**Intermediate dose Melphalan & Dexamethasone for Multiple Myeloma**

**Indication:** Relapsed Multiple Myeloma

**Regimen details:**
- Melphalan: 25mg/m² IV Day 1
- Dexamethasone: 20mg orally Days 1 to 4

**Administration:**
- Melphalan: IV infusion in 100-500ml sodium chloride 0.9% over 30 minutes
- Dexamethasone: Orally

**Premedication:** None required

**Frequency:** 28 day cycle, usually 2 - 4 cycles

**Extravasation:** Melphalan is not a vesicant.

**Anti-emetics:** Melphalan: moderate emetogenicity. Follow local anti-emetic protocol

**Supportive medication:**
- Allopurinol 300mg od orally (100mg if renal impairment) for prevention of tumour lysis syndrome for first cycle only.
- PPI prophylaxis e.g. omeprazole 20mg od orally.

**Regular investigations:**
- Baseline & regular FBC Prior to day 1
- LFTs Prior to day 1
- U&Es Prior to day 1
- Serum paraprotein and serum free light chains at the start of each cycle

**Dose Modifications**

**Haematological Toxicity**

Blood counts may not be normal prior to the first cycle.

Prior to cycle 2 and onwards:

<table>
<thead>
<tr>
<th>Neutrophils (x 10⁹/L)</th>
<th>Platelets (x 10⁹/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 1.0 x 10⁹/L &amp; ≥ 75 x 10⁹/L</td>
<td>100% dose</td>
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</tbody>
</table>
| < 1.0 x 10⁹/L & / or < 75 x 10⁹/L | Delay the next cycle until FBC recovery. Reduce the dose of the next cycle by 25%.

Doses reduced for haematological toxicity should continue for subsequent cycles.

**Renal Impairment**

<table>
<thead>
<tr>
<th>CrCl (ml/min)</th>
<th>Melphalan Dose</th>
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<tbody>
<tr>
<td>&lt; 30</td>
<td>Discuss with Consultant</td>
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</tbody>
</table>

Reason for Update: Network Protocol Development
Approved by Consultant: Matthew Streetly 27/02/2012
Version: 1
Approved by Chair Haem TWG: Maj Kazmi
Supersedes: All other versions
Date: 20/04/2012
Prepared by: Laura Cameron
Checked by (Network Pharmacist): Jacky Turner
Approved by SELCN DTAC Chair: Date: 23/01/2012
Hepatic Impairment

No dose changes required. If excessive toxicity, consider dose reduction on subsequent cycles.

Toxicities: Gastro-intestinal disturbances e.g. nausea and diarrhoea.

Drug interactions: None applicable

References:


