

## Ciclosporin Capsules/Oral solution

ESCA: For the treatment of Psoriasis / Atopic dermatitis

### AREAS OF RESPONSIBILITY FOR THE SHARING OF CARE

This shared care agreement outlines suggested ways in which the responsibilities for managing the prescribing of ciclosporin in Psoriasis / Atopic dermatitis can be shared between the specialist and general practitioner (GP). You are **invited** to participate however, if you do not feel confident to undertake this role, then you are under no obligation to do so. In such an event, the total clinical responsibility for the patient for the diagnosed condition remains with the specialist.

Sharing of care assumes communication between the specialist, GP and patient. The intention to share care will be explained to the patient by the specialist initiating treatment. It is important that patients are consulted about treatment and are in agreement with it. Patients with Psoriasis / Atopic dermatitis are usually under regular specialist follow-up, which provides an opportunity to discuss drug therapy.

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

### RESPONSIBILITIES and ROLES

Specialist responsibilities
1. Confirm the diagnosis of Psoriasis / Atopic dermatitis
2. Discuss the potential benefits, treatment side effects, and possible drug interactions with the patient
3. Ask the GP whether he or she is willing to participate in shared care before initiating therapy so that appropriate follow on prescribing arrangements can be made
4. Do baseline monitoring prior to initiation of ciclosporin, confirm the brand
5. Initiate treatment and stabilise dose of ciclosporin
6. Review the patient's condition and monitor response to treatment regularly
7. A written summary to be sent promptly to the GP i.e. within 10 working days of a hospital outpatient review or inpatient stay
8. Report serious adverse events to the MHRA via Yellow Card Scheme <a href="https://yellowcard.mhra.gov.uk">https://yellowcard.mhra.gov.uk</a>
9. Ensure clear backup arrangements exist for GPs, for advice and support (please complete contact details in appendix 1)

General Practitioner responsibilities					
1. Reply to the request for shared care as soon as practicable i.e. within 10 working days					
2. Prescribe ciclosporin at the dose recommended, by the brand defined as per the consultant					
3. Adjust the dose as advised by the specialist.					
4. In the patient's notes, using the appropriate read code listed below, denote that the patient is receiving treatment under a shared care agreement					
GP Prescribing System	Read Code	Description	GP Prescribing System	Read Code	Description
EMIS and Vision	8BM5.00	Shared care prescribing	SystemOne	XaB58	Shared care
5. Monitor patient's response to treatment; make dosage adjustments if agreed with specialist					
6. Report to and seek advice from the specialist or clinical nurse specialist on any aspect of patient care that is of concern to the GP, patient or carer and may affect treatment					
7. Refer back to specialist if condition deteriorates					
8. Report serious adverse events to specialist and MHRA via the Yellow Card Scheme <a href="https://yellowcard.mhra.gov.uk">https://yellowcard.mhra.gov.uk</a>					
9. Stop treatment on advice of specialist					

Patient's role
1. Report to the specialist, clinical nurse specialist or GP if he or she does not have a clear understanding of the treatment
2. Attend regularly for required blood tests and annual health checks.
3. Share any concerns in relation to treatment with ciclosporin with the specialist, clinical nurse specialist or GP
4. Report any adverse effects to the specialist or GP whilst taking ciclosporin
5. Attend regular outpatient appointments with the specialist

**Please enter Specialist contact details and patient specific information in Appendix 1**

**SUPPORTING INFORMATION**

<b>Indication</b>		Treatment of severe psoriasis in patients in whom conventional therapy is inappropriate or ineffective. Indicated in patients with severe atopic dermatitis when systemic therapy is required.
<b>Dosage and Administration</b>		
Psoriasis	Initial dose	For inducing remission, 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. Treatment should be discontinued in patients in whom sufficient response of psoriatic lesions cannot be achieved within 6 weeks on 5 mg/kg/day, or in whom the effective dose is not compatible with the established safety guidelines
	maintenance treatment	Doses have to be titrated individually to the lowest effective level, and should not exceed 5 mg/kg/day
Atopic dermatitis	Initial dose	The recommended dose range is 2.5 to 5 mg/kg/day given in 2 divided oral doses. If a starting dose of 2.5 mg/kg/day does not achieve a satisfactory response within 2 weeks, the daily dose may be rapidly increased to a maximum of 5 mg/kg. In very severe cases, rapid and adequate control of the disease is more likely to occur with a starting dose of 5 mg/kg/day
	maintenance treatment	Once satisfactory response is achieved, the dose should be reduced gradually and, if possible, ciclosporin should be discontinued. Subsequent relapse may be managed with a further course of ciclosporin.  Although an 8-week course of therapy may be sufficient to achieve clearing, up to 1 year of therapy has been shown to be effective and well tolerated, provided the monitoring guidelines are followed.
BSR/BHPR guideline for disease-modifying anti-rheumatic drug (DMARD) therapy in consultation with the British Association of Dermatologists (2008)		Psoriasis and atopic dermatitis (BAD): starting dose 2.5–5 mg/kg/day depending on disease severity and then treated according to response; maximum dose 5 mg/kg/day.
<b>Renal Impairment</b>	Patients with impaired renal function should not receive ciclosporin	
<b>Hepatic impairment</b>	Mild	Close monitoring of parameters that assess hepatic function is required and abnormal values may necessitate dose reduction.
	Moderate	
	Severe	Dose reduction may be necessary in patients with severe liver impairment to maintain blood levels within the recommended target range
<b>Contra-indications / Special precautions</b>	<p><b>Contraindications</b></p> <ul style="list-style-type: none"> <li>• Hypersensitivity to the active substance or to any of the excipients listed.</li> <li>• Combination with products containing <i>Hypericum perforatum</i> (St John's Wort).</li> <li>• Combination with medicines that are substrates for the multidrug efflux transporter P-glycoprotein or the organic anion transporter proteins (OATP) and for which elevated plasma concentrations are associated with serious and/or life-threatening events, e.g. bosentan, dabigatran etexilate and aliskiren</li> </ul> <p><b>Special warnings and precautions for use</b></p> <p><u>Medical supervision</u> Ciclosporin should be prescribed only by physicians who are experienced in immunosuppressive therapy and can provide adequate follow-up, including regular full physical examination, measurement of blood pressure and control of laboratory safety parameters. The physician responsible for maintenance therapy should receive complete information for the follow-up of the patient.</p> <p><u>Lymphomas and other malignancies</u> In view of the potential risk of skin malignancy, patients on ciclosporin, in particular those treated for psoriasis or atopic dermatitis, should be warned to avoid excess unprotected sun exposure and should not receive concomitant ultraviolet B irradiation or PUVA photochemotherapy.</p> <p><u>Infections</u> Effective pre-emptive and therapeutic strategies should be employed, particularly in patients on multiple long-term immunosuppressive therapy.</p> <p><u>Renal toxicity</u> A frequent and potentially serious complication, an increase in serum creatinine and urea, may occur</p>	

during ciclosporin therapy. Frequent monitoring of renal function is therefore required according to local guidelines for the indication in question.

#### Hepatotoxicity

Ciclosporin may also cause dose-dependent, reversible increases in serum bilirubin and in liver enzymes. Close monitoring of parameters that assess hepatic function is required and abnormal values may necessitate dose reduction.

Elderly population (age 65 years and above)

In elderly patients, renal function should be monitored with particular care.

Additional precautions in psoriasis

Discontinuation of ciclosporin therapy is recommended if hypertension developing during treatment cannot be controlled with appropriate therapy.

Elderly patients should be treated only in the presence of disabling psoriasis, and renal function should be monitored with particular care.

There is only limited experience with the use of ciclosporin in children with psoriasis.

In psoriatic patients on ciclosporin, as in those on conventional immunosuppressive therapy, development of malignancies (in particular of the skin) has been reported. Skin lesions not typical for psoriasis, but suspected to be malignant or pre-malignant should be biopsied before ciclosporin treatment is started. Patients with malignant or pre-malignant alterations of the skin should be treated with ciclosporin only after appropriate treatment of such lesions, and if no other option for successful therapy exists.

In a few psoriatic patients treated with ciclosporin lymphoproliferative disorders have occurred. These were responsive to prompt discontinuation.

Patients on ciclosporin should not receive concomitant ultraviolet B irradiation or PUVA photochemotherapy.

Additional precautions in atopic dermatitis

Discontinuation of ciclosporin is recommended if hypertension developing during treatment cannot be controlled with appropriate therapy.

Experience with ciclosporin in children with atopic dermatitis is limited.

Elderly patients should be treated only in the presence of disabling atopic dermatitis and renal function should be monitored with particular care.

Benign lymphadenopathy is commonly associated with flares in atopic dermatitis and invariably disappears spontaneously or with general improvement in the disease.

Lymphadenopathy observed on treatment with ciclosporin should be regularly monitored.

Lymphadenopathy which persists despite improvement in disease activity should be examined by biopsy as a precautionary measure to ensure the absence of lymphoma.

Active herpes simplex infections should be allowed to clear before treatment with ciclosporin is initiated, but are not necessarily a reason for treatment withdrawal if they occur during therapy unless infection is severe.

Skin infections with *Staphylococcus aureus* are not an absolute contraindication for ciclosporin therapy, but should be controlled with appropriate antibacterial agents. Oral erythromycin, which is known to have the potential to increase the blood concentration of ciclosporin, should be avoided. If there is no alternative, it is recommended to closely monitor blood levels of ciclosporin, renal function, and for side effects of ciclosporin.

Paediatric use in non-transplantation indications

	<p>Except for the treatment of nephrotic syndrome, there is no adequate experience available with ciclosporin. Its use in children under 16 years of age for non-transplantation indications other than nephrotic syndrome cannot be recommended.</p> <p>Please refer to SPC for full list- link under references.</p>	
<b>Side Effects</b>	Very common	Hyperlipidaemia, Tremor, headache, Hypertension, Nausea, vomiting, abdominal discomfort/pain, diarrhoea, gingival hyperplasia, peptic ulcer, Hirsutism, Renal dysfunction
	Common	Leucopenia, Hyperglycaemia, anorexia, hyperuricaemia, hyperkalaemia, hypomagnesaemia, Convulsions, paraesthesia, Flushing, Hepatic function abnormal, Acne, hypertrichosis, Myalgia, muscle cramps, Pyrexia, fatigue
<b>Monitoring</b>		
<p>In non-transplant patients, occasional monitoring of ciclosporin blood levels is recommended, e.g. when ciclosporin is co-administered with substances that may interfere with the pharmacokinetics of ciclosporin, or in the event of unusual clinical response (e.g. lack of efficacy or increased drug intolerance such as renal dysfunction).</p>		
Pre-treatment assessment	<p>Blood pressure to be &lt;140/90 mmHg before treatment on two measurements 2 weeks apart</p> <p>Renal Function - Creatinine: check twice, two weeks apart, to obtain a mean value for creatinine</p> <p>Liver function</p> <p>Lipid level</p> <p>Potassium levels</p>	
After commencing treatment	Blood pressure	Regular monitoring of blood pressure is required during ciclosporin therapy. If hypertension develops, appropriate antihypertensive treatment must be instituted. Preference should be given to an antihypertensive agent that does not interfere with the pharmacokinetics of ciclosporin.
	Lipid levels	Since ciclosporin has been reported to induce a reversible slight increase in blood lipids, it is advisable to perform lipid determinations before treatment and after the first month of therapy. In the event of increased lipids being found, restriction of dietary fat and, if appropriate, a dose reduction, should be considered.
	Hyperkalaemia	Ciclosporin enhances the risk of hyperkalaemia, especially in patients with renal dysfunction. Caution is also required when ciclosporin is co-administered with potassium-sparing drugs (e.g. potassium-sparing diuretics, angiotensin converting enzyme (ACE) inhibitors, angiotensin II receptor antagonists) or potassium-containing medicinal products as well as in patients on a potassium rich diet. Control of potassium levels in these situations is advisable.
	Hypomagnesaemia	Ciclosporin enhances the clearance of magnesium. This can lead to symptomatic hypomagnesaemia, especially in the peri-transplant period. Control of serum magnesium levels is therefore recommended in the peri-transplant period, particularly in the presence of neurological symptom/signs. If considered necessary, magnesium supplementation should be given.
	Hyperuricaemia	Caution is required when treating patients with hyperuricaemia.
	Live-attenuated vaccines	During treatment with ciclosporin, vaccination may be less effective. The use of live attenuated vaccines should be avoided
<p><b>Actions to be taken: (Based on BSR/BHPR guideline therapy in consultation with BAD - 2008)</b></p>		
Creatinine rises >30% from baseline	<i>Repeat in 1 week and if still &gt;30% above baseline withhold until discussed with the specialist team</i>	
Potassium rises to above the reference range	<i>Withhold until discussed with the specialist team</i>	
Platelets <120.000	<i>Withhold until discussed with the specialist team</i>	
'Significant' rise in fasting lipids	<i>Withhold until discussed with the specialist team.</i>	
High BP: 140/90 on two consecutive readings 2 weeks apart	<i>Treat blood pressure before stopping the ciclosporin (note interactions with several anti-hypertensives). If BP cannot be controlled, stop ciclosporin and obtain BP control before restarting ciclosporin. Discuss with the specialist team</i>	
AST, ALT or alkaline phosphatase more than 2 upper limit of reference range	<i>Withhold until discussed with the specialist team. Check any other reason such as alcohol, drug interaction including over the counter medication</i>	
Abnormal bruising	<i>Check FBC immediately and withhold until discussed with the specialist team</i>	

**Drug Interactions** (significant interaction as outlined in BNF, please see BNF and SPC for more detail)

Medication	Interaction	Severity of interaction	Evidence for interaction	Action
Aliskiren	Both ciclosporin and aliskiren can increase the risk of hyperkalaemia (hyperkalaemia is particularly notable when ACE inhibitors or angiotensin-II receptor antagonists are given with spironolactone or eplerenone). Ciclosporin markedly increases the exposure to aliskiren.	Severe	Study	Manufacturer advises avoid.
Amiodarone	Amiodarone increases the concentration of ciclosporin.	Severe	Study	Manufacturer advises monitor concentration and adjust dose.
Aprepitant	Aprepitant increases the concentration of ciclosporin.	Severe	Study	
Atazanavir	Atazanavir increases the concentration of ciclosporin.	Severe	Study	
Atorvastatin	Ciclosporin very markedly increases the exposure to atorvastatin.	Severe	Study	Manufacturer advises avoid or adjust atorvastatin dose.
Bacillus Calmette-Guérin vaccine	Bacillus Calmette-Guérin vaccine is predicted to increase the risk of generalised infection (possibly life-threatening) when given with ciclosporin. Public Health England advises avoid (refer to Green Book).	Severe	Theoretical	
Bezafibrate	Bezafibrate is predicted to increase the risk of nephrotoxicity when given with ciclosporin.	Severe	Theoretical	
Bosentan	Bosentan moderately decreases the exposure to ciclosporin and ciclosporin moderately increases the exposure to bosentan.	Severe	Study	Manufacturer advises avoid.
Carbamazepine	Carbamazepine decreases the concentration of ciclosporin.	Severe	Study	
Caspofungin	Ciclosporin slightly increases the exposure to caspofungin.	Severe	Study	
Ceritinib	Ceritinib is predicted to increase the exposure to ciclosporin.	Severe	Theoretical	Manufacturer advises avoid.
Clarithromycin	Clarithromycin increases the concentration of ciclosporin.	Severe	Study	
Cobicistat	Cobicistat increases the concentration of ciclosporin.	Severe	Study	
Colchicine	Ciclosporin increases the exposure to colchicine.	Severe	Study	Manufacturer advises avoid or adjust colchicine dose.
Crizotinib	Crizotinib increases the concentration of ciclosporin.	Severe	Study	
Dabigatran	Ciclosporin is predicted to increase the exposure to dabigatran.	Severe	Theoretical	Manufacturer advises avoid.
Danazol	Danazol increases the concentration of ciclosporin.	Severe	Study	

Daptomycin	Ciclosporin is predicted to increase the risk of rhabdomyolysis when given with daptomycin.	Severe	Theoretical	
Darunavir	Darunavir increases the concentration of ciclosporin.	Severe	Study	
Daunorubicin	Ciclosporin increases the concentration of daunorubicin.	Severe	Study	
Diclofenac	Both ciclosporin and diclofenac can increase the risk of nephrotoxicity. Both ciclosporin and diclofenac can increase the risk of hyperkalaemia (hyperkalaemia is particularly notable when ACE inhibitors or angiotensin-II receptor antagonists are given with spironolactone or eplerenone). Ciclosporin increases the concentration of diclofenac.	Severe	Study	
Digoxin	Ciclosporin increases the concentration of digoxin.	Severe	Theoretical	Manufacturer advises monitor and adjust dose.
Diltiazem	Diltiazem increases the concentration of ciclosporin.	Severe	Study	
Doxorubicin	Ciclosporin increases the concentration of doxorubicin.	Severe	Study	
Dronedarone	Ciclosporin increases the exposure to dronedarone. . Dronedarone increases the concentration of ciclosporin.	Severe	Theoretical /Study	Manufacturer advises avoid
Edoxaban	Ciclosporin slightly increases the exposure to edoxaban.	Severe	Study	Manufacturer advises adjust edoxaban dose.
Enzalutamide	Enzalutamide decreases the concentration of ciclosporin.	Severe	Study	
Epirubicin	Ciclosporin increases the concentration of epirubicin.	Severe	Study	
Erythromycin	Erythromycin increases the concentration of ciclosporin.	Severe	Study	
Etoposide	Ciclosporin increases the exposure to etoposide. Manufacturer advises monitor and adjust dose.	Severe	Study	
Everolimus	Ciclosporin moderately increases the exposure to everolimus.	Severe	Study	Manufacturer advises avoid or adjust dose.
Fenofibrate	Fenofibrate increases the risk of nephrotoxicity when given with ciclosporin.	Severe	Study	
Fluconazole	Fluconazole increases the concentration of ciclosporin.	Severe	Study	
Fluvastatin	Ciclosporin moderately increases the exposure to fluvastatin.	Severe	Study	
Fosamprenavir	Fosamprenavir increases the concentration of ciclosporin.	Severe	Study	
Fosphenytoin	Fosphenytoin decreases the concentration of ciclosporin.	Severe	Study	
Glecaprevir	Ciclosporin increases the exposure to glecaprevir.	Severe	Study	Manufacturer advises avoid or monitor.
Grapefruit juice	Grapefruit juice increases the concentration of ciclosporin.	Severe	Study	Manufacturer advises avoid.
Grazoprevir	Ciclosporin greatly increases the exposure to grazoprevir.	Severe	Study	Manufacturer advises avoid.
Idarubicin	Ciclosporin increases the concentration of idarubicin.	Severe	Study	

Idelalisib	Idelalisib increases the concentration of ciclosporin.	Severe	Study	
Imatinib	Imatinib increases the concentration of ciclosporin.	Severe	Study	
Influenza vaccine (live)	Influenza vaccine (live) is predicted to increase the risk of generalised infection (possibly life-threatening) when given with ciclosporin. Public Health England advises avoid (refer to Green Book).	Severe	Theoretical	
Isavuconazole	Isavuconazole increases the concentration of ciclosporin.	Severe	Study	
Itraconazole	Itraconazole increases the concentration of ciclosporin.	Severe	Study	
Ketoconazole	Ketoconazole increases the concentration of ciclosporin.	Severe	Study	
Lanreotide	Lanreotide is predicted to decrease the absorption of oral ciclosporin.	Severe	Theoretical	Manufacturer advises adjust dose.
Lercanidipine	Ciclosporin moderately increases the exposure to lercanidipine.	Severe	Study	Manufacturer advises use with caution or avoid.
Lopinavir	Lopinavir increases the concentration of ciclosporin.	Severe	Study	
Lumacaftor	Lumacaftor is predicted to decrease the exposure to ciclosporin.	Severe	Theoretical	Manufacturer advises avoid.
Measles, mumps and rubella vaccine, live	Measles, mumps and rubella vaccine, live is predicted to increase the risk of generalised infection (possibly life-threatening) when given with ciclosporin. Public Health England advises avoid (refer to Green Book).	Severe	Theoretical	
Miconazole	Miconazole increases the concentration of ciclosporin.	Severe	Anecdotal	Manufacturer advises monitor and adjust dose.
Mifamurtide	Ciclosporin is predicted to decrease the efficacy of mifamurtide.	Severe	Theoretical	Manufacturer advises avoid.
Mitoxantrone	Ciclosporin increases the concentration of mitoxantrone.	Severe	Study	
Netupitant	Netupitant increases the concentration of ciclosporin.	Severe	Study	
Nicardipine	Nicardipine increases the concentration of ciclosporin.	Severe	Study	
Nilotinib	Nilotinib increases the concentration of ciclosporin.	Severe	Study	
Octreotide	Octreotide decreases the absorption of oral ciclosporin.	Severe	Anecdotal	Manufacturer advises adjust ciclosporin dose.
Oxcarbazepine	Oxcarbazepine decreases the concentration of ciclosporin.	Severe	Anecdotal	
Pasireotide	Pasireotide is predicted to decrease the absorption of oral ciclosporin.	Severe	Theoretical	Manufacturer advises adjust dose.
Phenobarbital	Phenobarbital decreases the concentration of ciclosporin.	Severe	Study	
Phenytoin	Phenytoin decreases the concentration of ciclosporin.	Severe	Study	
Pibrentasvir	Ciclosporin increases the exposure to pibrentasvir.	Severe	Study	Manufacturer advises avoid or monitor.
Pitolisant	Pitolisant is predicted to decrease the exposure to ciclosporin.	Severe	Theoretical	Manufacturer advises avoid.
Posaconazole	Posaconazole increases the concentration of ciclosporin.	Severe	Study	

Pravastatin	Ciclosporin markedly to very markedly increases the exposure to pravastatin.	Severe	Study	Manufacturer advises adjust pravastatin dose.
Primidone	Primidone decreases the concentration of ciclosporin.	Severe	Study	
Rifampicin	Rifampicin decreases the concentration of ciclosporin.	Severe	Study	
Rifaximin	Ciclosporin very markedly increases the exposure to rifaximin.	Severe	Study	
Ritonavir	Ritonavir increases the concentration of ciclosporin.	Severe	Study	
Rosuvastatin	Ciclosporin markedly increases the exposure to rosuvastatin.	Severe	Study	Manufacturer advises avoid.
Rotavirus vaccine	Rotavirus vaccine is predicted to increase the risk of generalised infection (possibly life-threatening) when given with ciclosporin. Public Health England advises avoid (refer to Green Book).	Severe	Theoretical	
Saquinavir	Saquinavir increases the concentration of ciclosporin.	Severe	Study	
Simvastatin	Ciclosporin markedly increases the exposure to simvastatin.	Severe	Study	Manufacturer advises avoid.
Sirolimus	Ciclosporin moderately increases the exposure to sirolimus.	Severe	Study	Manufacturer advises separate administration by 4 hours.
Sulfinpyrazone	Sulfinpyrazone decreases the concentration of ciclosporin.	Severe	Study	
Tacrolimus	Both ciclosporin and tacrolimus can increase the risk of nephrotoxicity. Both ciclosporin and tacrolimus can increase the risk of hyperkalaemia (hyperkalaemia is particularly notable when ACE inhibitors or angiotensin-II receptor antagonists are given with spironolactone or eplerenone). Ciclosporin increases the concentration of tacrolimus.	Severe	Study	Manufacturer advises avoid.
Ticagrelor	Ciclosporin is predicted to increase the exposure to ticagrelor.	Severe	Study	Manufacturer advises use with caution or avoid.
Tipranavir	Tipranavir increases the concentration of ciclosporin.	Severe	Study	
Tofacitinib	Ciclosporin increases the exposure to tofacitinib.	Severe	Study	Manufacturer advises avoid.
Topotecan	Ciclosporin is predicted to increase the exposure to topotecan.	Severe	Study	
Typhoid vaccine, oral	Typhoid vaccine, oral is predicted to increase the risk of generalised infection (possibly life-threatening) when given with ciclosporin. Public Health England advises avoid (refer to Green Book).	Severe	Theoretical	
Ursodeoxycholic acid	Ursodeoxycholic acid affects the concentration of ciclosporin.	Severe	Anecdotal	Manufacturer advises use with caution and adjust dose.
Varicella-zoster vaccine	Varicella-zoster vaccine is predicted to increase the risk of generalised infection (possibly life-threatening) when given with ciclosporin. Public Health England advises avoid (refer to	Severe	Theoretical	

	Green Book).			
Venetoclax	Ciclosporin is predicted to increase the exposure to venetoclax.	Severe	Theoretical	Manufacturer advises avoid or monitor for toxicity.
Verapamil	Verapamil increases the concentration of ciclosporin.	Severe	Study	
Voriconazole	Voriconazole increases the concentration of ciclosporin.	Severe	Study	
Voxilaprevir	Ciclosporin increases the concentration of voxilaprevir.	Severe	Study	Manufacturer advises avoid.
Yellow fever vaccine, live	Yellow fever vaccine, live is predicted to increase the risk of generalised infection (possibly life-threatening) when given with ciclosporin. Public Health England advises avoid (refer to Green Book).	Severe	Theoretical	

### References

BSR/BHPR guideline for disease-modifying anti-rheumatic drug (DMARD) therapy in consultation with the British Association of Dermatologists (2008)

BNF Online

SmPC Neoral

**Appendix 1:**

**Effective Shared Care Agreement (ESCA)  
Ciclosporin Capsules/Oral solution**

For the treatment of Psoriasis / Atopic dermatitis

Please refer to BSSE APC formulary website for complete document.

**BACK-UP ADVICE AND SUPPORT (To be completed by Specialist team)**

Trust	Contact details	Telephone No.	Email address:
	Consultant:-		
	Specialist Nurse		

Patient's name	Date of birth	Sex	Home Address	Hospital Number
				NHS Number

*Hospital Specialist/Consultant*

Name (please print) \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

**To be completed by the General Practitioner:**

I agree to participate in this shared care agreement for the treatment of the below named patient with ciclosporin in Psoriasis / Atopic dermatitis

*General Practitioner*

Name (please print) \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

**Please keep a copy of this agreement for your own records and forward the original to the above named Consultant.**

In the patient's notes, using the appropriate Read Code listed below, denote that the patient is receiving treatment under a shared care agreement.					
GP Prescribing System	Read Code	Description	GP Prescribing System	Read Code	Description
EMIS and Vision	8BM5.00	Shared care prescribing	SystemOne	XaB58	Shared care