HERPC
Hull & East Riding Prescribing Committee

Prescribing Framework for Leflunomide in Rheumatic Diseases

Patient's Name:……..… NHS Number: ……

Patient's Address:……...……(Use addressograph sticker)

GP's Name:……..

Communication

We agree to treat this patient within this Prescribing Framework

Specialist Prescriber's Name…… Prof Reg. No. ……

Specialist Prescriber's Signature…… Date:……

Where prescriber is <u>not</u> a consultant:

Consultant's Name: …… GMC No ……..

Consultant's Signature ……..... ……. Date:…….

GP's Signature:…… Date:……..

GP's Name (if different from listed above)……..

The front page of this form should be completed by the specialist and the form sent to the patient's general practitioner.
The patient's GP should sign and **send back to specialist**, to confirm agreement to enter into shared care arrangement. If the General Practitioner is **<u>unwilling</u>** to accept prescribing responsibility for the above patient the specialist should be informed within two weeks of receipt of this framework and specialist's letter.

Full copy of framework can also be found at: http://www.hey.nhs.uk/amber.htm

1. Background

DMARDs are fundamental to arresting the disease process in Rheumatoid Arthritis and other inflammatory arthritides. While early initiation of therapy is essential to arrest the disease process, sustained use is vital if disease suppression is to be maintained. Prolonged therapy requires long-term monitoring for toxicity and safety profile.

Leflunomide is a DMARD that may be used for rheumatoid arthritis (NICE Clinical Guideline 79, www.nice.org.uk/cg79) and other rheumatic diseases.

These guidelines aim to provide a framework for the prescribing of leflunomide by GPs and to set out the associated responsibilities of GPs and hospital specialists who enter into the shared care arrangements.

This document should be read in conjunction with the guidance "Responsibility for prescribing between Primary & Secondary/Tertiary Care" https://www.england.nhs.uk/wp-content/uploads/2018/03/responsibility-prescribing-between-primary-secondary-care-v2.pdf

2. Indication

Rheumatoid arthritis, psoriatic arthritis.

3. Dose

10mg daily; may be increased to 20mg daily if there is no response to treatment.

It should be noted that loading doses are no longer used to initiate treatment.
In certain circumstances leflunomide may be used in combination with methotrexate, in such instances specific information will be provided to the GP.

Doses may vary for individual patients and will be documented in specialist letter.

4. Duration of treatment

Advice will be given to the GP on duration of treatment and dose changes for each individual patient.

5. Contraindications and cautions

Leflunomide is contraindicated in severe immunodeficiency; severe hypoproteinaemia; serious infection, hepatic impairment, moderate to severe renal impairment.

Leflunomide has the potential to be teratogenic and is toxic to a developing foetus.

Leflunomide should therefore not be administered during pregnancy or lactation. Effective contraception is essential until total drug elimination is complete (in both men and women), which may take up to 3 months in men and 2 years in women.

6. Adverse effects

Most frequently reported adverse effects are diarrhoea, nausea, vomiting, abdominal pain, anorexia, hypertension, leucopenia, paraesthesia, headache, dizziness, oral mucosal disorders, rash, alopecia, tenosynovitis, CPK increased, asthenia, abnormal hepatic enzyme levels.

Colestyramine may be used to eliminate the leflunomide rapidly in patients who present with severe reactions. **This may be used only following discussion with a rheumatologist.**

7. Interactions

Patients receiving leflunomide should be advised against immunization with live vaccines. (Influenza vaccines may be given in this group of patients).

Increased risk of toxicity when leflunomide is given with other haematotoxic and hepatotoxic drugs, including methotrexate. However methotrexate may be given in combination with leflunomide following specialist advice.

Leflunomide has the potential to interact with colestyramine, rifampicin, warfarin and tolbutamide, phenytoin**.**

Details of contraindications, cautions, drug interactions and adverse effects listed above are not exhaustive. For further information always check with BNF www.bnf.org.uk or SPC (www.medicines.org.uk).

8. Monitoring

Disease monitoring:
Clinical response to therapy

Drug monitoring:
A full blood count, including differential white cell count, platelets, LFTs and blood pressure (preferably 2 consecutive readings 2 weeks apart) are checked prior to therapy, then every 2 weeks for the first 6 months then if stable every 2 months.

Monitoring parameter	Recommended response
WBC < 4.0 x 10^9 /1	withhold **until discussed** with specialist team
Neutrophils <2.0 x 10^9 /l	withhold **until discussed** with specialist team
Platelets <150 x 10^9 /l	withhold **until discussed** with specialist team
>2 fold rise in AST, ALT (from upper limit reference range)	withhold **until discussed** with specialist team
> 2 fold rise in creatinine	withhold **until discussed** with specialist team
Hypertension occurs that cannot be controlled with appropriate therapy	Withhold **until discussed** with specialist team.
Rash / itch / mouth ulcers. **(This may be a delayed effect)**	Very rare cases of Steven Johnson's syndrome have been reported. Patient should be urgently referred to the rheumatology service.
Abnormal bruising or **severe sore** throat or rash	Check FBC immediately and withhold until results are available

9. Information to patient

Patients should be informed about benefits and risks of treatment and need for monitoring.

Patients should be told to go to their GP immediately if they experience any fever, rash, bruising, bleeding, sore throat, oral ulceration, jaundice or infection.

Patients should be advised on need for effective contraception during and after treatment, where relevant.

10. Responsibilities of clinicians involved

Stage of Treatment	Hospital Specialist	General Practitioner
Initiation	Assess the patient following referral by GP Carry out baseline full blood count, differential WCC, platelets, U&Es, LFTs and blood pressure Recommend appropriate treatment to the GP by approved DMARDs clinic letter	Prescribe on FP10
Maintenance	Assess clinical response to treatment Provide adequate advice and support for the GP Provide information to GP on frequency of monitoring if doses are changed	Monitor for adverse effects, refer to consultant where necessary. FBC, LFTs and blood pressure every 2 weeks for the first 6 months, then every 2 months, if stable.
Discontinuation	Provide advice to GP and patient if discontinuation is considered N.B. switching from leflunomide to another DMARD without following the recommended washout procedure may increase the risk of serious adverse reactions even for a long time after the switching	Refer to specialist for advice on discontinuation

DMARDs clinic letter box

DMARD COMMENCEMENT	Tick box
Bloods checked and satisfactory	
X-Ray checked and satisfactory	
Information given to patient	
Counselling given to patient	
Shared Care Protocol attached	

Contact Details:

During Office hours:

Number for patients and non urgent enquiries for staff tel: 01482 675683.
(The helpline number is an answering machine service in which messages are taken at midday Mon - Fri.)

For urgent or staff enquiries only contact consultant secretary via switchboard (01482 875875)

Specialist pharmacists
Interface Pharmacist – Antonio Ramirez 01482 674306
Rheumatology – Emily Hardaker 01482 674043

Out of hours: Contact On-call Registrar for Medicine via Switchboard.

APPROVAL PROCESS (for Shared Care Framework)

Written by:	***Marie Miller, Interface Pharmacist***
Consultation process:	***Rheumatology***
Approved by:	***MMIG March 2014***
Ratified by:	***HERPC March 2014 Updated June 2018***
Review date:	***June 2021***