Docetaxel in Adjuvant Breast Cancer

Indication: Adjuvant therapy for patients who have had previous anthracycline therapy for previous Early Breast Cancer

Regimen details: Docetaxel 100mg/m² IV D1

Administration: Docetaxel in 250mls Sodium Chloride 0.9% IV over 1 hour

Premedication: Dexamethasone 8mg po bd for 3 days, starting the morning of the day prior to each Docetaxel administration, to reduce the incidence and severity of fluid retention and hypersensitivity reactions. If the patient has not taken the oral pre-med for any reason, Dexamethasone 20mg IV should be administered 1 hour prior chemotherapy

Frequency: Every 21 days, for 4 cycles

Extravasation: Vesicant

Anti-emetics: Low emetogenic
Follow local Anti-emetic policy

Supportive medication: Primary Prophylactic Growth Factor support should be used starting at least 24 hours post chemotherapy given with each cycle of chemotherapy, following the local Guidelines for the Use of Colony Stimulating Factors to Manage Neutropenia

Regular investigation: FBC D1
LFTs D1
U&Es D1

Comments: Hypersensitivity reactions may occur, during the first and second infusions, within a few minutes following the initiation of the infusion

Degree of symptoms | Hypersensitivity reactions | Action
--- | --- | ---
Minor | Flushing | Do not require interruption of therapy. Administer prophylactic anti-anaphylactic medication before further cycles of Docetaxel
Localised cutaneous reaction |
Severe | Severe hypotension | Require immediate discontinuation of Docetaxel
Bronchospasm | Generalised rash/erythema | Administer appropriate aggressive therapy
DOSE MODIFICATIONS

Haematological Toxicity

Day 1

WBC < 3.0 x 10^9/L
or
Neutrophils < 1.0 x 10^9/L
or
Platelets < 100 x 10^9/L

Delay for 1 week.
Repeat FBC - If within normal parameters, resume Docetaxel
at 80% dose and continue G-CSF support

Subsequent cycles:

Neutrophils < 0.5 x 10^9/L for more than 7 days, OR
Febrile neutropenia is diagnosed, OR
Platelets < 50 x 10^9/L,

If still these low counts despite Docetaxel dose reduction and G-CSF support, seek Consultant advice about further Docetaxel dose reduction

Renal Impairment: Docetaxel : No dose adjustment required

Hepatic Impairment

<table>
<thead>
<tr>
<th>ALP and AST/ALT and/or Bilirubin</th>
<th>Docetaxel dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 2.5 x ULN and ≤ 1.5 x ULN</td>
<td>Full dose</td>
</tr>
<tr>
<td>2.5 – 6 x ULN and 1.6 – 3.5 x ULN</td>
<td>75% dose</td>
</tr>
<tr>
<td>&gt; 6 x ULN and &gt; 3.5 x ULN</td>
<td>&gt; 22µmol/L Not recommended. Docetaxel should be administered with Consultant approval</td>
</tr>
</tbody>
</table>

DOSE MODIFICATIONS FOR OTHER TOXICITIES AS APPROPRIATE

CUTANEOUS REACTIONS / PERIPHERAL NEUROPATHY - DOCETAXEL

<table>
<thead>
<tr>
<th>Grade</th>
<th>Cutaneous reactions</th>
<th>Neuropathy-sensory</th>
<th>Docetaxel dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Erythema without associated symptoms</td>
<td>Paresthesia (including tingling) but not interfering with function</td>
<td>100% dose</td>
</tr>
<tr>
<td>2</td>
<td>Localized erythema of the palms of the hands and soles of the feet with oedema followed by desquamation</td>
<td>Paresthesia interfering with function, but not interfering with activities of daily living</td>
<td>May consider reduce Docetaxel dose to 75mg/m²</td>
</tr>
<tr>
<td>3</td>
<td>Severe, generalised eruptions followed by desquamation</td>
<td>Paresthesia interfering with activities of daily living</td>
<td>Delay Docetaxel until recovery to grade ≤ 2, thereafter, reduce Docetaxel dose to 75mg/m². If symptoms return, discontinue Docetaxel</td>
</tr>
<tr>
<td>4</td>
<td>Generalised exfoliative, ulcerative, or bullous dermatitis</td>
<td>Disabling</td>
<td>Discontinue Docetaxel, permanently</td>
</tr>
</tbody>
</table>
Toxicities: Myelosuppression; nausea; vomiting; diarrhoea; stomatitis; asthenia; fluid retention; peripheral neuropathy; hypersensitivity reactions; cutaneous reactions (reversible); nail disorder; ovarian failure; infertility

Drug interactions: Concomitant administration of substrates, inducers or inhibitors of cytochrome P450-3A e.g. ciclosporin, terfenadine, ketoconazole, erythromycin etc, may alter the pharmacokinetics of docetaxel, presenting a theoretical interaction

References: [www.medicines.org.uk](http://www.medicines.org.uk)
GSTT guidelines for treating nausea and vomiting in adult patients. Sept 2007
UCLH- Dosage Adjustment for Cytotoxics in Renal Impairment. Nov 2003
UCLH- Dosage Adjustment for Cytotoxics in Hepatic Impairment. Nov 2003
CTCAE v 3.0. August 2006