Chemotherapy Protocol

LYMPHOMA

CHLORAMBUCIL

There are multiple versions of this protocol in use. Please ensure you have the correct protocol for the relevant diagnosis.

Regimen

- Lymphoma – Chlorambucil

Indication

- Non Hodgkin's Lymphoma (low grade)

Toxicity

Drug	Adverse Effect
Chlorambucil	Gastro-intestinal disturbances, rash

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

Monitoring

Drugs

- FBC, LFTs and U&Es prior to day one of treatment

Dose Modifications

The dose modifications listed are for haematological, liver and renal function and drug specific toxicities only. Dose adjustments may be necessary for other toxicities as well.

In principle all dose reductions due to adverse drug reactions should not be re-escalated in subsequent cycles without consultant approval. It is also a general rule for chemotherapy that if a third dose reduction is necessary treatment should be stopped.

Please discuss all dose reductions / delays with the relevant consultant before prescribing, if appropriate. The approach may be different depending on the clinical circumstances.

Haematological

Dose modifications for haematological toxicity in the table below are for general guidance only. Always refer to the responsible consultant as any dose reductions or delays will be dependent on clinical circumstances and treatment intent. Low counts can be a consequence of bone marrow infiltration as well as drug toxicity.

Consider blood transfusion if patient symptomatic of anaemia or has a haemoglobin of less than 8g/dL.

Neutrophils ($x10^9$/L)	**Dose Modifications**
1 or more	100%
Less than 1	1st Occurrence Delay until recovery has occurred. Reduce the number of treatment days per cycle by 25% of the original e.g. from 14 days to 10 days 2nd Occurrence Delay until recovery has occurred. Reduce the number of treatment days per cycle by at least 50% of the original e.g. from 10 days to 7 days
Platelets ($x10^9$/L)	**Dose Modifications**
100 or more	100%
Less than 100	1st Occurrence Delay until recovery has occurred. Reduce the number of treatment days per cycle by at least 25% of the original e.g. 14 days to 10 days 2nd Occurrence Delay until recovery has occurred. Reduce the number of treatment days per cycle by at least 50% of the original e.g. from 10 days to 5 days

Hepatic Impairment

Drug	**Bilirubin µmol/L**		**AST/ALT units/L**	**Dose (% of original dose)**
Chlorambucil				Initial dose reduction recommended in patients with gross hepatic dysfunction. Then modify dose based on haematological parameters.

Renal Impairment

Drug	**Creatinine Clearance (ml/min)**	**Dose (% of original dose)**
Chlorambucil	N/A	No dose adjustment needed but monitor closely as patients with renal impairment may be more prone to myelosuppression

Other

Dose reductions or interruptions in therapy are not necessary for those toxicities that are considered unlikely to be serious or life threatening. For example, alopecia, altered taste or nail changes.

In general for all other non-haematological NCI-CTC grade 3 and above toxicities delay treatment until the adverse effect has resolved to NCI-CTC grade 1 or below. Reduce the number of days treatment per cycle by at least 25% e.g. 14 days to 10 days or discontinue as appropriate.

Regimen

28 day cycle for 6 cycles

Please note that the dose and/or number of days of treatment may be modified according to performance status, tolerability and individual clinical circumstances.

Drug	Dose	Days	Administration
Chlorambucil	10mg	1-14 incl.	Oral

Dose Information

- Chlorambucil is available as 2mg tablets
- Chlorambucil tablets should be stored in a refrigerator

Administration Information

- Chlorambucil may be taken at night to avoid daytime nausea.

Additional Therapy

- Antiemetics
    - metoclopramide 10mg three times a day when required oral
- Consider oral prednisolone with initial treatment

Additional Information

- The National Patient Safety Agency alert NPSA/2008/RRR001 must be followed when prescribing, dispensing or administering oral chemotherapy.
- It must be made clear to all staff, including those in the community, that this is a short course of oral chemotherapy that must not be continued.
- Patients should be assessed for suitability for oral chemotherapy prior to starting treatment.

Coding

- Procurement – X70.1
- Delivery – X73.1

References
1.Ardeshna KM, Smith P, Norton A et al. Long term effect of a watch and wait policy versus immediate systemic treatment for asymptomatic advanced stage, non-Hodgkins lymphoma: a randomised controlled trial. Lancet 2003; 362 (9383): 516-522

REGIMEN SUMMARY

Chlorambucil

Day One

Take Home Medicines

1. Chlorambucil 10mg once a day for 14 days oral

2. Metoclopramide 10mg three times a day when required oral*

*The metoclopramide will be supplied on cycle one only. Thereafter it can be added from supportive treatments if further supplies are required.

DOCUMENT CONTROL

Version	Date	Amendment	Written By	Approved By
1.1	Jan 2015	Header changed Toxicities removed Metoclopramide dose changed to 10mg Disclaimer added	Donna Kimber Pharmacy Technician	Rebecca Wills Pharmacist
1	April 2012	None	Rebecca Wills Pharmacist Dr Debbie Wright Pharmacist	Dr Andrew Davies Consultant Medical Oncologist Dr Alison Milne Consultant Haematologist

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;

Hampshire Hospitals NHS Foundation Trust
NHS Isle of Wight
Portsmouth Hospitals NHS Trust
Salisbury Hospitals NHS Foundation Trust
University Hospital Southampton NHS Foundation Trust
Western Sussex Hospitals NHS Foundation Trust

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