High Risk Drug monitoring in primary care during COVID-19

Azathioprine, leflunomide, mercaptopurine, and methotrexate

The following advice is for the management of patients taking DMARDs for rheumatology related conditions.

General guidance on management of rheumatology patients during COVID-19 is available from the British Society for Rheumatology.

This page gives advice on drug monitoring in primary care during COVID-19 for the following drugs when used as DMARDs in stable patients (*stable patients are defined as those who have been on current treatment for >12 months and at a stable dose for >6 weeks*):

Azathioprine, Leflunomide, Mercaptopurine, and Methotrexate

During the COVID-19 pandemic, recommendations to reduce attendances are:

- Where DMARD use has been successful and stable (*see definition of stable above*) consider extending the monitoring interval to up to every 6 months
- However, extending blood monitoring is **not suitable** if the patient has:
    - poor renal function with CKD ≥ 3
    - severe liver disturbance or abnormal liver results due to DMARDs within previous 3 months
    - severe abnormal WBC results due to DMARDs within previous 3 months

For patients with symptoms of COVID-19, recommendations are:

- Consider stopping medication (see *"Should patients cease their medication as a precaution?"* advice from BSR) and seek specialist advice on when to re-start
- Undertake additional blood tests after self-isolation and within two weeks of re-starting medication
- If results okay—revert to monitoring every 6 months; if abnormal—seek specialist advice
- Refer patients to advice from Versus Arthritis

This page was developed in conjunction with Kalveer Flora, Chair, Rheumatology Pharmacists UK (RPUK); Lead Pharmacist, Specialised Rheumatology CRG for NHS England. We are hugely grateful for her input

Sulfasalazine drug monitoring in primary care during COVID-19

The following advice is for the management of patients taking DMARDs for rheumatology related conditions.

General guidance on management of rheumatology patients during COVID-19 is available from the British Society for Rheumatology.

This page gives advice on drug monitoring in primary care during COVID-19 for sulfasalazine when used as a DMARD in stable patients (*stable patients defined as those who have been on current treatment for >12 months and at a stable dose for >6 weeks)*

For sulphasalazine, the usual monitoring recommendations are:

- After 12 months, no routine monitoring required unless patient is at high risk of toxicity in which case monitoring may be more frequent

During the COVID-19 pandemic, recommendations are:

- No change to the existing monitoring regimen is recommended

For patients with symptoms of COVID-19, recommendations are:

- Consider stopping medication (see *"Should patients cease their medication as a precaution?"* advice from BSR) and seek specialist advice on when to re-start
- Undertake additional blood tests after self-isolation and within two weeks of re-starting medication
- If results okay—revert to usual monitoring recommendations; if abnormal—seek specialist advice
- Refer patients to advice from Versus Arthritis

Hydroxychloroquine drug monitoring in primary care during COVID-19

The following advice is for the management of patients taking DMARDs for rheumatology related conditions.

General guidance on management of rheumatology patients during COVID-19 is available from the British Society for Rheumatology.

This page gives advice on drug monitoring in primary care during COVID-19 for hydroxychloroquine in stable patients (*stable patients defined as those who have been on current treatment for >12 months and at a stable dose for >6 weeks)*

For hydroxychloroquine, usual monitoring **recommendations are:**

- annual eye assessment (ideally including optical coherence tomography) if continued for ≥5 years (see RCO advice)
- No routine laboratory monitoring is required for hydroxychloroquine

During the COVID-19 pandemic, recommendations are:

- Consider suspending annual eye assessment with ophthalmologist advice

For patients with symptoms of COVID-19, recommendations are:

- Consider stopping medication (see *"Should patients cease their medication as a precaution?"* advice from BSR) and seek specialist advice on when to re-start
- refer patients to advice from Versus Arthritis

Ciclosporin drug monitoring in primary care during COVID-19

The following advice is for the management of patients taking DMARDs for rheumatology related conditions.

General guidance on management of rheumatology patients during COVID-19 is available from the British Society for Rheumatology.

This page gives advice on drug monitoring in primary care during COVID-19 for ciclosporin when used as a DMARD in stable patients (*stable patients are defined as those who have been on current treatment for >12 months and at a stable dose for >6 weeks*)

For ciclosporin, the usual monitoring recommendation is:

During the Covid-19 pandemic, the recommendation to reduce attendances is:

- For those on 4 weekly monitoring, consider extending the monitoring interval to between 6 to 8 weeks with specialist advice
- For those who receive monitoring less frequently, seek specialist advice for extensions to monitoring during the COVID-19 pandemic
- For those who receive monitoring more frequently due to being at higher risk of toxicity, seek specialist advice for extensions to monitoring during the COVID-19 pandemic

For patients with symptoms of COVID-19, recommendations are:

- Consider stopping medication (see *"Should patients cease their medication as a precaution?"* advice from BSR) and seek specialist advice on when to re-start
- Undertake additional blood tests after self-isolation and within two weeks of re-starting medication
- If results okay—revert to monitoring at extended interval; if abnormal—seek specialist advice
- Refer patients to advice from Versus Arthritis

Penicillamine drug monitoring in primary care during COVID-19

The following advice is for the management of patients taking DMARDs for rheumatology related conditions.

General guidance on management of rheumatology patients during COVID-19 is available from the British Society for Rheumatology.

This page gives advice on drug monitoring in primary care during COVID-19 for penicillamine when used as a DMARD in stable patients (*stable patients are defined as those who have been on current treatment for >12 months and at a stable dose for >6 weeks*)

For penicillamine, the usual monitoring recommendation is:

- 4 weekly monitoring of FBC, CrCl or calculated GFR, ALT and/or AST, albumin, urinalysis (blood and protein)
- Depending on local policy, people who have been stable for 12 months *may* be considered for reduced monitoring frequency (every 3 months) on an individual basis
- More frequent monitoring may be appropriate in patients at higher risk of toxicity

During the COVID-19 pandemic, the recommendation to reduce attendances is:

- For patients not already being monitored on a 3 monthly basis, consider extending the monitoring interval to up to 3 monthly
- For those who receive monitoring more frequently due to being at higher risk of toxicity, seek specialist advice for extensions to monitoring during the COVID-19 pandemic

For patients with symptoms of COVID-19, recommendations are:

- Consider stopping medication (see *"Should patients cease their medication as a precaution?"* advice from BSR) and seek specialist advice on when to re-start
- Undertake additional blood tests after self-isolation and within two weeks of re-starting medication
- If results okay—revert to monitoring at extended interval; if abnormal—seek specialist advice
- Refer patients to advice from Versus Arthritis

Lithium drug monitoring during COVID-19 for stable adult patients

General guidance on the management of medicines to treat mental health conditions during COVID-19 is available from the Royal College of Psychiatrists

Normal monitoring recommendations for lithium are:

- thyroid function, renal function and weight check normally every 6 months; or every 3 months in at-risk patients (defined below)
- once stable, serum lithium levels every 3 months for the first year then normally every 6 months thereafter; or continue every 3 months in at-risk patients (defined below)

During the COVID-19 pandemic, recommendations are:

- If patients are not in the at-risk category (defined below) then monitoring intervals can be extended by up to 3 months; however, patients must keep in good physical health and maintain good fluid intake and should resume normal monitoring intervals as soon as possible and safe to do so
- If patients are in the at-risk category (defined below) then their normal monitoring interval should be continued and extension is in most circumstances inappropriate

At-risk patients are defined as:

- Elderly (> 65 years)
- Have received less than 12 months treatment
- Renal impairment (eGFR < 60ml/min)
- Impaired thyroid function at last test
- Raised calcium levels at last test
- Poor symptom control or suspected poor adherence
- Last serum lithium > 0.8mmol/L
- Recent (i.e. since last blood test) introduction or removal of interacting medications (See BNF for exhaustive list. Key interacting medications include, NSAIDs, ACEi, ARB and thiazide diuretics)

For patients with COVID-19 symptoms, recommendations are:

- If patient does not have symptoms of lithium toxicity, continue lithium but take lithium serum level and U&Es
- If patient has symptoms of lithium toxicity WITHOLD lithium, take URGENT lithium serum level and U&Es
- Symptoms of lithium toxicity include: diarrhoea, vomiting, tremor, mental state changes, or falls
- Advise patients to maintain their fluid intake and not to take over-the-counter NSAIDs (e.g. ibuprofen), but to take paracetamol instead.

Reference – SPS - https://www.sps.nhs.uk/articles/drug-monitoring-in-primary-care-for-stable-patients-during-covid-19/