

Chemotherapy Protocol

SUPPORT REGIMEN– GvHD PROPHYLAXIS

METHOREXATE – T Depleted Allograft

GvHD PROPHYLAXIS

This regimen will only be available to prescribe at the Wessex Blood and Marrow Transplant Unit

Regimen

- GvHD Prophylaxis – Methotrexate (T Depleted Allograft-GvHD)

Indication

Hematopoietic stem cell transplant (HSCT) graft versus host disease prophylaxis.

Toxicity

Drug	Adverse Effect
Methotrexate	Headache, back or shoulder pain, fever, mucositis

The adverse effects listed are not exhaustive. Please refer to the relevant Summary of Product Characteristics for full details.

Monitoring

Drugs

- Creatinine and bilirubin before each dose
- Assess for mucositis

Dose Modifications

The dose modifications listed are for liver and renal function.

Hepatic Impairment

Serum Bilirubin level $\mu\text{mol/L}$	Methotrexate dose
less than or equal to 35	100% dose
36-50	50% dose
51-85	25% dose
greater than 85	omit dose

Renal Impairment

Serum Creatinine level $\mu\text{mol/L}$	Methotrexate dose
less than or equal to 145	100% dose
146-165	50% dose
166-180	25% dose
greater than 180	omit dose

Other

Dose adjustments may be necessary for mucositis caused by the transplant conditioning schedule. If mucositis is NCI-CTC grade 3 or more on day +11 the methotrexate dose may be reduced or omitted. This should be discussed with the patient's transplant clinician.

Regimen

Drug	Dose	Days	Administration
Methotrexate	10mg/m ²	+3	Intravenous bolus over 5 minutes
Methotrexate	5mg/m ²	+6,+11	Intravenous bolus over 5 minutes

Dose Information

- Methotrexate will be dose rounded to the nearest 2.5mg (down if halfway). The most common doses are 5mg, 7.5mg, 10mg, 12.5mg and 15mg. Doses will normally be supplied as two individual syringes containing different amounts to allow dose adjustment on the day of administration that may fall on a weekend.

Administration Information

- It is the responsibility of the nurse administering the dose to ensure that the patient's transplant clinician has checked the bilirubin, creatinine and mucositis of the patient and documented the dose to be administered before each methotrexate dose is given.

Extravasation

- Methotrexate – non-vesicant

Additional Therapy

- Calcium folinate 30mg (15mg/m² is the precise dose but in practice 30mg is given) intravenous bolus given six hourly for four doses starting 24 hours after each methotrexate bolus (+4, +7, +12)

Coding

- Procurement –
- Delivery – Inpatient supportive care regimen

References

1. P-P-54 Wessex Blood and Marrow Transplant – Dose adjustments for stem cell transplant conditioning agents policy. Version 1.0
2. P-P-20 Wessex Blood and Marrow Transplant – Reduced toxicity conditioning regimens policy Version 1.2
3. P-P-27 Wessex Bloos and Marrow Transplant – Acute Graft Versus Host Disease: Prevention Policy
4. National Dose Banding Tables: <https://www.england.nhs.uk/commissioning/spec-services/npc-crg/group-b/b02/>

REGIMEN SUMMARY

Methotrexate (T Depleted Allograft - GvHD)

Day +3

1. Warning – Check calcium folinate prescribed

Administration instructions

Ensure that calcium folinate is prescribed on the inpatient prescribing system. Prescribe 30mg intravenous bolus every 6 hours for 4 doses starting 24hours after the methotrexate, at 1700hrs, 2300hrs, 0500hrs, 1100hrs (days +4, +7, +12)

2. Time – Methotrexate to start at 1700

3. Methotrexate 10mg/m² intravenous bolus over 5 minutes

Administration Instructions

Administer at 1700

Check the patient notes to confirm the dose to be prescribed

It is the responsibility of the nurse administering the dose to ensure that the patient's transplant clinician has checked the bilirubin, creatinine and mucositis of the patient and documented the dose to be given before each methotrexate dose is administered.

Methotrexate will be dose rounded to the nearest 2.5mg (down if halfway). The most common doses are 5mg, 7.5mg, 10mg, 12.5mg and 15mg. Doses will normally be supplied as two individual syringes containing different amounts to allow dose adjustment on the day of administration that may fall on a weekend.

Day +6, +11

4. Warning – Check calcium folinate prescribed

Administration instructions

Ensure that calcium folinate is prescribed on the inpatient prescribing system. Prescribe 30mg intravenous bolus every 6 hours for 4 doses starting 24hours after the methotrexate, at 1700hrs, 2300hrs, 0500hrs, 1100hrs (days +4, +7, +12)

5. Time – Methotrexate to start at 1700

6. Methotrexate 5mg/m² intravenous bolus over 5 minutes

Administration Instructions

Administer at 1700

Check the patient notes to confirm the dose to be prescribed

It is the responsibility of the nurse administering the dose to ensure that the patient's transplant clinician has checked the bilirubin, creatinine and mucositis of the patient and documented the dose to be given before each methotrexate dose is administered.

Methotrexate will be dose rounded to the nearest 2.5mg (down if halfway). The most common doses are 5mg, 7.5mg, 10mg, 12.5mg and 15mg. Doses will normally be supplied as two individual syringes containing different amounts to allow dose adjustment on the day of administration that may fall on a weekend.

This protocol will be set up as both a regimen and in the support folder in ARIA

DOCUMENT CONTROL

Version	Date	Amendment	Written By	Approved By
1	July 2017	None	Harriet Launders Haematology Pharmacist	Dr Deborah Richardson Consultant Haematologist Dr Kate Hill Associate Specialist Haematology

This chemotherapy protocol has been developed as part of the chemotherapy electronic prescribing project. This was and remains a collaborative project that originated from the former CSCCN. These documents have been approved on behalf of the following Trusts;

University Hospital Southampton NHS Foundation Trust

All actions have been taken to ensure these protocols are correct. However, no responsibility can be taken for errors that occur as a result of following these guidelines.

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