**LEFLUNOMIDE - for active joint inflammation**

**AREAS OF RESPONSIBILITY FOR THE SHARING OF CARE**

This shared care agreement outlines suggested ways in which the responsibilities for managing the prescribing of Leflunomide can be shared between the specialist and general practitioner or non-medical prescriber in primary care (GP). GPs are invited to participate. If the GP is not confident to undertake these roles, then he or she is under no obligation to do so. In that case, the total clinical responsibility for the patient for the diagnosed condition remains with the specialist. **If a specialist asks the GP to prescribe drugs for this treatment, the GP should reply to this request as soon as practicable.**

Sharing of care assumes communication between the specialist, GP and patient. The intention to share care should be explained to the patient by the doctor initiating treatment. It is important that patients are consulted about treatment and are in agreement with it. Patients with Rheumatological inflammatory diseases are under regular specialist follow-up. This provides an opportunity to discuss and to monitor drug therapy.

**The doctor who prescribes the medication legally assumes clinical responsibility for the drug and the consequences of its use.**

**RESPONSIBILITIES and ROLES**

<table>
<thead>
<tr>
<th>Specialist responsibilities</th>
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<tbody>
<tr>
<td>• Ensure FBC, liver and renal function are within normal parameters to allow Leflunomide to commence.</td>
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<tr>
<td>• If abnormalities found at baseline inform GP as soon as possible.</td>
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<td>• Initiate treatment with Leflunomide or advise GP on initiating treatment.</td>
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<td>• Discuss the benefits and side effects of treatment with the patient and inform GP this has occurred.</td>
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<td>• Ask the GP whether he or she is willing to participate in shared care, and agree with the GP as to who will discuss the shared care arrangement with the patient.</td>
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<td>• Review the patient’s condition and monitor response to treatment regularly where indicated.</td>
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<td>• Advise GP if monitoring is needed, and the frequency.</td>
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<tr>
<td>• Monitor any other parameters considered necessary, or advise GP on which to monitor.</td>
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<td>• Communicate promptly with the GP when treatment is changed or needs to be changed by the GP, any results of the monitoring undertaken, and assessment of adverse events.</td>
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<td>• Have a mechanism in place to receive rapid referral of a patient from the GP in the event of deteriorating clinical condition.</td>
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<td>• Advise GPs on when to stop treatment (if appropriate).</td>
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<tr>
<td>• Report adverse events to the MHRA via Yellow Card Scheme.</td>
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<td>• Ensure that clear backup arrangements exist for GPs to obtain advice and support.</td>
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</table>
**General Practitioner responsibilities**

- Reply to the request for shared care as soon as practicable.
- Prescribe Leflunomide at the dose recommended.
- Adjust the dose as advised by the specialist.
- Monitor any parameters considered necessary, if agreed with the specialist to do so.
- Report to and seek advice from the specialist on any aspect of patient care that is of concern and may affect treatment.
- Refer patient to specialist if his or her condition deteriorates.
- Stop treatment on the advice of the specialist or immediately if an urgent need to stop treatment arises.
- Report adverse events to the specialist and to the MHRA via the Yellow Card Scheme.

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**Patient’s role**

1. Report to the specialist or GP if he or she does not have a clear understanding of the treatment.
3. Report any adverse effects to the specialist or GP.

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**BACK-UP ADVICE AND SUPPORT**

<table>
<thead>
<tr>
<th>Contact details</th>
<th>Telephone No.</th>
<th>Email address:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist:</td>
<td>01592 648193</td>
<td><a href="mailto:janegibson@nhs.net">janegibson@nhs.net</a></td>
</tr>
<tr>
<td>Rheumatology Dept</td>
<td>01592 265967 (fax)</td>
<td><a href="mailto:helenharris@nhs.net">helenharris@nhs.net</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:johnmclaren@nhs.net">johnmclaren@nhs.net</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:sharoncullinane@nhs.net">sharoncullinane@nhs.net</a></td>
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</tbody>
</table>

**SUPPORTING INFORMATION (taken from the SPC)**

**Licensed indications**

Rheumatoid and Psoriatic arthritis with active joint inflammation, usually supported by indices of inflammation.

**Dosage and Administration**

Maintenance dose is 10mg or 20mg once daily. The loading dose of 100mg od for 3 days, is no longer used.

**Contraindications and precautions for use**

- Due to a potential for additive hepatotoxic effects, it is recommended that alcohol consumption be avoided or reduced to 3-4 units/week, during treatment with leflunomide.
- Due to the potential liver and haematological reactions, it is essential that monitoring recommendations are strictly adhered to (see ‘monitoring’ section).
- Hypersensitivity to the active substance or to any of the excipients.
- Impairment of liver function, or moderate to severe renal impairment.
- Severe immunodeficiency states or serious infections; significantly impaired bone marrow function or significant anaemia, leucopenia, neutropenia or thrombocytopenia due to causes other than rheumatoid or psoriatic arthritis
- Severe hypoproteinaemia.

- Leflunomide is contraindicated in pregnancy. Effective contraception is essential in women of childbearing potential during and up to 2 years after treatment or up to 11 days after washout procedure (see below). The patient must be advised that if there is any delay in onset of menses or any other reason to suspect pregnancy, they must notify the physician immediately for pregnancy testing, and if positive, the physician and patient must discuss the risk to the pregnancy.
- Breast feeding should be avoided.
- Men should use effective contraception during and for at least 3 months after stopping Leflunomide.
- The use of live vaccines with Leflunomide is contra-indicated.

Side Effects (also state any specific side-effects which require the consultant to be notified)
- Mild increases in BP, GI disturbance, rash, reversible alopecia, headache, oral ulceration, haematological abnormalities (leucopenia), raised LFTs, paraesthesia, dizziness, pruritis, eczema, tenosynovitis and asthenia.
- Rare: pulmonary infiltration/pneumonitis, increased LDH, severe increase in BP and pancytopenia.
- Very rare: Stevens-Johnson Syndrome or toxic epidermal necrolysis.

If diarrhoea occurs with Leflunomide the dose could be reduced to 10mg daily, if taking 20mg.

For a complete list of side effects see BNF/ Summary of product Characteristics.

Treatment should be withheld and the Rheumatology Department contacted if:
- NEUTROPHILS < 1.5x10^9
- PLATELETS <100x10^9
- >2 fold increase in ALT (from upper limit of reference range)
- ABNORMAL BRUISING / SORE THROAT (urgent F.B.C.)
- BLOOD PRESSURE INCREASES OF 10-15% ON 2 OCCASIONS

Washout for intolerance or prior to starting another DMARD (if required - active metabolite has long half-life) - use cholestyramine 8g three times daily for 11 days or if not tolerated, activated charcoal 50g four times daily for 11 days and re-refer to rheumatologist.

Monitoring (State specific monitoring to be undertaken by the GP / Consultant) see FRDU blood monitoring forms (ADTC website)

Rheumatologist responsibilities:
FBC, liver and renal function are within normal parameters to allow Leflunomide to commence.

General Practitioner responsibilities:
- While taking Leflunomide patients will require monthly FBC, Liver function & BP for the first 6 months of treatment.
- If monitoring is stable (and patient is not on combination therapy) monitoring can be reduced to eight weekly.

Drug Interactions
- Hepatotoxic or haematotoxic medication eg phenytoin, warfarin, tolbutamide.

Any queries relating to this Shared Care Protocol contact the Clinical Effectiveness Pharmacist (01592) 226915
Document approved by NHS Fife Area Drugs & Therapeutics Committee on behalf of NHS Fife. Date: February 2013
Ishtiaq Mohammed, Clinical Effectiveness Pharmacist
- Patients on warfarin must have their INR monitored closely for several weeks after stopping leflunomide due to its long half-life.

- It is recommended that patients receiving leflunomide are not treated with colestyramine because this leads to a rapid and significant decrease in plasma A771726 (the active metabolite of leflunomide).

- Avoid concomitant use of live vaccines.

For a complete list of drug interactions please see the BNF / Summary of Product Characteristics.

**Cost (July 2012)**

- 30 X 20mg tablet = £66.94
- 30 X 10mg tablet = £56.49