

## Pegylated Liposomal DOXOrubicin 20mg/m<sup>2</sup> 21 days

Please note that the Myocet® product, which contains non-pegylated liposomal DOXOrubicin should not be used when treating patients with this regimen.

### INDICATIONS FOR USE:

INDICATION	ICD10	Regimen Code	Reimbursement Status
Treatment of AIDS-related Kaposi's sarcoma (KS) in patients with low CD4 counts (< 200 CD4 lymphocytes/mm <sup>3</sup> ) and extensive mucocutaneous or visceral disease	C46	00462a	Hospital

### 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 patients individual clinical circumstances.

Treatment is administered once every 21 days\* for a maximum of 6 cycles or until disease progression or unacceptable toxicity occurs.

\* In some patients, a 14 day cycle may be more appropriate.

Facilities to treat anaphylaxis MUST be present when systemic anti-cancer therapy (SACT) is administered.

Day	Drug	Dose	Route	Diluent & Rate	Cycle
1	Pegylated liposomal DOXOrubicin	20mg/m <sup>2</sup>	IV infusion	<sup>a</sup> 250ml glucose 5% at rate of 1mg/min for first cycle (see note)	Repeat every 21 days
<p><sup>a</sup>For doses ≥ 90mg, use 500mL infusion bag Do not use with in-line filters</p> <p><b>NOTE:</b> If no infusion reaction observed subsequent infusions may be administered over 60min.</p> <p>For patients who experience an infusion reaction, the method of infusion should be modified as follows: 5% of the total dose should be infused slowly over the first 15 minutes. If tolerated without reaction, the infusion rate may then be doubled for the next 15 minutes. If tolerated, the infusion may then be completed over the next hour for a total infusion time of 90 minutes.</p>					

### ELIGIBILITY:

- Indications as above
- ECOG 0-3

### EXCLUSIONS:

- Hypersensitivity to pegylated liposomal DOXOrubicin or to any of the excipients
- Pre-existing cardiac myopathy or congestive heart failure
- Hepatic dysfunction (see Dose Modifications below)

NCCP Regimen: Pegylated Liposomal DOXOrubicin 20mg/m <sup>2</sup> 21 days	Published: 16/02/2018 Review: 26/02/2025	Version number: 3
Tumour Group: Sarcoma NCCP Regimen Code: 00462	ISMO Contributor: Prof Maccon Keane	Page 1 of 4
<p>The information contained in this document is a statement of consensus of NCCP and ISMO or IHS professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is the responsibility of the prescribing clinician and is subject to HSE's terms of use available at <a href="http://www.hse.ie/eng/Disclaimer">http://www.hse.ie/eng/Disclaimer</a></p> <p><i>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoregimens">www.hse.ie/NCCPchemoregimens</a></i></p>		

## PRESCRIPTIVE AUTHORITY:

The treatment plan must be initiated by a Consultant Medical Oncologist.

## TESTS:

### Baseline tests:

- FBC, renal and liver profile
- ECG
- MUGA or ECHO (to determine LVEF )

### Regular tests:

- FBC, renal and liver profile prior to each cycle
- ECG
- \*MUGA or ECHO (to determine LVEF as clinically indicated)  
\*See Adverse Effects/Regimen specific complications for guidelines regarding cardiotoxicity

### 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 of pegylated liposomal DOXOrubicin in haematological toxicity**

ANC ( $\times 10^9$ /L)		Platelets ( $\times 10^9$ /L)	Dose
$\geq 1$	and	$\geq 75$	100%
0.5-0.99	or	50-74	50%
<0.5	or	<50	Delay

## Renal and Hepatic Impairment:

**Table 2: Dose modification of pegylated liposomal DOXOrubicin in renal and hepatic impairment**

Renal Impairment	Hepatic Impairment	
No dose reduction necessary	Bilirubin (micromol/L)	Dose
	20-51	75%
	>51	50%

NCCP Regimen: Pegylated Liposomal DOXOrubicin 20mg/m <sup>2</sup> 21 days	Published: 16/02/2018 Review: 26/02/2025	Version number: 3
Tumour Group: Sarcoma NCCP Regimen Code: 00462	ISMO Contributor: Prof Maccon Keane	Page 2 of 4
<p>The information contained in this document is a statement of consensus of NCCP and ISMO or IHS professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is the responsibility of the prescribing clinician and is subject to HSE's terms of use available at <a href="http://www.hse.ie/eng/Disclaimer">http://www.hse.ie/eng/Disclaimer</a></p> <p><i>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoregimens">www.hse.ie/NCCPchemoregimens</a></i></p>		

## Management of adverse events:

**Table 3: Dose Modification of pegylated liposomal DOXOrubicin Palmar-Plantar Erythrodysesthesia (PPE) and Stomatitis**

Week after prior pegylated liposomal DOXOrubicin dose			
Toxicity Grade At Current Assessment	Day 1 of new cycle	Delayed one week	Delayed 2 weeks
Grade 1	Proceed with dose unless patient has experienced a previous Grade 3 or 4 skin toxicity or stomatitis, in which case delay 1 week	Proceed with dose unless patient has experienced a previous Grade 3 or 4 skin toxicity or stomatitis, in which case delay another week	PPE and stomatitis: Decrease dose by 25 %; OR Stomatitis: Consider discontinuation - clinician decision
Grade 2	Delay 1 week	Delay an additional week	PPE and stomatitis: Decrease dose by 25 %; OR Stomatitis: Consider discontinuation - clinician decision
Grade 3	Delay 1 week	Delay an additional week	Discontinue
Grade 4	Delay 1 week	Delay an additional week	Discontinue

## SUPPORTIVE CARE:

**EMETOGENIC POTENTIAL:** Low (Refer to local policy).

**PREMEDICATIONS:** None usually required

## OTHER SUPPORTIVE CARE:

Other strategies to prevent and treat PPE, which may be initiated for 4 to 7 days after treatment with pegylated liposomal DOXOrubicin include keeping hands and feet cool, by exposing them to cool water (soaks, baths, or swimming), avoiding excessive heat/hot water and keeping them unrestricted (no socks, gloves, or shoes that are tight fitting)(Refer to local policy).

## ADVERSE EFFECTS / REGIMEN SPECIFIC COMPLICATIONS:

*The adverse effects listed are not exhaustive. Please refer to the relevant Summary of Product Characteristics for full details.*

- Cardiotoxicity:** Frequent ECG monitoring is recommended. Reduction of the QRS complex suggests cardiac toxicity. LVEF monitoring using ECHO or MUGA should be applied during treatment. The evaluation of LVEF is considered to be mandatory before each additional administration of pegylated liposomal DOXOrubicin that exceeds a lifetime cumulative anthracycline dose of 450mg/m<sup>2</sup>. Cardiac toxicity also may occur at cumulative anthracycline doses lower than 450mg/m<sup>2</sup> in patients with prior mediastinal irradiation or in those receiving concurrent cyclophosphamide therapy.

NCCP Regimen: Pegylated Liposomal DOXOrubicin 20mg/m <sup>2</sup> 21 days	Published: 16/02/2018 Review: 26/02/2025	Version number: 3
Tumour Group: Sarcoma NCCP Regimen Code: 00462	ISMO Contributor: Prof Maccon Keane	Page 3 of 4
<p>The information contained in this document is a statement of consensus of NCCP and ISMO or IHS professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is the responsibility of the prescribing clinician and is subject to HSE's terms of use available at <a href="http://www.hse.ie/eng/Disclaimer">http://www.hse.ie/eng/Disclaimer</a></p> <p><i>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoregimens">www.hse.ie/NCCPchemoregimens</a></i></p>		

- **Acute Infusion Reaction:** Usually seen during the first infusion. For patients who experience an infusion reaction, the method of infusion should be modified as follows: 5% of the total dose should be infused slowly over the first 15 minutes. If tolerated without reaction, the infusion rate may then be doubled for the next 15 minutes. If tolerated, the infusion may then be completed over the next hour for a total infusion time of 90 minutes.
- **Palmar-plantar erythrodysesthesia syndrome (PPE):** Monitor patient for presence of PPE. If present, patient may require an interruption in treatment (see dose modifications).
- **Extravasation:** Pegylated liposomal DOXOrubicin is considered an irritant. **(Refer to local guidelines).**

## DRUG INTERACTIONS:

- No formal medicinal product interaction studies have been carried out.
- Exercise caution in the concomitant use of pegylated liposomal DOXOrubicin with products known to interact with standard DOXOrubicin hydrochloride
- Current drug interaction databases should be consulted for more information.

## REFERENCES:

1. Stewart et al. Randomized Comparative Trial of Pegylated Liposomal DOXOrubicin versus Bleomycin and Vincristine in the treatment of AIDS-Related Kaposi's Sarcoma. J Clin Oncol 1998;16(2):683-91.
2. Northfelt et al. Pegylated-liposomal DOXOrubicin versus DOXOrubicin, Bleomycin and Vincristine in the treatment of AIDS-related Kaposi's sarcoma: Results of a randomized Phase III Clinical Trial. J Clin Oncol 1998 ;16(7):2445-51.
3. Caelyx<sup>®</sup> Summary of product characteristics. Accessed June 2023 . Available at [https://www.ema.europa.eu/en/documents/product-information/caelyx-epar-product-information\\_en.pdf](https://www.ema.europa.eu/en/documents/product-information/caelyx-epar-product-information_en.pdf)
4. NCCP Classification Document for Systemic Anti-Cancer Therapy (SACT) Induced Nausea and Vomiting. V5 2023. Available at: <https://www.hse.ie/eng/services/list/5/cancer/profinfo/chemoprotocols/nccp-classification-document-for-systemic-anti-cancer-therapy-sact-induced-nausea-and-vomiting.pdf>

Version	Date	Amendment	Approved By
1	16/02/2018		Prof Maccon Keane
2	26/02/2020	Reviewed.	Prof Maccon Keane
3	28/07/2023	Removal of brand name.	Prof Maccon Keane

Comments and feedback welcome at [oncologydrugs@cancercontrol.ie](mailto:oncologydrugs@cancercontrol.ie).

NCCP Regimen: Pegylated Liposomal DOXOrubicin 20mg/m <sup>2</sup> 21 days	Published: 16/02/2018 Review: 26/02/2025	Version number: 3
Tumour Group: Sarcoma NCCP Regimen Code: 00462	ISMO Contributor: Prof Maccon Keane	Page 4 of 4
<p>The information contained in this document is a statement of consensus of NCCP and ISMO or IHS professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is the responsibility of the prescribing clinician and is subject to HSE's terms of use available at <a href="http://www.hse.ie/eng/Disclaimer">http://www.hse.ie/eng/Disclaimer</a></p> <p><i>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoregimens">www.hse.ie/NCCPchemoregimens</a></i></p>		