Bendamustine for Indolent Non-Hodgkin’s Lymphoma

Indication: Indolent Non-Hodgkin’s Lymphoma in patients who have progressed during or within 6 months following treatment with rituximab or a rituximab containing regimen. Confirm local funding is agreed before commencing therapy.

Regimen details: Bendamustine 120mg/m² IV Days 1 and 2

Administration: IV in 500ml sodium chloride 0.9% over 30 - 60 minutes

Premedication: None required

Frequency: Every 21 days, for up to 6 to 8 cycles depending on response and toxicity

Extravasation: If there is any possibility that extravasation has occurred, contact a senior member of the medical team and follow local protocol for dealing with cytotoxic extravasation of irritant and non-vesicant drugs.

Anti-emetics: Moderate emetogenic potential (30 - 60%)

Supportive medication: Allopurinol 100 - 300 mg od (dependent on renal function) for first cycle. PPI as per local policy.

Regular investigations: FBC D1 U&E D1 LFTs D1 Virology screen – Hep B & C, HIV prior to initiating treatment (Hep B includes HBsAg and HBcAb)

Dose Modifications

Haematological Toxicity due to treatment:

<table>
<thead>
<tr>
<th>Neutrophils (x 10⁹/L)</th>
<th>Platelets (x 10⁹/L)</th>
<th>Bendamustine dose adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 1.0 x 10⁹/L &amp; ≥ 75 x 10⁹/L</td>
<td>100% dose</td>
<td></td>
</tr>
<tr>
<td>&lt; 1.0 x 10⁹/L &amp; / or &lt; 75 x 10⁹/L</td>
<td>Delay treatment until counts recovered.</td>
<td></td>
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</tbody>
</table>

If neutrophil count < 0.5 x 10⁹/L and/or platelet count < 20 x 10⁹/L, dose reduce to 90mg/m².
If neutrophil count < 0.5 x 10⁹/L and/or platelet count < 20 x 10⁹/L occur at 90mg/m², dose reduce to 60mg/m².
If neutrophil count < 0.5 x 10⁹/L and/or platelet count < 20 x 10⁹/L occur at 60mg/m², discontinue treatment.

Renal Impairment

Creatinine clearance > 10 ml/min give 100% Bendamustine dose.
Creatinine clearance < 10 ml/min; no data available.
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Hepatic Impairment

<table>
<thead>
<tr>
<th>Bilirubin</th>
<th>Bendamustine dose adjustment</th>
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</thead>
<tbody>
<tr>
<td>&lt; 21umol/L</td>
<td>100% dose</td>
</tr>
<tr>
<td>21 – 52umol/L</td>
<td>70% dose</td>
</tr>
<tr>
<td>&gt; 53umol/L</td>
<td>No information available</td>
</tr>
</tbody>
</table>

Toxicities: Tumour lysis syndrome, cardiac dysfunction, hypotension, hypertension, diarrhoea, constipation, skin reactions, infusion related reactions (fever, chills, pruritus and rash).

Drug interactions: Bendamustine metabolism involves the CYP P450 1A2 pathway. There is potential for interaction with CYP1A2 inhibitors such as ciprofloxacin, aciclovir and cimetidine.

Comments: Patients with cardiac disorders: Ensure K+ remains > 3.5mmol/L during treatment with Bendamustine.

Patients may develop infusion related reactions; symptoms include fever, chills, pruritus and rash.

Rarely, anaphylactic reactions can occur. Patients must be asked about symptoms suggestive of infusion reactions after their first cycles of therapy. Measures to prevent severe reactions, including antihistamines, antipyretics and corticosteroids must be considered in subsequent cycles. Patients who have experienced Grade 3 or worse allergic-type reactions should not be re-challenged.

Blood and platelet transfusion according to unit guidelines. Products must be irradiated as patients are at risk of transfusion-associated graft versus host disease - ensure blood transfusion is notified and patient has received a PIL Information for patients needing irradiated blood and Alert Card.

References:
