

Safe Prescribing and Monitoring Protocol for Systemic immunomodulatory therapies for immune-mediated inflammatory skin disease in the context of Coronavirus (COVID-19)

Key Considerations

The impact of systemic immunomodulatory and biological drugs for immune-mediated inflammatory skin disease on outcomes to Coronavirus (COVID-19) infection is unknown. For this reason, current recommendations are for patients to stay on their prescribed medications unless advised otherwise by their dermatology team.

In addition, resources for monitoring (e.g. blood tests) are likely to be reduced as personnel and services are diverted to the acute sector, and steps are being taken to reduce the risk of unnecessary travel. There will be many patients who have been on the same medication for significant periods of time with adequate disease control and blood monitoring that has remained satisfactory. For such patients it may be possible to safely increase the time interval for blood monitoring on a case-by-case basis.

Therefore, please consider the following carefully with reference to guidelines and table 1

When starting therapy:

- Is it essential to initiate this drug immediately?
- Is there a safer alternative? If it is in the best interests of the patient to select a treatment strategy that is outside an established treatment pathway, please document the reasons for this clearly in the notes. Reasons might include selection of an intervention with lower frequency monitoring/better risk profile in the context of COVID-19 (see table 1)
- Is the monitoring and review feasible? Consider the feasibility of where the patient will attend for monitoring on a case by case basis, in light of changes in resources and capacity.
- Can the monitoring safely be achieved remotely and at a frequency that maintains the safety and well-being of the patient? (see table 1)

When established on therapy

- Is this treatment required?
- Can the monitoring safely be achieved remotely and at a frequency that maintains the safety and well-being of the patient? (see table 1)

Please note that if a drug is not included in this protocol, normal Trust guidance should be applied.

Table 1: Summary of initiation and monitoring schedules in line with national guidelines and expert consensus opinion¹

Drug	Current Monitoring	Change	Interim Guidance Initiation Phase	Interim Guidance Maintenance Phase	Rational
Biologic s/c	Face to Face review and blood monitoring at baseline, week 4-6 and 3-4 month NICE time point And then 3-4 monthly year 1 6-12 monthly year 2	YES	Week 4-6: No routine blood monitoring. Telephone call 'safety check' to ensure correct dosing, screen for early AEs (e.g injection site reactions, conjunctivitis with dupilumab) 3-4 months: Retain visit for review (ideally including skin assessment) and blood monitoring at regular NICE time point 10 months: Virtual appointment with blood monitoring (Aim to achieve at least two sets of monitoring with review within year 1). After year 1, to be seen 6 monthly (see interim	6 monthly thereafter (*annual face to face review alternating with virtual appointment) Stable patient year 3 onwards consider annual review	In line with previous planned changes to biologics pathway. In line with national guidance and drug SPCs Patients to be provided with access points to the clinical team for advice where needed e.g. Zesty appointments

¹ These assessment and monitoring suggestions will need to be reviewed in the context of each individual. Additional measures may be required depending on the clinical circumstances, for example those with underlying condition (s) that may influence the safety of the intervention, pre-existing abnormal blood tests, those on co-therapy, those on novel agents. Please seek advice from the consultant in charge.

			guidance for maintenance phase).		
Biologic IV (Infliximab)	<p>Blood monitoring at week 2, 6</p> <p>Face to face review and blood monitoring at 3-4 NICE time point</p> <p>Face to face review and blood monitoring every 3-4 months thereafter (current practice only)</p>	NO	<p>Follow normal appointment and blood monitoring protocol</p> <p>Where possible align clinical review with infusion appointment to minimise visits. Where review required ensure this is booked on DDC before infusion time slot to avoid delay</p>	<p>Follow normal appointment and blood monitoring protocol</p> <p>Where possible align clinical review with infusion appointment to minimise visits. Where review required ensure this is booked on DDC before infusion time slot to avoid delay</p>	<p>Generally administered to high risk group.</p> <p>To ensure no early idiosyncratic reactions/ Infection in HS patients</p> <p>SPC recommends liver monitoring in particular but no specific time points- rare cases of severe fatal reactions.</p> <p>SPC reports of pancytopenia/ leucopenia/ neutropenia</p> <p>Blood can be taken from the cannula on the day</p>
MTX ²	<p>Blood monitoring weekly for 4 weeks after initiation or weekly for 2 weeks following a dose change</p> <p>Face to face review at 4-6 weeks, and then at 3 months with blood monitoring</p> <p>Thereafter 3 monthly face to face reviews and blood monitoring</p>	YES	<p>Avoid dose titration to reduce monitoring. Initiate at 15mg unless reason not to (see guideline e.g. elderly, poor renal function)</p> <p>Follow normal blood monitoring protocol (frequency and content)</p> <p>Week 4-6: Telephone call 'safety check' if bloods stable to ensure correct</p>	<p>Follow normal appointment and blood monitoring protocol (consider virtual review where appropriate)</p>	<p>In line with licence (recommends bloods at week 1 and every 7-14 days for first month thereafter 2-3 monthly) and BAD and recent shared care agreement.</p> <p>No clinical experience within dermatology to inform change to practice³</p> <p>Continue to use methotrexate monitoring booklets as per normal protocol (as NHSE mandatory requirement)</p>

² Avoid initiation of this drug given burden of monitoring unless no other safer alternative

³ Rheumatology do not titrate and do bloods week 2 and face to face at week 6

			<p>dosing, screen for early AEs.</p> <p>3 months: Retain visit for review (ideally including skin assessment) and blood monitoring</p>		
Ciclosporin ⁴	<p>Blood monitoring and blood pressure monitoring every 2 weeks for 12 weeks following initiation</p> <p>Face to face review at 4-6 weeks, and then at 3 months with monitoring</p> <p>Thereafter 3 monthly face to face reviews with monitoring</p> <p>Monitoring every 2 weeks for 4 weeks following dose change</p>	YES	<p>Follow normal blood monitoring protocol (frequency and content). Self-monitoring of BP where possible</p> <p>Week 4-6: Telephone call 'safety check' if bloods stable to ensure correct dosing, screen for early AEs.</p> <p>3 months: Retain visit for review (ideally including skin assessment) and blood monitoring</p>	Follow normal appointment and blood monitoring protocol (consider virtual review where appropriate)	In line with licence and recently agreed shared care guidance. Risk of myelosuppression and nephrotoxicity without monitoring

⁴ Avoid initiation of this drug given burden of monitoring unless no other safer alternative

<p>Azathioprine⁵</p>	<p>Blood monitoring weekly for 4 weeks following initiation or dose change, then monthly for 2 months.</p> <p>Face to face review at 4-6 weeks, and then at 3 months with blood monitoring</p> <p>Thereafter 3 monthly face to face reviews with blood monitoring</p> <p>Dose variable based on TPMP</p>	<p>YES</p>	<p>Follow normal blood monitoring protocol (frequency and content).</p> <p>Week 4-6: Telephone call 'safety check' if bloods stable to ensure correct dosing, screen for early AEs.</p> <p>3 months: Retain visit for review (ideally including skin assessment) and blood monitoring</p>	<p>Follow normal appointment and blood monitoring protocol (consider virtual review where appropriate)</p>	<p>In line with licence (actually suggests weekly for 8 weeks and no more than 12 weekly for maintenance) and recently agreed shared care guidance. Risk of myelosuppression and hepatotoxicity without monitoring</p>
<p>Mycophenolate⁶</p>	<p>Blood monitoring weekly for 2 weeks following initiation and after each dose increase.</p> <p>Face to face review at 4-6 weeks, and then at 3 months with blood monitoring</p>	<p>YES</p>	<p>Follow normal monitoring protocol (frequency and content)</p> <p>Week 4-6: Telephone call 'safety check' if bloods stable to ensure correct dosing, screen for early AEs.</p> <p>3 months:</p>	<p>Follow normal appointment and blood monitoring protocol (consider virtual review where appropriate)</p>	<p>In line with licence and recently agreed shared care guidance. Risk of myelosuppression without monitoring</p> <p>No clinical experience in dermatology to inform change to practice^{7 b}</p>

⁵ Avoid initiation of this drug given burden of monitoring unless no other safer alternative

⁶ Avoid initiation of this drug given burden of monitoring unless no other safer alternative

⁷ Rheumatology have some experience of starting at 1g, do not titrate and bloods at week 2 and 6

	Thereafter 3 monthly face to face reviews with blood monitoring		Retain visit for review (ideally including skin assessment) and blood monitoring		
Apremilast	Face to face review at 4-6 weeks Face to face review at 3 months, then 6 monthly thereafter	YES	Week 4-6: Telephone call 'safety check' to assess if tolerating and any effect on patient mood. 3 months: Retain visit for review (ideally including skin assessment)	6 monthly thereafter (consider alternating virtual and face to face reviews)	No routine monitoring recommended in SPC We had been monitoring whilst black triangle drug but no longer applicable HIGH COST drug - risk for posting
Dapsone	Blood monitoring weekly for 4 weeks following initiation and then monthly for 3 months. Face to face review at 4-6 weeks, and then at 3 months with blood monitoring Thereafter 3 monthly face to face reviews with blood monitoring Blood monitoring at weeks 2, 4 and 8 after a dose increase. Thereafter 3-4 monthly	YES	Follow normal monitoring protocol (frequency and content). Week 4-6: Telephone call 'safety check' if bloods stable to ensure correct dosing, screen for early AEs. 3 months: Retain visit for review (ideally including skin assessment) and blood monitoring	Follow normal appointment and blood monitoring protocol (consider virtual review where appropriate)	Risk of haemolysis, Methaemoglobinaemia, Agranulocytosis License recommends blood monitoring but doesn't specify regimen

<p>Acitretin</p>	<p>Blood monitoring at week 4 and 8 following initiation.</p> <p>Face to face review at 4-6 weeks, and then at 3 months with blood monitoring</p> <p>Thereafter 3 monthly face to face reviews with blood monitoring</p>	<p>YES</p>	<p>Follow normal monitoring protocol (frequency and content).</p> <p>Week 4-6: Telephone call 'safety check' if bloods stable to ensure correct dosing, screen for early AEs.</p> <p>Virtual consultation. No change. Review on case by case basis. Outside of license. If not suitable/has not opted out of PPP then consider interrupting treatment on discussion with the supervising consultant.</p>	<p>Follow normal appointment and monitoring protocol</p> <p>If patient has opted out of PPP and stable may consider a virtual consult and re-issue of prescription for collection but must be clearly marked as exempt PPP.</p>	<p>Monitoring recommendations in keeping with European S3 Guidelines and reflects clinical practice.</p> <p>SPC recommends more frequent monitoring: liver function before starting, every 1-2 weeks for the first 2 months, then 3 monthly during treatment. Lipids and fasting blood glucose before starting treatment, 1 month after, then 3 monthly during treatment.</p> <p>MHRA updated June 2019-recommended PPP for this drug. Patients who are not appropriate to opt out (with consent) of pregnancy prevention programme are required to ideally have a pregnancy test on the day of issuing the prescription and dispensing the medication. This would be difficult to manage virtually within current governance arrangements</p>
<p>Isotretinoin</p>	<p>Depending on PPP pathway, blood monitoring and face to face review at 4-6 weeks (nurse-led) then monthly face to face review if opted into PPP, or 3</p>	<p>NO</p>	<p>Follow normal monitoring protocol (frequency and content).</p>	<p>Following normal appointment and monitoring protocol.</p> <p>If patient has opted out of PPP and stable may consider a virtual consult and re-issue of</p>	<p>License recommend bloods at 1 month and 3 monthly thereafter.</p> <p>Assessment of mood and PPP make remote monitoring difficult</p> <p>MHRA updated June 2019-recommended PPP for this drug.</p>

	<p>monthly face to face reviews if opted out.</p> <p>Face to face review at week 16-18 (Dr)</p> <p>Continue monthly visits for those in PPP until next Dr review week 26-30 when therapy may stop.</p> <p>OR issued 8-12 weeks until final review if opted out of PPP</p>			<p>prescription for collection but must be clearly marked as exempt PPP.</p>	<p>Patients who are not appropriate to opt out (with consent) of pregnancy prevention programme are required to ideally have a pregnancy test on the day of issuing the prescription and dispensing the medication. This would be difficult to manage virtually within current governance arrangements</p>
Alitretinoin	<p>Depending on PPP pathway, blood monitoring and face to face review at 4-6 weeks (nurse-led) then monthly face to face review if opted into PPP, or 3 monthly face to face reviews if opted out.</p> <p>Face to face review at week 16-18 (Dr)</p> <p>Continue monthly visits for those in PPP until next Dr review week 26-30 when therapy may stop.</p>	NO	Follow normal monitoring protocol (frequency and content).	<p>Follow normal appointment and monitoring protocol</p> <p>If patient has opted out of PPP and stable may consider a virtual consult and re-issue of prescription for collection but must be clearly marked as exempt PPP.</p>	<p>License recommends monitoring of mood, lipids and hepatic function but no specific time point</p> <p>Assessment of mood and PPP make remote monitoring difficult.</p> <p>HIGH COST drug - risk for posting</p> <p>MHRA updated June 2019- recommended PPP for this drug. Patients who are not appropriate to opt out (with consent) of pregnancy prevention programme are required to ideally have a pregnancy test on the day of issuing the prescription and dispensing the medication. This</p>

	OR issued 8-12 weeks until final review if opted out of PPP				would be difficult to manage virtually within current governance arrangements.
Dimethyl fumarate ⁸	<p>Bloods and urine monitoring at week 8 and 12</p> <p>Face to face review at 4-6 weeks, and then at 3 months with blood monitoring</p> <p>Thereafter 3 monthly face to face reviews with blood monitoring</p>	YES	<p>Follow normal monitoring protocol (frequency and content).</p> <p>Week 4-6: Telephone call 'safety check' if bloods stable to ensure correct dosing, screen for early AEs.</p> <p>3 months: Retain visit for review (ideally including skin assessment) and blood monitoring</p>	<p>Follow normal appointment and blood monitoring protocol (consider virtual review where appropriate).</p>	<p>SPC advises 3 monthly as minimum or monthly if counts drop.</p> <p>High risk of adverse effects in early treatment</p>

⁸ Avoid initiation of this drug given burden of monitoring unless no other safer alternative