



**PAN MERSEY AREA PRESCRIBING COMMITTEE
SHARED CARE FRAMEWORK**
FIRST APC BOARD DATE: 27 SEP 2017
LAST APC BOARD DATE: 28 NOV 2018



PENICILLAMINE for patients within adult services
No longer in BSR guidelines this is a framework for existing patients only

1. Background	<p>Penicillamine is a thiol-group containing chelating agent, variably absorbed from the gastrointestinal tract. Penicillamine is strongly plasma-protein bound. About 80% of the absorbed dose is excreted rapidly in the urine, mostly as mixed disulphides.</p> <p>N.B. Penicillamine is not included in the 2017 version of the British Society for Rheumatology guidelines.</p>
2. Licensed Indications	<p>Rheumatoid arthritis Wilson's disease (hepatolenticular degeneration) Chronic active hepatitis in adults</p>
3. Locally agreed off-label use	N/A
4. Initiation and ongoing dose regime	<p>Transfer of monitoring and prescribing to Primary care is normally after 3 months</p> <p>The duration of treatment will be determined by the specialist based on clinical response and tolerability.</p> <p>125mg to 250mg daily for the first month. Increase by the same amount every four to 12 weeks until remission occurs. The usual maintenance dose is 500 to 750mg daily. Up to 1500mg daily may be required. (Daily dosage should not exceed 1000mg in elderly)</p> <p>All dose adjustments will be the responsibility of the initiating specialist unless directions have been discussed and agreed with the primary care clinician</p> <p>Termination of treatment will be the responsibility of the specialist.</p>
5. Baseline investigations, initial monitoring and dose titration to be undertaken by specialist	<p>FBC, Urinalysis (for protein and blood), CRP, ESR, U&E's: fortnightly for 6 weeks, or longer until dose is stable</p>

6. Ongoing monitoring requirements to be undertaken by primary care.	Monitoring		Frequency
	FBC, U&E's, CRP, ESR, Urinalysis (for protein and blood) CRP and ESR (rheumatology patients only)		Monthly
7. Pharmaceutical aspects	Route of administration		Oral
	Formulation		125mg and 250mg tablets
	Administration details		Penicillamine should be taken on an empty stomach at least half an hour before meals, or on retiring.
	Other important information		Pyridoxine 25 mg daily may be given to patients taking penicillamine for long periods, especially if they are on a restricted diet, since penicillamine increases the requirement for this vitamin
8. Contraindications Please note this does not replace the Summary of Product Characteristics (SPC) and should be read in conjunction with it.	<ul style="list-style-type: none"> • Hypersensitivity to penicillamine or any of the ingredients. • Patients with moderate or severe renal insufficiency, • Lupus erythematosus, • A history of penicillamine induced agranulocytosis, aplastic anaemia or severe thrombocytopenia. 		
9. Significant drug interactions	<p>For a comprehensive list consult the BNF or Summary of Product Characteristics. SPC</p> <p>Seek advice from the initiating Specialist if there are any concerns about interactions.</p>		
10. Adverse Effects and managements	Result		Action
	Abnormal bruising or severe sore throat		Stop drug until FBC results available, contact Specialist Nurse (SN)
	Fall in WCC $<3.5 \times 10^9/l$		Stop drug. Contact SN for advice and management
	Fall in neutrophils $<1.6 \times 10^9/l$		
	Fall in platelets $<140 \times 10^9/l$		
	Increased MCV $>105f/l$		Check folate, B12 & TSH. Treat if abnormal but contact SN for advice if normal.
	Unexplained reduction in albumin $<30g/l$		Stop drug. Contact SN
	Abnormal LFTs – AST or ALT $> 100 U/l$		Stop drug. Contact SN
	Rash		Discuss with SN.
	Taste loss:		Reassure, continue drug.
	Nausea, vomiting, diarrhoea		Discuss with SN
	Increase in serum creatinine $> 30\%$ over period of 12 months or less OR decline in eGFR $> 25\%$		Contact SN if there is new or unexplained renal impairment
	Proteinuria:	Trace	Continue drug
+		Send MSU to exclude infection	

		++ / +++	Send MSU. If negative - stop drug and contact SN
	Haematuria:	Trace	Continue drug
		+	Send MSU to exclude infection
		++ / +++	Stop drug. Send MSU and contact SN
11. Advice to patients and carers	The specialist will counsel the patient with regard to the benefits and risks of treatment and will provide the patient with any relevant information and advice, including patient information leaflets on individual drugs.		
12. Pregnancy and breast feeding	The safety of penicillamine in pregnancy has not been established. Penicillamine should be used in pregnancy and breastfeeding only when the expected benefits outweigh the risks of discontinuing the medication.		
13. Specialist contact information	See specialist communication.		
14. Additional information	Where patient care is transferred from specialist service or GP practice to another, a new shared care agreement must be completed.		
15. References	BSR monitoring guidelines		
16. To be read in conjunction with the following documents.	<ol style="list-style-type: none"> 1. Policy for Shared Care 2. Shared care agreement. When two or more DMDs are initiated, one shared care agreement form should be completed for all relevant drugs.		