**VinBLASTine and Methotrexate Therapy**

**INDICATIONS FOR USE:**

<table>
<thead>
<tr>
<th>INDICATION</th>
<th>ICD10</th>
<th>Regimen Code</th>
<th>*Reimbursement Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment of advanced aggressive fibromatosis</td>
<td>M72</td>
<td>00554a</td>
<td>Hospital</td>
</tr>
</tbody>
</table>

*If the reimbursement status is not defined*, the indication has yet to be assessed through the formal HSE reimbursement process.

**TREATMENT:**

The starting dose of the drugs detailed below may be adjusted downward by the prescribing clinician, using their independent medical judgement, to consider each patient’s individual clinical circumstances.

Treatment is to be delivered every 7 days on day 1, 8, and 15 of a 28 day cycle for up to 12 cycles until disease progression or unacceptable toxicity develops.

<table>
<thead>
<tr>
<th>Day</th>
<th>Drug</th>
<th>Dose</th>
<th>Route</th>
<th>Diluent &amp; Rate</th>
<th>Cycle (28 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,8,15</td>
<td>Methotrexate</td>
<td>30 mg/m²</td>
<td>IV bolus</td>
<td>N/a</td>
<td>Every 28 days for up to 12 cycles</td>
</tr>
<tr>
<td>1,8,15</td>
<td>vinBLASTine</td>
<td>6 mg/m²</td>
<td>IV infusion</td>
<td>50ml NaCl 0.9% over 10 min</td>
<td>Every 28 days for up to 12 cycles</td>
</tr>
</tbody>
</table>

*VinBLASTine is a neurotoxic chemotherapeutic agent. Refer to NCCP Guidance on the Safe Use of Neurotoxic drugs (including Vinca Alkaloids) in the treatment of cancer [here](#)*

**ELIGIBILITY:**

- Indications as above

**EXCLUSIONS:**

- Hypersensitivity to vinBLASTine, methotrexate or any of the excipients.
- Creatinine clearance less than 30 mL/min
- Large third space fluid accumulations (significant ascites, large pleural effusion or other large lobulated fluid accumulations)

**PRESCRIPTIVE AUTHORITY:**

The treatment plan must be initiated by a Consultant Medical Oncologist

**TESTS:**

**Baseline tests:**

- FBC, renal and liver profile
- Chest X-ray

**Regular tests:**

- FBC, renal and liver profile prior to each cycle
NCCP Chemotherapy Regimen

Disease monitoring:
Disease monitoring should be in line with the patient’s treatment plan and any other test/s as directed by the supervising Consultant.

DOSE MODIFICATIONS:
- Any dose modification should be discussed with a Consultant.

Haematological:
Table 1: Dose modification in haematological toxicity

<table>
<thead>
<tr>
<th>ANC (x10^9/L)</th>
<th>Platelets (x10^9/L)</th>
<th>Recommended Dose modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;0.9</td>
<td>And &gt;99</td>
<td>100%</td>
</tr>
<tr>
<td>0.5-0.9</td>
<td>Or 50-99</td>
<td>50%</td>
</tr>
<tr>
<td>&lt;0.5</td>
<td>or &lt;50</td>
<td>Delay*</td>
</tr>
</tbody>
</table>

*baseline VinBLAStine dose reduced by 25% if chemotherapy delayed by 2 or more weeks

Renal and Hepatic Impairment:
Table 2: Dose modification in renal and hepatic impairment

<table>
<thead>
<tr>
<th>Drug</th>
<th>Renal Impairment</th>
<th>Hepatic Impairment</th>
</tr>
</thead>
<tbody>
<tr>
<td>VinBLAStine</td>
<td>No dose reduction necessary</td>
<td>Bilirubin (micromol/L)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26-51 or 60-180</td>
</tr>
<tr>
<td>Methotrexate</td>
<td>Cr Cl (ml/min)</td>
<td>Dose</td>
</tr>
<tr>
<td>&gt;80</td>
<td>100%</td>
<td>51-85 or &gt;180</td>
</tr>
<tr>
<td>60-80</td>
<td>65%</td>
<td>50%</td>
</tr>
<tr>
<td>45-60</td>
<td>50%</td>
<td>Clinical Decision</td>
</tr>
<tr>
<td>30-45</td>
<td></td>
<td>&lt;30 Contra-indicated</td>
</tr>
<tr>
<td>&lt;30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Management of adverse events:
Table 3: Dose Modification for Adverse Events

<table>
<thead>
<tr>
<th>Adverse reactions</th>
<th>Recommended dose modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade &gt;2 Peripheral neuropathy</td>
<td>Dose reduction of vinBLAStine may be required at the discretion of the prescribing consultant</td>
</tr>
<tr>
<td>Mucositis</td>
<td>Dose reduction of methotrexate by 50%</td>
</tr>
<tr>
<td>Grade 2</td>
<td>Dose reduction of methotrexate by 100%</td>
</tr>
<tr>
<td>Significant third space fluids (ascites, pleural effusions)</td>
<td>Reconsider treatment</td>
</tr>
</tbody>
</table>
SUPPORTIVE CARE:

EMETOGENIC POTENTIAL: Low (Refer to local policy).

PREMEDICATIONS: Not usually required

OTHER SUPPORTIVE CARE: Not usually required

ADVERSE EFFECTS / REGIMEN SPECIFIC COMPLICATIONS
The adverse effects listed are not exhaustive. Please refer to the relevant Summary of Product Characteristics for full details.

- Neutropenia: Fever or other evidence of infection must be assessed promptly and treated appropriately.
- Pleural effusion or ascites: Methotrexate should be used with caution in patients with pleural effusions or ascites, as methotrexate may accumulate in third space fluid compartments.
- Extravasation: vinBLAStine cause pain and tissue necrosis if extravasated (Refer to local policy)

DRUG INTERACTIONS:
- Current drug interaction databases should be consulted for more information.
- Drugs which compromise renal function eg. aminoglycosides and CISplatin can decrease clearance of methotrexate and lead to systemic toxicity.
- Concurrent use of non-steroidal anti-inflammatory drugs (NSAIDs) and penicillins reduces renal clearance of methotrexate and these drugs should be avoided when using high dose methotrexate. Cotrimoxazole and ciprofloxacin also interact.
- Concomitant administration of drugs that cause folate deficiency may lead to increased methotrexate toxicity.

ATC CODE:
VinBLAStine - L01CA01
Methotrexate - L01BA01

REFERENCES:
NCCP Regimen: VinBLAStine and methotrexate

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Version number: 1

Tumour Group: Sarcoma
NCCP Regimen Code: 00554

ISM0 Contributor: Prof Maccon Keane

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