LONDON CANCER ALLIANCE
West and South

Skin Pathway Group – Pegylated Liposomal Doxorubicin (Caelyx) in Primary Cutaneous T-cell Lymphoma

Indication:	Advanced Mycosis Fungoides, Stage IIb-IVa and IVb first and subsequent lines Other tumour stage and advanced primary cutaneous T cell lymphoma Caelyx in not licensed for this indication, and therefore use should be in line with individual Trust governance process
Regimen details:	Pegylated Liposomal Doxorubicin (Caelyx) 20mg/m^2 IV Day 1 and Day 15 For patients with poor performanace status: Pegylated Liposomal Doxorubicin (Caelyx) 20mg/m^2 IV Day 1
Administration:	IV infusion over 60 – 90 minutes Caelyx dose < 90mg — Dilute in 250ml Glucose 5% Caelyx dose ≥ 90mg — Dilute in 500ml Glucose 5% Caelyx is incompatible with Sodium Chloride. The IV line should be flushed **before** and **after** the infusion with Glucose 5% The initial Caelyx dose should be administered no faster than 1mg/minute, to minimize the risk of infusion reactions. If no infusion reaction occurs with the first dose, subsequent Caelyx infusions may be administered over 1 hour In those patients who experience an infusion reaction, stop the infusion temporarily until symptoms have cleared with or without further therapy (antihistamines, corticosteroids, adrenaline) and resume treatment, at a slower rate, as follows:

Version: 1.0 Supersedes: all other versions	Approved by LCA Skin Pathway Chemotherapy Lead: Mark Harries
Reason for Update: LCA Protocol Development	Approved by LCA Joint Delivery Subgroup Co-Chairs: Pauline McCalla & Rebecca Johl
Prepared by: Ravi Shaunak	Approved by LCA Medicines & Chemotherapy Steering Group Chair:
Second check by: Sanna Eestila	Date prepared: January 2015 Review Date: January 2017

	5% of the total dose should be infused slowly over the first 15 minutes If tolerated, without reaction: may double the infusion rate for the next 15 minutes If tolerated: complete the infusion over the next hour for a total infusion time of 90 minutes
Frequency:	Every 28 days, for 6 to 8 cycles
Pre-medication:	Paracetamol / Chlorphenamine / Hydrocortisone
Anti- emetics:	Low emetogenicity Follow Local Anti-emetic Policy
Supportive medication:	If required, emollients and Pyridoxine 50mg po TDS for palmar-plantar erythrodysesthesia (PPE) (not scientifically proven)
Extravasation:	Non-vesicant
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	In high-risk patients
ECG	Baseline and then periodically as required

Prior to Cycle 1 Day 15 dose and all doses onwards:

FBC	Day 1 and Day 15 (within 72 hours)
LFTs	Day 1 and Day 15 (within 72 hours)
U&Es	Day 1 and Day 15 (within 72 hours)
Clinical Skin scoring and Imaging	Every 2 cycles

Toxicities:	Myelosuppresion, infection, nausea, vomiting, stomatitis mucositis, taste alteration, skin changes, palmar-plantar erythrodysethesia, hot flashes, backache, photosensitivity, urine discolouration, infusion associated reactions, tiredness, cardiotoxicity.

DOSE MODIFICATIONS

Haematological Toxicity

Neutrophils (x 10^9/L)		Platelets (x 10^9/L)	Dose
1.5 – 1.9	**or**	75 – 150	Give 100% dose
0.5 – 1.4	**or**	25 – 74	Delay treatment until neutrophils ≥ 1.5 x 10^9/L and Platelets ≥ 75 x 10^9/L, then give 100% dose
< 0.5	**or**	< 25	Delay treatment until neutrophils ≥ 1.5 x 10^9/L and Platelets ≥ 75 x 10^9/L, then give 75% dose

Non-haematological Toxicities

Renal Impairment No dose reduction needed

Hepatic Impairment

Bilirubin (micromol/L)	Dose
20 – 51	Give 75%
≥ 51	Give 50 %

Dose modifications for other toxicities

The following measures may help to minimise the risk of PPE for the first 4 – 7 days after Caelyx infusion:

- Keep hands and feet as cool as possible
- Do not wear tight fitting gloves or socks and avoid wearing tight-fitting footwear and high heeled shoes
- Avoid exposing the skin to very hot water, such as the bath or washing up
- Do not rub the skin vigorously or use abrasive washcloths. Pat skin dry after washing
- Avoid the use of topical anaesthetics as they can worsen skin reactions

TOXICITY GRADE After Prior Caelyx Dose	PALMAR-PLANTAR ERYTHRODYSESTHESIA	STOMATITIS	WEEK 4 After Prior Caelyx Dose	WEEK 5 After Prior Caelyx Dose	WEEK 6 After Prior Caelyx Dose
1	Mild erythema, swelling or Desquamation not interfering with ADL	Painless ulcers, erythema or mild soreness	**Redose unless** patient experienced a previous Grade 3 or 4 toxicity, in which case wait an additional week	**Redose unless** patient experienced a previous Grade 3 or 4 toxicity, in which case wait an additional week	**Give 75% dose and return to 4 week interval or stop treatment- discuss with Consultant**
2	Erythema, desquamation or swelling interfering with but not precluding normal physical activities; small blisters or ulcerations < 2cm in diameter	Painful erythema, oedema or ulcers, but can eat	Wait an additional week	Wait an additional week	**Give 75% dose and return to 4 week interval or stop treatment- discuss with Consultant**
3	Blistering, ulceration or swelling interfering with walking or normal daily activities; cannot wear usual clothing	Painful erythema, oedema or ulcers, but cannot eat	Wait an additional week	Wait an additional week	**No further treatment**
4	Diffuse or local process causing infectious complications, or a bedridden state or hospitalisation	Requires parenteral or enteral support	Wait an additional week	Wait an additional week	**No further treatment**

Location of regimen delivery: Day case setting

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Comments:

Maximum cumulative dose Caelyx = 450mg/m^2
A baseline MUGA scan or Echocardiogram should be performed where the patient is considered at risk of having impaired cardiac function e.g. significant cardiac history, hypertension, diabetes, obese, smoker, elderly, previous exposure to anthracyclines, previous thoracic radiotherapy.
MUGA scan or Echocardiogram should be repeated if there is suspicion of cardiac toxicity at any point during treatment, or if cumulative anthracycline dose approaches maximum

Drug interactions:

- Ciclosporin (high dose) increase Caelyx serum levels and myelotoxicity
- Concomitant use of other cardioactive compounds e.g. calcium channel blockers require monitoring of cardiac function throughout treatment
- Phenytoin : reduced blood levels of the anticonvulsant and increased seizure activity
- Warfarin : the anticoagulant effect is increased

References:

www.medicines.org.uk accessed February 2015
Wollina U et al. Multicentre study of Pegylated Liposomal Doxorubicin in patients with cutaneous T cell Lymphoma. Cancer 2003; Sep 1; Vol 98; n5 9 993 – 1001
Di Lorenzo G et al. Pegylated Liposomal doxorubicin in stage Ivb Mycosis Fungoides. Br J Derm 2005 153 pp 183-185
EORTC Cutaneous Lymphoma Task Force. Phase II clinical trial with Caelyx mono-chemotherapy in patients with advanced Mycosis fungoides stage IIb, Iva and IVb with or without previous chemotherapy. EORTC protocol 21012. Version 1.2 / 26 January, 2005

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