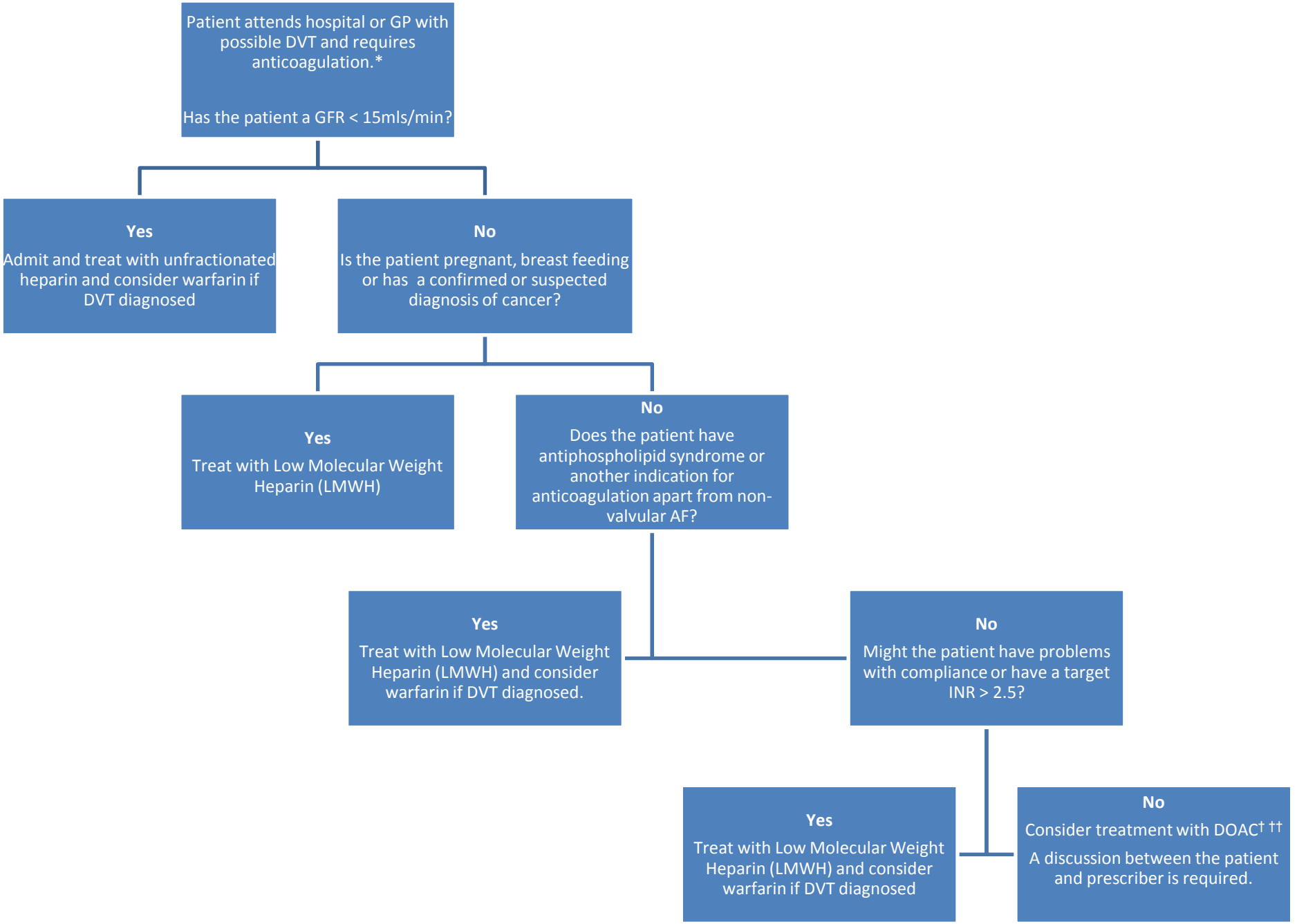
Suspected Deep Vein Thrombosis (DVT) Anticoagulation Treatment Pathway **Date:** April 2018 **Review Date:** April 2021 **Worcestershire Area Prescribing Committee**

(Extract from WAHT Anticoagulant guidance)



*Anticoagulation should be started if a diagnosis of DVT is confirmed or if the patient will have to wait more than 4 hours for the definitive investigation. †N.B. dabigatran is contraindicated GFR < 30mls/min.

††A Direct Oral Anticoagulant (DOAC) should be considered if there are no contra-indications; apixaban, dabigatran, edoxaban and rivaroxaban are available in line with NICE TAs 341, 327, 354 and 261 respectively. Current prescriber and patient information and alert cards are available on the Trust intranet and the respective manufacturers' Summary of Product Characteristics (SPC).

DVT DOSING RECOMMENDATIONS *(Please refer to the relevant SPC with regards to dosing, cautions, contra-indications, interactions and side-effect profile to ensure the most current information is referred to)*

Low Molecular Weight Heparin (LMWH) Enoxaparin (Clexane®, Inhixa®):
Uncomplicated DVT, low risk of recurrence: Enoxaparin 1.5mg/kg daily; for CrCl 15-30ml/minute use 1mg/kg daily
Complicated DVT, obesity, iliofemoral: Enoxaparin 1mg/kg twice daily; for CrCl 15-30ml/minute use 1mg/kg daily
Suspected cancer, active cancer, undergoing chemotherapy, pregnant:
Enoxaparin (Clexane®/Inhixa®): 1mg/kg twice daily; for CrCl 15-30ml/minute use 1mg/kg daily

	Loading / Usual Dose	Dose Adjustment	Renal Function Considerations
Apixaban	10mg twice daily for 7 days then 5mg twice daily	If duration > 6 months: 2.5mg twice daily	**CrCl < 15ml/min:** not recommended **CrCl 15-29ml/min:** use with caution, no dose reduction required
Dabigatran	150mg twice daily **after 5 days treatment with LMWH**	110mg twice daily if ≥80 years of age, prescribed verapamil or aged 75-80 years of age with increased bleeding risk	**CrCl < 30ml/min:** contraindicated **CrCl 30-50ml/min:** consider dose reduction to 110mg twice daily if high bleeding risk
Edoxaban	60mg once daily **after 5 days treatment with LMWH** ****In line with trial data; WAHT first line option in cancer associated thrombosis (avoid in patients with a high risk of bleeding, especially upper GI malignancies, given the increased risk of bleeding)**	30mg once daily if CrCl 15-50ml/min, weight ≤60Kg concomitant use of P-glycoprotein inhibitors (i.e. ciclosporin, dronedarone, erythromycin, ketoconazole)	**CrCl < 15ml/min:** not recommended **CrCl 15-50ml/min:** 30mg once daily
Rivaroxaban	15mg twice daily for 21 days then 20mg once daily	Same loading dose; Consider 15mg once daily in renal impairment – *see opposite*	**CrCl < 15ml/min:** not recommended **CrCl 15-49ml/min:** consider 15mg once daily if high bleeding risk (Caution **15-29ml/min**, plasma levels significantly increased).

Creatinine Clearance Calculator

CrCl vs. eGFR: whilst SPCs state dose adjustments in relation to a patient's CrCl, eGFR is used in practice. eGFR is normalised to a standard body surface area of 1.73m^2 so is less reliable at extremes of body weight. In certain patient groups, e.g. African-Caribbean / African family origin, people with extremes of muscle mass, e.g. bodybuilders, amputees or those with muscle wasting disorders, interpret eGFR with caution. Reduced muscle mass will lead to overestimation of actual GFR and increased muscle mass to underestimation of actual GFR. For more information see BNF 'Principles of dose adjustment in renal impairment'.

For those patients who are to be considered for a DOAC; i.e apixaban, dabigatran, edoxaban or rivaroxaban, a discussion between the patient and the prescriber is required.

Patient likely to benefit most from warfarin:
- Indication not covered by DOAC; e.g. valvular atrial fibrillation (AF), prosthetic valves
- Severe renal failure (GFR<30mls/min) or high chance of significant deterioration
- Hepatic dysfunction
- Arterial grafts
- Patient concerns over long term safety data
- Concomitant use of other medicines which interact with DOACs
- Other medical conditions where data on the use of DOACs is limited
- Use of unusual drugs where experience of them alongside DOACs is limited

There may be more benefit to treatment of DVT with a DOAC compared to AF as the majority of patients are treated for a short period of time, therefore long term side-effects are less of a problem. Also the highest risk of bleeding on warfarin is in the first three months and that is when the majority of blood tests are.

Patient likely to benefit most from DOAC:
- Regularly prescribed drugs that interferes with warfarin; e.g. COPD patient with multiple courses of antibiotics
- Difficulty attending INR clinics (personal or medical reasons)

Likely poor compliance is not a reason for choosing a DOAC, the relative short half-life means missed doses leaves the patients without anticoagulation until the next dose is taken. The relative long half-life of warfarin means an occasional missed dose is unlikely to affect the INR.