LONDON CANCER ALLIANCE West and South

Breast Pathway Group – Paclitaxel Albumin (Abraxane) in Advanced Breast Cancer

Indication:	Alternative treatment for advanced breast cancer in patients who have documented taxane hypersensitivity in the metastatic setting
Regimen details:	Paclitaxel Albumin (Abraxane) 260mg/m^2 IV Day 1
Administration:	The dose will be supplied as 5mg/ml solution in an empty 250ml infusion bag given over 30 minutes. Do not use an in-line filter.
Frequency:	Day 1, every 21 days, for 6 cycles
Pre-medication:	Not routinely required
Anti- emetics:	Low emetogenicity Follow Local Anti-emetic Policy
Supportive medication:	Mouthcare as per local policy
Extravasation:	Vesicant Paclitaxel albumin 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 investigations:	Prior to Cycle 1: FBC Day 1 (within 14 days) LFTs Day 1 (within 14 days) U&Es Day 1 (within 14 days) MUGA scan/ECHO See Comments

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Reason for Update: LCA Protocol Development	Approved by LCA Joint Delivery Subgroup Co-Chairs: Pauline McCalla & Rebecca Johl
Prepared by: Isabel Munoz	Approved by LCA Medicines & Chemotherapy Steering Group Chair: Jamie Ferguson
Second check by: Lisa Yuen	Date prepared: November 2014 Review Date: November 2016

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)

Toxicities: Myelosuppression, infection, neuropathy, anaemia, alopecia, fatigue, myalgia, arthalgia, nausea, vomiting, diarrhoea, stomatitis, cardiotoxicity, skin reactions, nail disorders, eye problems, anorexia, pneumonitis, dizziness, hypersensitivity reactions (uncommon - see comments)

DOSE MODIFICATIONS

Haematological Toxicity

Neutrophils (x 10^9/L)		Platelets (x 10^9/L)	Dose
≥ 1.5	&	≥ 100	100%
< 1.5	& / or	< 100	Delay for 1 week. Repeat FBC - if recovered to above these levels, resume treatment with 100% doses Consider dose reduction for >1 delay.

- Dose reduction and / or delay is more appropriate in the advanced setting
- If during the preceding cycle, the patient has experienced neutrophils < 0.5 x 10^9/L or has febrile neutropenia diagnosed, GCSF should be considered.
- If platelets persistently < 100 x 10^9/L on Day 1 despite dose delay - seek Consultant advice and consider dose reduction by 25%

Non-haematological Toxicities

Renal Impairment

Studies in patients with impaired renal function have not been performed and insufficient data are currently available to recommend dose modifications in patients with renal impairment.

Hepatic Impairment

Bilirubin		AST / ALT	Dose
< 2 x ULN	& / or	< 2 x ULN	100% dose
2 to 5 x ULN		2.5 to 9 x ULN	Reduce to 220mg/m^2
> 5 x ULN		> 10 x ULN	Discontinue

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Dose modifications for other toxicities as appropriate

Sensory neuropathy

Grade	Sensory neuropathy	1st occurrence	2nd occurrence
1	Paresthesia (including tingling) but not interfering with function	Give 100% dose	Give 100% dose
2	Paresthesia interfering with function, but not interfering with activities of daily living	Give 100% dose	Give 100% dose
3	Paresthesia interfering with activities of daily living	Withhold until recover to grade 1-2, then reduce dose to 220mg/m^2	Withhold until recover to grade 1-2, then reduce dose to 180mg/m^2
4	Disabling	Withhold until recover to grade 2, then reduce dose to 220mg/m^2	Withhold until recover to grade 2, then reduce dose to 180mg/m^2 or discontinue

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

Comments: None

Hypersensitivity: Hypersensitivity reactions are rare, however very rare events of anaphylaxis have been reported. Availability of resuscitation equipment must be ensured as a standard precaution. If a hypersensitivity reaction occurs, Abraxane should be discontinued immediately and symptomatic treatment should be initiated. The patient should **not** be rechallenged.

Cardiotoxicity: Rare reports of congestive heart failure and left ventricular dysfunction have been observed in patients with underlying cardiac history or previous exposure to cardiotoxic products such as anthracyclines. Patients should be monitored for the occurrence of cardiac events.

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Visual acuity	Post-marketing experience has identified rare reports of reduced visual acuity due to cystoid macular oedema. Treatment should be discontinued.
Sodium content	When reconstituted, paclitaxel albumin (Abraxane) contains approximately 425 mg sodium per dose. To be taken into consideration by patients on a controlled sodium diet.
Drug interactions:	The metabolism of paclitaxel is catalysed, in part, by cytochrome P450 isoenzymes CYP2C8 and CYP3A4. Caution should be exercised when administering paclitaxel concomitantly with medicines known to inhibit (e.g. ketoconazole and other imidazole antifungals, erythromycin, fluoxetine, gemfibrozil, cimetidine, ritonavir, saquinavir, indinavir, and nelfinavir) or induce (e.g. rifampicin, carbamazepine, phenytoin, efavirenz, nevirapine) either CYP2C8 or CYP3A4.

References:

Celgene Ltd. Summary of Product Characteristics: Abraxane® 23/08/2013 Available at http://www.medicines.org.uk/emc/ [Accessed 10/10/13]

Micromedex review – Abraxane. Available at http://www.micromedexsolutions.com/ [accessed 03/07/13]

Gradishar W, Tjulandin S, Davidson N et al. Phase III trial of nanoparticle albumin-bound paclitaxel compared with polyethylated castor oil-based paclitaxel in women with breast cancer. J Clin Oncol 2005, 23:7794-7803

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