The Pharm- Assistant
presents

MANAGING

DMARD'S

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WELCOME

TO THE PHARM-ASSISTANT

The Pharm-Assistant Platform has been set up to help health professionals widen their scopes of practice, while also developing confidence, comfort, and competence in their roles. Over the last 3 years I have helped many pharmacists achieve new goals and succeed in more challenging roles within the profession. For more information please visit my website at www.pharm-assistant.co.uk.

I have been mentoring pharmacists since 2018. At first for the Royal Pharmaceutical Society, and since 2021 as an independent mentor with a simple vision in mind.

"I want to help as many pharmacists as possible develop into being the best they can be, EITHER in the role they are in, OR in the role they want to be in."

So if you are someone who is lost and not quite sure what the next step is I urge you to GET IN TOUCH AT:

https://pharm-assistant.co.uk/need-a-mentor%3F.

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DISCLAIMER
TO THE READER

This guide is written from a clinical perspective to help health professionals structure their consultations, such that they are able to accurately help to manage their patients with regards the high risk medications.

This guide does not seek to circumvent the guidelines, and clinical training already given to Pharmacists by the NHS. Where this guide differs from the information given to you by the NHS, clinicians should follow the national guidance given.

This guide does not aim to replace a pharmacists clinical judgment, and responsibility for decisions made ultimately lies with the pharmacist making that clinical decision.

We aim only to provide information and structure to the reader, such that the reader is able to use the information provided confidently to the benefit of their patients.

Thank You.

PHARM-ASSISTANT

HELPING YOU TO HELP YOURSELF

THE DMARDS

REVIEWING DMARDS

There are 5 key points to remember

- **Check compliance** - Make sure that the patient knows why they are taking, how to take the medication and that it is in line with the specialists recommendations.

- **Check dose** - Is the dose clinically safe? Confirm using BNF and/or hospital letters (only query this, if the dose prescribed is above the clinical maximum for that condition).

- **Check the drug monitoring** -
  - Is the blood monitoring up-to-date?
  - Are the results safe? Is any action required?

- **Check for red flags** - Are there any red flag symptoms which need to be actioned?

- **Check when they are next due to see their consultant** - Most patients on high risk drugs will be under a consultant who they should be seeing regularly.
  - Check when their next appointment is?
  - Check if they are aware of the action plans?

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THE SHARE OF CARE

In almost all cases, these medicines will be prescribed under a shared care agreement.

This is a document which will be agreed and signed by the relevant specialist consultant and the GP. Strictly speaking, these medicines should not be prescribed in primary care until this agreement has been signed.

The document highlights the following:

- The indication for which the medication is being prescribed;
- The hospital department in charge of care;
- The dose of the medication to be prescribed;
- The monitoring frequency; and
- Scenarios where the patient should be referred back to the specialist e.g. deranged blood tests or red flags.

Simply put, while this booklet provides advice on how to safely manage these medicines, the shared care protocol should be your go-to document with regards to individual patient care.

For more information, visit the following link:
https://www.england.nhs.uk/medicines-2/regional-medicines-optimisation-committees-advice/shared-care-protocols/

For a list of current shared care protocols, please visit the following link:
https://www.england.nhs.uk/publication/shared-care-protocols/

WHEN TO TAKE ACTION WITH

DMARDS

For full guidance, please visit: https://cks.nice.org.uk/topics/dmards/

BLOOD TEST	ACTION REQUIRED WHEN:	ACTION REQURED
WHITE CELL COUNT	<3.5 X 109/L	DISCUSS WITH SPECIALIST
MCV	>105 FL	CHECK B12, FOLATE, TSH:- • If abnormal treat; • If normal, discuss with specialist
NEUTRIPHILES	<1.6 X 109/L	DISCUSS WITH SPECIALIST
CREATININE	INCREASE >30% IN 12 MONTHS	• Repeat in 1 week. • If still more than 30% from baseline, withhold and discuss with specialist team.
EOSINOPHILS	>0.5 X 109/L	DISCUSS WITH SPECIALIST
ALT	>100 U/L	DISCUSS WITH SPECIALIST
PLATELETE COUNT	<140 X 109/L	DISCUSS WITH SPECIALIST
ALBUMIN	<30G/L	DISCUSS WITH SPECIALIST
URIN PROTEINE	2+	• Check mid-stream urine sample. • If evidence of an infection, treat appropriately. • If sterile and 2+ proteinuria or more persists on two consecutive measurements, withhold medication until discussed with specialist team.

OTHER THINGS TO WATCH FOR

RED FLAG SYMPTOMS

- BLEEDING (remember to check bleeding from the front or back passage, sputum and nose);
- BRUISING (was there a cause?);
- SORE THROAT (MTX is immunosuppressive); and
- RASH

Which specialist should be seeing them?

- DERMATOLOGY;
- RHEUMATOLOGIST;
- GASTROENTEROLOGIST;
- *OTHERS (SEE SHARED CARE GUIDELINES).*

Take a look at their last letter from these specialists:

1. *What are the action plans?*
2. *When are they next due to be seen?*
3. *Have they had any monitoring in hospital?*

HIGH RISK Patients

- **PREGNANT PATIENTS** - AVOID
- **BREAST-FEEDING PATIENTS** - AVOID
- **HEPATIC PATIENTS** - DISCUSS WITH CONSULTANT
- **RENAL PATIENTS -** DISCUSS WITH CONSULTANT

METHOTREXATE (MTX)

Indications

- IBD (inflammatory bowel disease);
- Rheumatoid Arthritis;
- Psoriasis;
- Other (*see shared care policy);*
- Cancer *(outside the scope of this booklet).*

CLICK HERE FOR
Methotrexate shared care policy

DOSE

Weekly dose up to a maximum of 25mg per week.
*(**Note**, only 2.5mg tablets to be prescribed,*
please see shared care guidance for injections dosing).

DRUG MONITORING

- Full Blood Count
- Liver Function Tests
- Renal Function Tests

Initial monitoring - Minimum 2 weekly for the first 6 weeks, then monthly for 3 months (usually done by hospital).

Continual monitoring - 3 MONTHLY (unless otherwise instructed by the consultant).

LEFLUNOMIDE

Indications

- Rheumatoid Arthritis;
- Psoriatic arthritis;
- O*ff label uses (please see shared care policy).*

CLICK HERE FOR
Leflunomide shared care policy

DOSE

Max 20mg per day

DRUG MONITORING

- Full Blood Count
- Liver Function Tests
- Renal Function Tests

Initial monitoring - Minimum 2 weekly for the first 6 weeks, then monthly for 3 months (usually done by hospital).

Continual monitoring - 2 MONTHLY, minimum 3 monthly (unless otherwise instructed by the consultant).

AZATHIOPRINE

Indications

- Crohn's disease and UC;
- Rheumatoid arthritis, Lupus, polymyositis;
- Refractory Eczema;
- Transplant rejection and myasthenia; gravis *(outside the scope of this booklet);*
- *Many more (see shared care guidance).*

CLICK HERE FOR
Azathioprine shared care policy

DOSE

Maintenance doses will be between 1-3mg/kg,
(please see individual drug monograph and shared care).

DRUG MONITORING

- Full Blood Count
- Liver Function Tests
- Renal Function Tests

Initial monitoring - Minimum 2 weekly for the first 6 weeks, then monthly for 3 months (usually done by hospital).

Continual monitoring - 3 MONTHLY (unless otherwise instructed by the individual shared care policy).

SULFASALAZINE

Indications

- Crohn's disease;
- Rheumatoid arthritis;
- Ulcerative colitis;
- O*ther (see shared care protocol).*

CLICK HERE FOR
Sulfasalazine shared care policy

DOSE

Initially 500mg per day, increase weekly by 500mg to a max of 3g per day in divided doses.

- Maintenance for UC and Crohn's - Usually 500mg QDS
- Maintenance for Rheumatology - 2-3g/day

DRUG MONITORING

- Full Blood Count
- Liver Function Tests
- Renal Function Tests

Initial monitoring - Minimum 2 weekly for the first 6 weeks, then monthly for 3 months (usually done by hospital).

Continual monitoring - 3 MONTHLY for up to 1 year, then no routine monitoring bar annual renal function is required (however, follow the advice given on your local shared care guidelines).

MYCOPHENOLATE

Indications

- Renal, Liver and Cardiac Transplant (*outside the scope of this booklet);*
- Off label use *(see Shared Care Policy).*

CLICK HERE FOR
Mycophenolate shared care policy

DOSE

See shared care guidelines for individual patient:
Initial dose= 250mg-500mg od/bd, increase in weekly increments
Maintenance dose= 1-2g per day, max 3g per day

DRUG MONITORING

- Full Blood Count
- Liver Function Tests
- Renal Function Tests

Initial monitoring - Minimum 2 weekly for the first 6 weeks, then monthly for 3 months (usually done by hospital).

Continual monitoring - 3 MONTHLY (unless otherwise instructed by the individual shared care policy).

FINAL THOUGHTS

INTERACTIONS

- KEY INTERACTIONS INCLUDE:
  - LIVE VACCINES - see green book for guidance;
  - Medicines which cause bleeding disorders (NSAIDS, Antiplatelet, Anticoagulants, SSRIs);
  - Azathioprine interacts with - Allopurinol and Febuxostat;
  - Leflunomide interacts with Rosuvastatin (max dose of Rosuvastatin should be 10mg);
  - Enzyme inducers like Rifampicin (especially with Mycophenolate) and Anticonvulsants (especially for methotrexate); and
  - Other Hepatotoxic and Reno-toxic drugs.

INFLUENZA VACCINE + INFECTIONS

These patients would fall into the immunocompromised bracket and should be called for their annual influenza vaccination.

They are also vulnerable to infection and should be advised to report any new signs of cough or cold to their GP.

THINGS PATIENTS SHOULD REPORT

- Symptoms of chickenpox, or contact with a person with chickenpox or shingles.
- · Persistent cough, shortness of breath, or any other problems with breathing.
- · Sore throat, mouth ulcers, high temperature, skin rash, swollen glands, or any other signs or
- symptoms of infection
- · Signs or symptoms of liver problems, such as yellow skin or eyes (jaundice), itching all over,
- nausea or vomiting.
- · Swelling of the hands, feet, or ankles
- · Unexplained bleeding or bruising, black stools, or blood in the vomit or stools.
- · Suspected or confirmed pregnancy.

I HOPE THIS WAS **HELPFUL**

Let's Grow Together

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