Chlorambucil

Indication
Low grade non-Hodgkin lymphomas and other lymphoproliferative disorders including CLL.

For CD20+ disease, can be used in combination with rituximab (see separate R-Chlorambucil protocol).

ICD-10 codes
Codes with a prefix C82, C88, C91.

Regimen details

Day	Drug	Dose	Route
1-14 **or** 1-7	Chlorambucil* Chlorambucil	10mg OD 10mg/m^2 OD	PO PO

*Chlorambucil may be given at a continuous low dose of 2-4mg OD if concerns about tolerability.

Cycle frequency
Every 28 days

Number of cycles
Maximum of 4-6 cycles

Administration
Chlorambucil is available as 2mg tablets. Tablets should be taken on an empty stomach, at least 1 hour before or 3 hours after a meal.

Pre-medication
Nil

Emetogenicity
This regimen has mild-moderate emetogenic potential (on treatment days).

Additional supportive medication
Allopurinol 300mg (100mg if creatinine clearance <20mL/min) OD for the first cycle if required.
H_2 antagonist or PPI if required.
Antiviral and antifungal prophylaxis as per local policy.

Extravasation
N/A

Investigations – pre first cycle

Investigation	**Validity period** (or as per local policy)
FBC	14 days
U+E (including creatinine)	14 days
LFTs	14 days
LDH	14 days
Direct Antiglobulin Test (DAT)	14 days
Glucose	14 days

Other pre-treatment investigations:
Hepatitis B and C and HIV serology

Investigations – pre subsequent cycles

Investigation	**Validity period** (or as per local policy)
FBC	96 hours
U+E (including creatinine)	7 days
LFTs	7 days
LDH	7 days
Glucose	As clinically indicated

Standard limits for administration to go ahead

If blood results not within range, authorisation to administer **must** be given by prescriber/ consultant.

Investigation	**Limit**
Neutrophil count	≥ 1.0 x 10^9/L
Platelet count	≥ 100 x 10^9/L
Creatinine clearance	≥ 45 mL/min
Bilirubin	≤ 1.5 x ULN
AST/ALT	< 2 ULN

Dose modifications

- **Haematological toxicity**

If neutrophils < 1.0 x 10^9/L **or** platelets < 100 x 10^9/L delay by 1 week or until count recovery. If counts recovered within 2 weeks resume at full dose, otherwise consider dose reduction.

Once tolerance established, the dosage should be modified according to response, e.g. level of haematological suppression.

- **Renal impairment**

No dose reduction usually required. If CrCl <45mL/min discuss with the consultant and monitor closely for myelosuppression.

- **Hepatic impairment**

Chlorambucil should be dose reduced in severe hepatic impairment and the dose further modified based on response and degree of myelosuppression. Discuss with consultant if AST/ALT > 2 x ULN.

Adverse effects - for full details consult product literature/ reference texts

- **Serious side effects**

Myelosuppression
Stevens-Johnson syndrome
Hypersensitivity and allergic reactions
Infertility
Interstitial pulmonary fibrosis

- **Frequently occurring side effects**

Nausea or vomiting
Anorexia, weight loss
Constipation, diarrhoea
Stomatitis/mucositis

- **Other side effects**

Rash

Significant drug interactions – for full details consult product literature/ reference texts

Coumarin-derived anticoagulants such as warfarin: patients established on warfarin should either be changed to low molecular weight heparin or have weekly monitoring of INR. Patients who are initiated on anti-coagulation should remain on low molecular weight heparin until completion of the course of chemotherapy.

Additional comments

Haematological toxicity may be cumulative.
Patients should receive irradiated blood products.

References

- Summary of Product Characteristics Chlorambucil (Medac). Accessed 8 August 2018 via www.medicines.org.uk
- Oscier D, Dearden C, Eren E et al., British Committee for Standards in Haematology.Br J Haematol. 2012 Dec;159(5):541-64

Written/reviewed by: Dr S Otton (Consultant Haematologist, North Bristol NHS Trust)

Checked by: Sarah Murdoch (Senior Oncology/Haematology Pharmacist, SW Clinical Network)

Authorised by: Dr J Braybrooke (Consultant Oncologist, UHBristol NHS Trust, SW Clinical Network),

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