BCCA Protocol Summary for Therapy of Lymphoma, Hodgkin’s Lymphoma, Chronic Lymphocytic Leukemia or Multiple Myeloma Using Cyclophosphamide

**Protocol Code**  
LYCYCLO

**Tumour Group**  
Lymphoma

**Contact Physician**  
Dr. Laurie Sehn

**ELIGIBILITY:**
- Malignant lymphoma, Hodgkin’s lymphoma, chronic lymphocytic leukemia, multiple myeloma

**EXCLUSIONS:**
- Active hemolytic anemia or immune-related thrombocytopenia

**TESTS:**
- Baseline (required before first treatment): CBC and diff, platelets, bilirubin, AST, ALT
- Baseline (required, but results do not have to be available to proceed with first treatment; results must be checked before proceeding with cycle 2): HBsAg, HBcoreAb
- Before each treatment: CBC and diff, platelets

**PREMEDICATIONS:**
- ondansetron 8 mg PO/IV daily pre chemo
- dexamethasone 12 mg PO/IV daily pre chemo

**SUPPORTIVE MEDICATIONS:**
- If HBsAg or HBcoreAb positive, start lamivudine 100 mg/day PO for the duration of chemotherapy and for six months afterwards.

**TREATMENT:**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>BCCA Administration Guideline</th>
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</thead>
<tbody>
<tr>
<td>cyclophosphamide</td>
<td>600-1200 mg/m²** on day 1</td>
<td>IV in 100 to 250** mL NS over 20 min to 1 hour</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
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<tr>
<td>cyclophosphamide</td>
<td>300-400 mg/m²/day* x 5 days***</td>
<td>PO</td>
</tr>
<tr>
<td>PLUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prednisone (optional)</td>
<td>45 mg/m² daily x 5 days***</td>
<td>PO in am with food</td>
</tr>
</tbody>
</table>

*The actual dose depends on patient specific factors such as extent of prior treatment, performance status, duration of planned treatment and others.

**Use 250 mL for dose greater than or equal to 1000 mg

*** Round to the nearest 25 mg; if Cyclophosphamide is being given daily and dexamethasone is being used as an anti-emetic prednisone should be omitted

Repeat every 21-28 days.
Discontinue if no response after 2 cycles.
Continue treatment until 2 cycles after maximum response, to a maximum of 8 months of treatment.
DOSE MODIFICATIONS:

1. Hematological, for low counts due to treatment

<table>
<thead>
<tr>
<th>ANC (x10^9/L)</th>
<th>Platelets (x10^9/L)</th>
<th>Dose (all drugs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>greater than 1.2</td>
<td>greater than 80</td>
<td>100%</td>
</tr>
<tr>
<td>less than or equal to 1.2</td>
<td>less than or equal to 80</td>
<td>Delay until recovery</td>
</tr>
</tbody>
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2. Renal dysfunction: Dose modification may be required for cyclophosphamide. Refer to BCCA Cancer Drug Manual.

PRECAUTIONS:

1. Neutropenia: Fever or other evidence of infection must be assessed promptly and treated aggressively.

2. Hepatitis B Reactivation: All lymphoma patients should be tested for both HBsAg and HBcAb. If either test is positive, such patients should be treated with lamivudine during chemotherapy and for six months afterwards. Such patients should also be monitored with frequent liver function tests and hepatitis B virus DNA at least every two months. If the hepatitis B virus DNA level rises during this monitoring, management should be reviewed with an appropriate specialist with experience managing hepatitis and consideration given to halting chemotherapy.

Call Dr. Laurie Sehn or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.

Date activated: 01Jan 1980
Date last revised: 1 Jun 2014 (Hepatitis reactivation management clarified)