Prescribing Framework for Penicillamine 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 not 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 unwilling 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

Prescribing framework for Penicillamine
Date approved by the HERPC:March 2014 Review date:March 2017
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.

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

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

The guidelines should be read in conjunction with the general guidance on prescribing matters given in EL (91) 127 “Responsibility for prescribing between hospitals and GPs”.

2. **Indication**

Rheumatoid arthritis and other rheumatic diseases.

3. **Dose**

**Adults:** Initially 125mg daily, (1 hour before food) for 2 weeks increased to 250mg daily thereafter. Doses may be increased gradually, specific information will be provided by the consultant. The usual maximum dose is 500mg daily.

**Elderly:** Initially 125mg once daily (1 hour before food) for 1 month, increased by similar amounts at intervals of not less than 4 weeks up to a maximum of 500mg daily.

The consultant will give specific advice to the GP on dose escalation.

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**

Penicillamine is contraindicated in patients with moderate or severe renal insufficiency and lupus erythematosus.

**Penicillamine is contraindicated in pregnancy and breastfeeding**

6. **Adverse effects**

Most common side effects reported are: mouth ulcers, changes in taste or metallic taste, rash.

Less common side effects include: Nausea, anorexia, fever and skin reactions initially. Blood disorders including thrombocytopenia. Proteinuria.

Rare effects include: haematuria, haemolytic anaemia, nephritic syndrome, lupus syndrome, alopecia, bronchiolitis, pneumonitis, myasthenia gravis like syndrome, Good Pastures syndrome and Stevens-Johnsons syndrome also reported.

7. **Interactions**
Penicillamine should not be given with other drugs capable of causing similar serious haematological or renal adverse effects, for example gold salts, chloroquine, clozapine or hydroxychloroquine, or immunosuppressive drugs.

The absorption of penicillamine is reduced by iron, zinc and antacids. Iron supplements may be given to patients with caution on specialist advice only. Antacids and zinc supplements should not be taken within 2 hours of penicillamine. Digoxin should not be taken within 2 hours of penicillamine (digoxin levels reduced)

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:
Baseline- full blood count, LFTs, U&Es and urine dipstick (for protein and red cells) should be performed.
Ongoing - Fortnightly urinalysis (for proteinuria & haematuria) and FBC should be checked until on a stable dose and thereafter monthly.

<table>
<thead>
<tr>
<th>Monitoring parameter</th>
<th>Recommended response</th>
</tr>
</thead>
<tbody>
<tr>
<td>WBC &lt; 4.0 x 10^9 /l</td>
<td>withhold until discussed with specialist team</td>
</tr>
<tr>
<td>Neutrophils &lt;2.0 x 10^9 /l</td>
<td>withhold until discussed with specialist team</td>
</tr>
<tr>
<td>Platelets &lt;150 x 10^9 /l</td>
<td>withhold until discussed with specialist team</td>
</tr>
<tr>
<td>Proteinuria + on more than one occasion</td>
<td>withhold until discussed with specialist team</td>
</tr>
<tr>
<td>Haematuria + on more than one occasion</td>
<td>withhold until discussed with specialist team</td>
</tr>
<tr>
<td>Rash, abnormal bruising or severe sore throat</td>
<td>Check FBC immediately and withhold until results are available</td>
</tr>
</tbody>
</table>

9. Information to patient
Patients should be informed about benefits and risks of treatment and need for monitoring.

All patients should be advised to expect as a side effect mouth a change in taste, or a metallic taste.

Patients should be told to go to their GP immediately if they experience any fever, rash, unexplained bruising or bleeding, purpura, sore throat, oral ulceration, jaundice or infection.
10. Responsibilities of clinicians involved

<table>
<thead>
<tr>
<th>Stage of Treatment</th>
<th>Hospital Specialist</th>
<th>General Practitioner</th>
</tr>
</thead>
</table>
| Initiation         | Assess the patient following referral by GP  
|                    | Recommend appropriate treatment to the GP  
|                    | Carry out baseline full blood count, U&Es, LFTs  
|                    | and urine dipstick for protein and red cells.  
|                    | Give patient shared care booklet and fill in.  
|                     | 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  
|                    | Fill in patient shared care booklet where relevant.  
|                     | Monitor for adverse effects, refer to consultant where necessary.  
|                     | fortnightly urinalysis and FBC should be checked until on a stable dose and thereafter monthly.  
|                     | Fill in patient shared care booklet where relevant. |

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 – Marie Miller (01482) 675207  
Rheumatology – Antonio Ramirez (01482) 674731

Out of hours: Contact On-call Registrar for Medicine via Switchboard: tel 01482 875875

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) |
| Review date: | March 2017 |