018 Version 3