

Breast Pathway Group – Docetaxel x 4 in Early Breast Cancer

Indication: Neoadjuvant or adjuvant therapy for high risk and fit breast cancer patients suitable for a taxane containing regimen

Regimen details: Docetaxel 100mg/m² IV Day 1

Administration: Docetaxel in 250ml or 500ml Sodium Chloride 0.9% depending on final concentration IV over 1 hour

Hypersensitivity reactions may occur, such as flushing, rash with or without pruritus, chest tightness, back pain, dyspnoea and fever or chills, usually during the first and second infusions and within a few minutes following the start of the infusion; the infusion should be slowed down or interrupted and the necessary supportive medication should be administered.

Severe reactions such as hypotension and/or bronchospasm or generalised rash/erythema requires immediate discontinuation.

Availability of resuscitation equipment must be ensured as a standard precaution.

Frequency: Day 1, every 21 days, for 4 cycles

Pre-medication: Oral dexamethasone 8mg BD for 3 days, starting the day before docetaxel administration to reduce the incidence and severity of fluid retention and hypersensitivity reactions.

If the patient has not taken the oral pre-medication, clinicians may prescribe dexamethasone IV 20mg, chlorphenamine IV 10mg and ranitidine IV 50mg to be administered 1 hour prior to chemotherapy. *(note: there is no data available to support the use of IV steroids in this setting, responsibility remains with the prescribing clinician).*

Paracetamol / Chlorphenamine / Hydrocortisone can be given for administration-related reactions such as chills / fever.

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Reason for Update: LCA Protocol Development	Approved by LCA Joint Delivery Subgroup Co-Chairs: Pauline McCalla & Rebecca Johl
Prepared by: Lisa Yuen	Approved by LCA Medicines & Chemotherapy Steering Group Chair: Jamie Ferguson
Second check by: Laura Cameron	Date prepared: November 2014 Review Date: November 2016
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Anti- emetics:	Low emetogenicity 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, as per Local Policy Mouthcare as per Local Policy																		
Extravasation:	Vesicant Docetaxel should be administered with appropriate precautions to prevent 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																		
Regular investigation:	<table border="0"> <tr> <td>Prior to cycle 1</td> <td></td> </tr> <tr> <td>FBC</td> <td>Day 1 (within 14 days)</td> </tr> <tr> <td>LFTs</td> <td>Day 1 (within 14 days)</td> </tr> <tr> <td>U&Es</td> <td>Day 1 (within 14 days)</td> </tr> <tr> <td colspan="2"> </td> </tr> <tr> <td>Prior to Day 1 (all cycles)</td> <td></td> </tr> <tr> <td>FBC</td> <td>Day 1 (within 72 hours)</td> </tr> <tr> <td>LFTs</td> <td>Day 1 (within 72 hours)</td> </tr> <tr> <td>U&Es</td> <td>Day 1 (within 72 hours)</td> </tr> </table>	Prior to cycle 1		FBC	Day 1 (within 14 days)	LFTs	Day 1 (within 14 days)	U&Es	Day 1 (within 14 days)			Prior to Day 1 (all cycles)		FBC	Day 1 (within 72 hours)	LFTs	Day 1 (within 72 hours)	U&Es	Day 1 (within 72 hours)
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Toxicities:	Myelosuppression, nausea, vomiting, diarrhoea, stomatitis, asthenia, myalgia/arthralgia, fluid retention, peripheral neuropathy, hypersensitivity reactions, cutaneous reactions (reversible), nail disorder, ovarian failure, infertility																		

DOSE MODIFICATIONS

Haematological Toxicity

Neutrophils (x 10 ⁹ /L)		Platelets (x 10 ⁹ /L)	Dose
≥ 1.0	&	≥ 100	100% dose
≥ 1.0	&	75 - 99	Discuss with Consultant – treatment can be considered on medical advice. Or consider treatment delay for 1 week. Repeat FBC, if platelets recover to ≥ 100 x 10 ⁹ /L, resume

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			treatment at 100% dose.
< 1.0	or	< 75	Delay for 1 week. Repeat FBC, if recovered to above these levels, resume treatment with 75% dose for all subsequent cycles.

In neoadjuvant/adjuvant treatment, dose reduction and delays can compromise outcome.

- If despite GCSF treatment, febrile neutropenia occurs or a dose delay is required – seek Consultant advice and consider a dose reduction by 25%
- If platelets persistently < 100 x 10⁹/L on Day 1 despite dose delay – seek Consultant advice and consider dose reduction by 25%

Non-haematological Toxicities

Renal Impairment

Docetaxel: No dose adjustment required

Hepatic Impairment

ALP		AST / ALT		Bilirubin	Docetaxel Dose
≤ 2.5 X ULN	&	≤ 1.5 x ULN			Full dose
2.5 – 6 x ULN	&	1.6 – 3.5 x ULN			75% dose
> 6 ULN	&	> 3.5 x ULN	& / or	> 22µmol/L	Not recommended. Docetaxel should be administered with Consultant approval

Dose modifications for other toxicities as appropriate

NCI CTCAE Grade	Cutaneous Reactions	Dose
1	Erythema without associated symptoms	100% dose
2	Localised erythema of the palms of the hands and soles of the feet with oedema followed by desquamation	Consider dose reduction to 75% dose
3	Severe, generalised eruptions followed by desquamation	Delay until recovery to ≤ Grade 2, reduce to 75% dose For 2 nd occurrence, discontinue docetaxel
4	Generalised exfoliative, ulcerative or bullous dermatitis	Discontinue docetaxel permanently

NCI CTCAE Grade	Sensory Neuropathy	Dose
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1	Paraesthesia (including tingling), but not interfering with function	100% dose
2	Paraesthesia interfering with function, but not interfering with activities of daily living	Consider dose reduction to 75% dose
3	Paraesthesia interfering with activities of daily living	Delay until recovery to ≤ Grade 2, reduce to 75% dose For 2 nd occurrence, discontinue docetaxel
4	Disabling	Discontinue docetaxel permanently

Location of regimen delivery: Outpatient setting
Availability of resuscitation equipment must be ensured as a standard precaution.

Comments: None

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:

Accord. Summary of Product Characteristics: docetaxel 04/10/2013 Available at <http://www.medicines.org.uk/emc/> [Accessed 19/11/13]

UCLH- Dosage Adjustment for Cytotoxics in Renal Impairment. Jan 2009

UCLH- Dosage Adjustment for Cytotoxics in Hepatic Impairment. Jan 2009

LCA Breast Cancer Clinical Guidelines October 2013

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