BCCA Protocol Summary for Treatment of Hairy Cell Leukemia with Cladribine

Protocol Code: LYCDA
Tumour Group: Lymphoma
Contact Physician: Dr. Laurie Sehn

ELIGIBILITY:
- All patients with Hairy Cell Leukemia

TESTS:
- Baseline (required before first treatment): CBC & diff, platelets, creatinine, 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 further treatment): HBsAg, HBcoreAb

PREMEDICATIONS:
- None

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>
</tr>
</thead>
<tbody>
<tr>
<td>Cladribine</td>
<td>0.14 mg/kg/day</td>
<td>IV in 500 mL NS over 2 hours daily for 5 consecutive days</td>
</tr>
<tr>
<td></td>
<td>0.14 mg/kg/day</td>
<td>SC daily for 5 consecutive days*</td>
</tr>
</tbody>
</table>

Cladribine is usually given only once. There is no dose reduction for hematologic blood counts for this first cycle. If repeated, it should be given after recovery of blood counts to baseline following the dose reductions below.

*In Canada, cladribine is provided as 1 mg/mL concentration only. As a result, subcutaneous administration requires several syringes to be administered. Therefore, IV route may be preferred.
DOSE MODIFICATIONS:

1. Hematologic:

<table>
<thead>
<tr>
<th>ANC (x 10⁹/L)*</th>
<th>Platelets (x 10⁹/L)*</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 1.2</td>
<td>OR</td>
<td>less than 100</td>
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</table>

2. Renal Dysfunction: For any patient with a serum creatinine above normal and for all patients above the age of 60 years, a creatinine clearance should be measured or calculated using the following formula:

Estimated creatinine clearance (in mL/minute) =

For men: \[
\frac{[1.23 \times (140 - \text{age in y})(\text{weight in kg})]}{\text{serum creatinine in micromol/L}}
\]

For women: \[
\frac{[1.04 \times (140 - \text{age in y})(\text{weight in kg})]}{\text{serum creatinine in micromol/L}}
\]

<table>
<thead>
<tr>
<th>Creatinine Clearance (mL/min)</th>
<th>Actual Dose and Schedule (Note change in number of days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>greater than 70</td>
<td>0.14 mg/kg/day x 5 consecutive days</td>
</tr>
<tr>
<td>30 to 70</td>
<td>0.14 mg/kg/day x 3 consecutive days</td>
</tr>
<tr>
<td>less than 30</td>
<td>DO NOT USE</td>
</tr>
</tbody>
</table>

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 HBcoreAb. 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.

3. Severe neurotoxicity: has been reported with overdose, including irreversible neurologic toxicity, Guillain-Barré and Brown-Séquard syndromes.
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: 01 May 1993
Date last revised: 1 May 2017 (administration days and route clarified, dose modifications clarified, precautions updated)

References: