SPECIALTY: HAEMATOLOGY
CLINICAL PROBLEM: ORAL ANTICOAGULATION

We have a local anticoagulation specific web site http://stross.net/AcRx

WHETHER TO ANTICOAGULATE

Use of warfarin should be considered in the following cases:

- Venous thromboembolism
- Atrial fibrillation
- Mitral stenosis
- Mural thrombus
- Cardiomyopathy
- Heart valve prosthesis
- Risk of embolic stroke

Warfarin is not normally indicated for non-embolic stroke, peripheral arterial disease and grafts, coronary artery thrombosis.

Once the decision to anticoagulate is made, responsibility for the clinical management of the patient remains with the GP or referring consultant even if the patient is referred to the clinic.

CONTRAINDICATIONS TO STARTING WARFARIN/REASONS FOR DISCONTINUING

These need consideration but are not necessarily absolute contraindications:

- Renal failure
- Liver failure
- Pregnancy
- Alcoholism
- GI/urinary tract bleeding in past 6 months
- Non-compliance or patient unwilling
- Blackouts, falls, dementia
- Partial sight/illiteracy
- Patients who travel extensively or who work abroad (unless suitable for self-testing)
- Poor INR control achieved or significant bleeding

Also consider alternatives, e.g. aspirin

Occasional patients may benefit from alternate but similar drugs such as phenindione. Please discuss with Consultant Haematologist.
**ANTICOAGULANT CLINIC**

Held on Monday and Friday mornings **by appointment** (01243 788122 Ext 3584; direct line 01243 831657 with answerphone; e-mail Ac.Rx@wsht.nhs.uk with the following **essential** information:

- Full patient demographics
- Reason for starting warfarin
- Target INR range
- Duration of treatment or arrangements for review
- Relevant past history/family history
- All drug therapy: **is aspirin or other antiplatelet drug to be stopped?**

The Anticoagulation Clinic will counsel new patients, issue a yellow book and initiate treatment. Send referral letter giving full information listed above. The patient will be sent an appointment by the clinic. Most patients are transferred to the postal system as soon as possible.

**Temporary residents**
The Clinic will dose these patients only if they have a yellow book detailing diagnosis, therapeutic range, previous INRs and current dose.

**POSTAL SYSTEM**

For patients difficult to bleed a paediatric blood bottle can be used. Capillary testing may be appropriate.

Citrate blood samples for INR taken at GP surgery or patient's home by District Nurse, are sent to SRH for testing and dosing. Result sent by post direct to patient. A weekly summary is sent to GP surgeries. We also offer an e-mail service, write to the Ac.Rx@wsht.nhs.uk address. We can send results by text message too. These can be used to send further copies of the result to either relative or carer or pharmacist. If urgent, patients are telephoned. Patients unstable for any reason are invited to clinic. For patients requiring surgery or dentistry contact the anticoagulant clinic at least one week beforehand with patient details including date of and nature of procedure.

**INTERACTIONS WITH WARFARIN**

*It is best to assume that any drug can interact with warfarin. Any change in medication should be followed by an INR within a week, without adjusting the dose of warfarin.* If possible avoid starting amiodarone concurrently; review use of analgesics and NSAIDs; choose a non-interacting antibiotic if possible. See BNF appendix 1 for details of drug interactions. Use extreme caution with Amiodarone, Tamoxifen, Macrolides. Clopidogrel and aspirin will add to the risks of Warfarin therapy. Do not co-prescribe with oral anticoagulants such as Rivaroxaban or Dabigatran

### Atrial Fibrillation (see Atrial Fibrillation guidelines)

1. Non-rheumatic  
   **Risk factors:**  
   Previous TIA or stroke, hypertension, heart failure, diabetes, abnormal left ventricular function on ECHO.  
   The risk of Stroke is proportional to the CHADS2 score.  
   If under 65 without risk factor *use 300mg aspirin not warfarin.*  

<table>
<thead>
<tr>
<th>INR (RANGE)</th>
<th>DURATION</th>
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If over 65 or with one risk factor  

**Assess risk regularly - benefit/risk ratio may alter**

2. AF in valvular heart disease and thyrotoxicosis  
3. Pre-cardioversion (see Atrial Fibrillation guidelines)  
4. Mitral stenosis +/- AF  

### Mural thrombus post myocardial infarct

<table>
<thead>
<tr>
<th>INR (RANGE)</th>
<th>DURATION</th>
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<tbody>
<tr>
<td>2.5 (2.0-3.0)</td>
<td>review in 3 months</td>
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</table>

### Cardiomyopathy / Heart Failure

<table>
<thead>
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<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 (2.0-3.0)</td>
<td>long term</td>
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### Heart valve prosthesis

1. Mechanical:  
   - Mitral  
   - Aortic  
2. Bioprosthetic - patient may be anticoagulated post-op  
   *then stop unless mural thrombus, AF or previous emboli*

<table>
<thead>
<tr>
<th>INR (RANGE)</th>
<th>DURATION</th>
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<tbody>
<tr>
<td>3.5 (3.0-4.5)</td>
<td>long term</td>
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<tr>
<td>2.5 (2.0-3.0)</td>
<td>long term</td>
</tr>
<tr>
<td>2.5 (2.0-3.0)</td>
<td>3 months</td>
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### Venous thromboembolism VTE (non pregnant)

*Tinzaparin (LMWH) started concurrently and stopped when INR >2 for 2days and patient has received a minimum of 6 days LMWH*

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<tbody>
<tr>
<td>2.5 (2.0-3.0)</td>
<td>6 months</td>
</tr>
<tr>
<td>2.5 (2.0-3.0)</td>
<td>3 months</td>
</tr>
<tr>
<td>2.5 (2.0-3.0)</td>
<td>6 weeks</td>
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**Review if risk factors persist e.g. carcinoma, thrombophilia, immobility**

4. Recurrent DVT (off warfarin)  
5. Recurrent DVT (on warfarin)

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<td>long term</td>
</tr>
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<td>3.5 (3.0-4.0)</td>
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**Consider need to look for carcinoma, thrombophilia**

If pregnant or planning pregnancy, urgent referral (telephone call suggested) to Consultant Haematologist for advice.

### Thrombophilia

Any patient with suspected thrombophilia must be referred to a Consultant Haematologist. The diagnosis of thrombophilia, is not always an indication to continue long term.