



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



Pan Mersey
Area Prescribing Committee

CICLOSPORIN for patients within adult services

<p>1. Background</p>	<p>Ciclosporin is a potent immunosuppressant. Indications, dose adjustments and monitoring requirements for disease modifying drugs (DMDs) (licensed and unlicensed indications) included in this Framework are in line with national guidance published by the British Society for Rheumatology 2017.</p>
<p>2. Licensed Indications</p>	<ul style="list-style-type: none"> • Rheumatoid arthritis. • Psoriasis in patients in whom conventional therapy is inappropriate or ineffective. • Atopic dermatitis when systemic therapy is required • Inflammatory eye disease <p>Transplant indications are not included</p>
<p>3. Locally agreed off-label use</p>	<ul style="list-style-type: none"> • Interstitial lung disease • Other rheumatology indications • Myasthenia gravis • Connective tissue disease • Psoriatic arthritis • Connective tissue disease • Autoimmune and inflammatory kidney conditions • Sarcoidosis • Atypical neuro-inflammatory disease
<p>4. Initiation and ongoing dose regime</p>	<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><i>Rheumatoid arthritis</i> Initiation: For the first 6 weeks of treatment the recommended dose is 2.5 mg/kg/day orally given in 2 divided doses. If the effect is insufficient, the daily dose may then be increased gradually as tolerability permits, but should not exceed 5 mg/kg.</p> <p>Maintenance The dose will be titrated individually by the specialist to the lowest effective level according to tolerability, usually 2.5 - 4mg/kg per day orally.</p> <p><i>Psoriasis</i> Initiation: The recommended initial dose is 2.5 mg/kg/day orally given in 2 divided doses. If there is no improvement after 1 month, the daily dose may be gradually increased, but should not exceed 5 mg/kg. Initial doses of 5 mg/kg/day are justified in patients whose condition requires rapid improvement.</p>

	<p>Maintenance: Doses have to be titrated individually to the lowest effective level, and should not exceed 5 mg/kg/day.</p> <p>All dose or formulation adjustments will be the responsibility of the initiating specialist unless directions have been discussed and agreed with the primary care clinician</p> <p>Dose increases should be monitored by FBC creatinine/eGFR, ALT and/or AST and albumin every 2 weeks for 6 weeks after the dose increase, then revert back to previous schedule.</p> <p>Termination of treatment will be the responsibility of the specialist.</p>						
<p>5. Baseline investigations, initial monitoring and dose titration to be undertaken by specialist</p>	<p>Baseline</p> <ul style="list-style-type: none"> • Height, weight, BP, FBC, creatinine/eGFR, ALT and /or AST, albumin. • Vaccinations against pneumococcus and influenza are recommended. • Shingles vaccine (Zostavax) is recommended as per the JCVI for eligible patients. • Specialist to highlight in the first clinic letter notifying the GP of the decision to initiate DMDs that the GP will need to give the shingles vaccine if the patient is older than 69 years and the pneumococcal vaccine if this has not already been given. The GP should also be advised to add the patient to the influenza vaccine list. • Patients should be assessed for comorbidities that may influence DMD choice, including evaluation of respiratory disease and screening for occult viral infection. <p>Initiation</p> <ul style="list-style-type: none"> • FBC, creatinine/eGFR, ALT and /or AST and albumin every 2 weeks until on stable dose for 6 weeks; • Once on stable dose, monthly FBC, creatinine/eGFR, ALT and /or AST and albumin. <p>Once patients have been stable for 12 months they can be considered for reduced frequency of monitoring, as advised by the specialist team. This monitoring consists of FBC, creatinine/eGFR, ALT and/or AST and albumin at least every 12 weeks.</p> <p>BP and blood glucose should be measured at each monitoring visit.</p>						
<p>6. Ongoing monitoring requirements to be undertaken by primary care.</p>	<table border="1"> <thead> <tr> <th data-bbox="531 1675 987 1731">Monitoring</th> <th data-bbox="987 1675 1498 1731">Frequency</th> </tr> </thead> <tbody> <tr> <td data-bbox="531 1731 987 1865">FBC, creatinine/eGFR, ALT and/or AST, Albumin, BP, Blood Glucose</td> <td data-bbox="987 1731 1498 1865" rowspan="2">Monthly until stable for 12 months, then every 12 weeks or as advised by the specialist. The exact frequency of the monitoring to be communicated by the specialist in all cases.</td> </tr> <tr> <td data-bbox="531 1865 987 2058">CRP and ESR (rheumatology patients only)</td> </tr> </tbody> </table>	Monitoring	Frequency	FBC, creatinine/eGFR, ALT and/or AST, Albumin, BP, Blood Glucose	Monthly until stable for 12 months, then every 12 weeks or as advised by the specialist. The exact frequency of the monitoring to be communicated by the specialist in all cases.	CRP and ESR (rheumatology patients only)	
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7. Pharmaceutical aspects	Route of administration	oral
	Formulation	10mg, 25mg, 50mg, 100mg capsules, 100mg/1ml oral solution
	Administration details	The daily doses of ciclosporin should be given in two divided doses The solution should be diluted, preferably with orange or apple juice, however, other drinks, such as soft drinks, can be used. (Rinse with more to ensure total dose is taken). Do not mix with grapefruit juice.
	Other important information	Concomitant intake of grapefruit juice has been reported to increase bioavailability of ciclosporin.
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 the active substance or excipients. • Concomitant use of tacrolimus • Abnormal renal function, uncontrolled hypertension, uncontrolled infections or any malignancy • SPC states live vaccines should be avoided; however JCVI and BSR recommend that oral DMD therapy at standard doses is not a contraindication in most patients, clinician discretion is advised. 	
9. Significant drug interactions	<p>For a comprehensive list consult the BNF or Summary of Product Characteristics. SPC</p> <p>Ciclosporin interacts with all statins and is contraindicated with rosuvastatin</p> <p>MHRA Safety alert: Statins: interactions, and updated advice for atorvastatin</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 $<2.0 \times 10^9/l$	
	Fall in platelets $<140 \times 10^9/l$	
	Increased MCV $>105fl$	Check folate, B12 & TSH. Treat if abnormal, contact SN for advice if normal.
	Unexplained reduction in albumin $<30g/l$	Contact SN for advice and management
	Abnormal LFTs – AST or ALT $>100U/l$	
	'Significant' increase in fasting lipids	
	Rash:	Stop drug and contact SN.
	Taste loss:	Reassure, continue drug.
	Nausea, vomiting, diarrhoea	Discuss with SN
Increase in serum creatinine $>30\%$ over period of 12 months or	Contact specialist nurse if there is new or unexplained renal	

	less OR decline in eGFR > 25%	impairment
	Hyperkalaemia:	Stop drug and contact SN
	Hypertension:	Consider anti-hypertensive agent. If hypertension persists, stop drug and contact SN
	Gingival hypertrophy	Send patient for dental advice
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	Ciclosporin can be used during pregnancy at the lowest effective dose after considering the potential risks and benefits. BP, renal function and drug level should be monitored. Mothers receiving treatment with ciclosporin should not be discouraged from breastfeeding. (BSR & BHPR guideline on prescribing in pregnancy and breastfeeding)	
13. Specialist contact information	See appendix 2	
14. Additional information	Where patient care is transferred from one 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 form <p>When two or more DMDs are initiated, one shared care agreement form should be completed for all relevant drugs.</p>	

Appendix 1

Policy for Shared Care

Shared care is only appropriate if it provides an optimum solution for the patient and it meets the criteria outlined in the Shared Care section of the Pan Mersey **Definitions and Criteria for Categorisation of Medicines in the Pan Mersey Formulary** document.

Before prescribing responsibilities are transferred to primary care:

- Prescribing responsibility will only be transferred when the consultant and the patient's GP agree that the patient's condition is stable.
- All information required by the shared care framework for the individual medicine has been provided to the patient's GP.
- Patients will only be referred to the GP once the GP has agreed to the Shared Care Agreement and returned signed copies.

Inherent in any shared care agreement is the understanding that participation is at the discretion of the GP, subject to the availability of sufficient information to support clinical confidence.

Specialist Responsibilities in Shared Care

- To initiate the medicine, prescribe, monitor for toxicity and efficacy as described by the shared care framework until the patient is stabilised.
- To ensure the patient or their carer:
 - Is counselled with regard to the risks and benefits of the medicine.
 - Provide any necessary written information to the patient with regard to the individual medicine including patient information leaflets on individual drugs.
 - Obtain and document informed consent from the patient when any medicines is prescribed for an off-label indication for any condition
- To be familiar with the shared care framework.
- To provide all information to the patient's GP as required by the shared care framework when prescribing responsibility is initially transferred and at any subsequent times as necessary for safe and effective treatment of the patient.
- To assess the patient regularly as necessary for the duration of therapy.
- To review the patient promptly if required by the GP concerned.

- To meet any additional requirements as required by the individual medicine shared care framework.
- To communicate failure of a patient to attend a routine hospital review and advise the GP of appropriate action to be taken.
- **Addition of a second DMD:** Following the addition of a new drug to an existing regime covered by a Shared Care Agreement, the Specialist must initiate, prescribe and monitor the new drug in accordance with the relevant shared care agreement including subsequent review and inform the GP of this. A new Shared Care Agreement must then be initiated for the new drug.

Primary Care Responsibilities in Shared Care

- To reply to a written request for Shared Care within 21 days ensuring both copies of the Shared Care Agreement are signed if appropriate.

If agreeing to shared care, the GP is asked to:

- To provide prescribe or manage and monitor the medicine as advised by the Specialist and in line with the individual Shared Care Framework.
- To review the patient as required by the Shared Care Framework
- To make appropriate and contemporaneous records of prescribing and/or monitoring and to note the existence of the Shared Care Agreement on the patient's clinical record. A READ code of "6652 Shared Care- Specialist/GP" can be used.
- To be familiar with the individual Shared Care Framework.
- To report any adverse effects of treatment to the specialist team.
- To inform the Specialist of any relevant change in the patient's circumstances.
- To seek Specialist advice as appropriate.
- To meet any additional requirements as required by the individual Shared Care Framework.
- To respond to Specialist communication relating to any change or addition to the patients treatment covered by the Shared Care Agreement.

Appendix 2: Shared Care Agreement

Disease modifying drugs (DMDs)

Request by Specialist Clinician for the patient's GP to enter into a shared care agreement

Part 1

To be signed by Consultant / Prescribing member of Specialist Team

Date _____

Name of patient _____

Address _____

Patient NHS No _____

Patient hospital unit No _____

Diagnosed condition _____

If using addressograph label please attach one to each copy

Dear Dr _____

I request that you prescribe

(1) _____

(2) _____

(3) _____

(4) _____

for the above patient in accordance with the enclosed shared care framework.

Last Prescription Issued: / / Next Supply Due: / /

Date of last blood test: / / Date of next blood test: / /

Frequency of blood test:

I confirm that the patient has been stabilised and reviewed on the above regime in accordance with the Shared Care Framework and Policy.

I confirm that if this is a Shared Care Agreement for a drug indication which is unlicensed or off label, informed consent has been received. N/A

Details of Specialist Clinicians

Name _____ Date _____

*Consultant / Prescribing member of Specialist Team *circle or underline as appropriate*

Signature _____

In all cases, please also provide the name and contact details of the Consultant.

When the request for shared care is made by a prescriber who is not the consultant, it is the supervising consultant who takes medico-legal responsibility for the agreement.

Consultant: _____

Contact details:

Telephone number: _____ Ext: _____

Address for return
of documentation

Part 2

To be completed by Primary Care Clinician

I agree to prescribe _____ for the above patient in accordance with the enclosed shared care framework.

GP signature _____ Date _____

GP name _____ Please print

GP: Please sign and return a copy **within 21 calendar days** to the address above

OR

GP- If you do not agree to prescribe, please delete the section above and provide any supporting information as appropriate below: