BNSSG Shared Care Guidance
Please complete all sections

Section 1: Heading

Drug	Hydroxychloroquine
Amber *one month*	
Indication	**Dermatological Indications**: Cutaneous lupus erythematosus, lichen plano-pilaris, lichen planus, scarring alopecias, dermatomyositis, systemic and subacute lupus erythematosus, mixed connective tissue disease, sarcoidosis, chronic spontaneous urticarial and other photosensitivity disorders & inflammatory skin conditions **Rheumatological Indications**: Autoimmune rheumatologic conditions including inflammatory arthritis and connective tissue diseases and vasculitis.

Section 2: Treatment Schedule

Usual dose and frequency of administration *(Please indicate if this is licensed or unlicensed and any relevant dosing information)*	200mg-400mg daily (Capped at 5mg/kg or max 400mg daily)
Route and formulation	Tablets for oral administration
Duration of treatment	Long term. As long as clinically indicated- unless a serious side effect occurs or the drug becomes ineffective.

Section 3: Monitoring

Please give details of any tests that are required before or during treatment, including frequency, responsibilities (please state whether they will be undertaken in primary or secondary care), cause for adjustment and when it is required to refer back to the specialist.

Baseline tests - where appropriate
Pre-treatment assessment: Height, weight, FBC, renal function/GFR, LFT's will be done prior to commencing hydroxychloroquine but does not need repeating routinely. As part of pre-treatment assessment, rheumatology will also check blood pressure. The Royal College of Ophthalmologists no longer recommend baseline formal ophthalmic examination using optical coherence tomography (OCT) for new initiators of hydroxychloroquine (RCOphth, 2020)

Subsequent tests - where appropriate *(Please indicate who takes responsibility for taking bloods and interpreting results)*
This will be performed primarily by the patient's GP, with support from the rheumatology team in the event of abnormal results (see below) Annual eye assessment (ideally including optical coherence tomography) if continued for >5 years. Monitoring may be started one year after therapy is initiated if additional risk factors exist e.g. very high dose of drug therapy, concomitant Tamoxifen therapy or renal insufficiency. Currently, the Bristol Eye Hospital are only seeing patients who have been prescribed hydroxychloroquine for >5 years. The recall process will be managed by the hospital The Royal College of Ophthalmologists guidelines do not make any recommendation for patients to arrange annual community optometrist however locally specialists recommend routine optometry reviews, further information available from NHS website here. Patients should be advised to report any visual disturbance to the optometrist who can assess and refer if appropriate, consider assessment by optometrist in first instance.

Section 4: Side Effects

Please list only the most pertinent side effects and management. Please provide guidance on when the GP should refer back to the specialist. For everything else, please see BNF or SPC.

Side effects and management	**Common or very common:** gastro-intestinal disturbances (diarrhoea, loss of appetite, nausea, abdominal pain), headache, vision disorder, emotional lability, pruritus, rash and skin reactions. **Uncommon:** convulsions, hair loss, visual changes, discoloration of skin, nails and mucous membranes, ECG changes, hair depigmentation, keratopathy, ototoxicity, retinal damage. Ocular complications with hydroxychloroquine therapy are not common, but potentially serious. High doses of hydroxychloroquine may be associated with a maculopathy, presenting with impaired visual acuity and central visual field disturbance. **Rare:** AGEP, agranulocytosis, angioedema, aplastic anaemia, blood disorders, cardiomyopathy, emotional disturbances, exfoliative dermatitis, hepatic damage, mental changes, myopathy, photosensitivity, psychosis. Chickenpox or shingles infection – treat with aciclovir
Referral back to specialist	Development of blurred vision or changes in visual acuity with no causes found by optometrist, or optometry concerns about retina toxicity - Refer to ophthalmologist.

Section 5: Other Issues

(e.g. Drug Interactions, Contra-indications, Cautions, Special Recommendations)

Please list only the most pertinent action for GP to take (For full list please see BNF or SPC)

Issues	Hydroxychloroquine should not be prescribed with amiodarone, ciclosporin, droperidol, mefloquine or moxifloxacin. The plasma concentration of digoxin may be increased when co-prescribed with hydroxychloroquine. Metabolism of hydroxychloroquine is inhibited by cimetidine. **Cautions:** • Acute porphyrias, diabetes (may lower blood glucose), elderly, G6PD deficiency, may aggravate myasthenia gravis, severe GI disorders • Renal and liver impairment [caution if eGFR<50. If eGFR 30-50:maximum 75% of dose; eGFR 10-30: 25-50% of dose (equivalent of 150mg daily); eGFR<10: 25-50% of dose (equivalent of 50-100mg daily)] • Concomitant tamoxifen therapy • Neurological disorders specially in those with history of epilepsy: may reduce threshold for convulsions • Avoid antacids within 4h of dose • May exacerbate psoriasis • Hydroxychloroquine remains the antimalarial of choice in women planning a pregnancy with rheumatic disease in need of treatment, and should be continued during pregnancy. • Hydroxychloroquine is compatible with breastfeeding **Contraindications:** Pre-existing maculopathy. The Royal College of Ophthalmology Guidelines for Hydroxychloroquine retinopathy monitoring (2020) state that there is no clear evidence that macular pathology at treatment initiation increases the risk of hydroxychloroquine retinopathy. Patients with macular pathology may have images which cannot be interpreted as the images are already abnormal and so hydroxychloroquine toxicity cannot be detected. The guidelines advise that in this situation where a patient cannot undergo monitoring, or in whom retinal imaging cannot be performed or images interpreted, a discussion between the patient and the prescribing physician is recommended to determine whether hydroxychloroquine treatment should be continued without retinal monitoring (RCOphth, 2020). Hypersensitivity to hydroxychloroquine
Reminder to ask patient about specific problems	Patients should be advised to report any visual disturbance

Section 6: Advice to the patient

Advice for prescribing clinician to inform patient

1. Discuss potential benefits and side-effects of treatment with the Specialist and/or GP.
2. Share any concerns they have in relation to their treatment.
3. To report any side-effects to the Specialist and/or GP (see individual drug fact sheet for specific information).
4. To recommend routine optician review whilst taking hydroxychloroquine.
5. To agree to and attend for eye examination (currently being done at Bristol eye hospital) once they have been on the drug for 5 years.
6. To inform GP/Specialist/pharmacist of all medicines (including OTC preparations) that they are currently taking.
7. Patients should report any visual disturbance (e.g. changes in visual acuity or blurred vision) immediately to their GP and/or see their community optometrist

Section 7: Generic principles of shared care for SECONDARY CARE

Please do not amend.

Core responsibilities

1. Initiating treatment and prescribing for the length of time specified in **section 1.**
2. Undertaking the clinical assessment and monitoring for the length of time specified in **section 1** and thereafter undertaking any ongoing monitoring as detailed in **section 3.**
3. Communicate details of the above in 1 and 2 to GP within the first month of treatment. This information should be transferred in a timely manner.
4. Refer patients to GP and provide information of further action where appropriate e.g. if blood test is due.
5. To provide advice to primary care when appropriate.
6. Review concurrent medications for potential interaction prior to initiation of drug specified in **section 1.**
7. Stopping treatment where appropriate or providing advice on when to stop.
8. Reporting adverse events to the MHRA.
9. Reminder to ask patients about particular problems see **section 5.**

Section 8: Generic principles of shared care for PRIMARY CARE

Please do not amend.

Core responsibilities

1. Responsible for taking over prescribing after the length of time specified in **section 1.**
2. Responsible for any clinical assessment and monitoring if detailed in **section 3** after the length of time specified in **section 1.**
3. Review of any new concurrent medications for potential interactions.
4. Reporting adverse events to the MHRA.
5. Refer for advice to specialist where appropriate.
6. Reminder to ask patients about particular problems see **section 5.**

Section 9: Contact Details

Organisation	Contact	Contact details	Availability
University Hospitals Bristol and Weston NHS Foundation Trust, Bristol Royal Infirmary	Rheumatology Telephone Advice Line	Tel: 0117 3424881 Registrar bleep: 7021	**Mon – Thu 9am to 5pm Fri 9am to 1pm**
North Bristol Trust, Southmead Hospital	Consultant secretary as per clinic letter OR Rheumatology Telephone Advice Line	Tel: 0117 4140600 Fax: 0117 4140570 Tel: 07894800989 On Call Tel: 07894800989 Sat/Sun 9am-noon (GP service for existing NBT rheum patients only)	**Mon – Fri 9am to 5pm**
University Hospitals Bristol and Weston NHS Foundation Trust, Weston General Hospital	Weston Rheumatology Telephone Advice Line	Tel:01934 881075 Fax: 01934 647025 On Call registrar bleep: 279	**Mon – Fri 9am to 5pm**
BNSSG CCG	Interface Pharmacists	BNSSG.Formulary@nhs.net	**Mon-Fri 9am to**

			5pm
University Hospitals Bristol and Weston NHS Foundation Trust, Bristol Royal Infirmary and Weston General Hospital	Consultant secretary as per clinic letter OR Dermatology CNS email	dermatologysecretaries@uhbw.nhs.uk medicaldermatologyclinicalnursespecialists@uhbw.nhs.uk	

Section 10: Document Details

Date prepared	July 2021
Prepared by	Formulary team (collated dermatology and rheumatology SCPs)
Date approved by JFG	September 2021
Date of review	September 2023
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Section 11: Collaboration

All shared care protocols should be BNSSG wide where possible. Specialists in any one discipline are encouraged to collaborate across the health community in preparing shared care guidance. Please give details

1. Rheumatology NBT and UHBW
2. Dermatology UHBW

Section 12: References

Please list references

1. Royal College of Ophthalmologists (2020) Hydroxychloroquine and Chloroquine retinopathy: recommendations on monitoring. Available at: Hydroxychloroquine-and-Chloroquine-Retinopathy-Monitoring-Guideline.pdf (rcophth.ac.uk) [accessed 19/08/21]
2. NHS (2019) How often can I have a free eye test? Available from: How often can I have a free NHS sight test? - NHS (www.nhs.uk) [accessed 19/08/21]