Pegylated Liposomal DOXOrubicin 20mg/m² (CAELYX) ® 21 days

INDICATIONS FOR USE:

<table>
<thead>
<tr>
<th>INDICATION</th>
<th>ICD10</th>
<th>Regimen Code</th>
<th>Reimbursement Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment of AIDS-related Kaposi’s sarcoma (KS) in patients with low CD4</td>
<td></td>
<td>C46</td>
<td>Hospital</td>
</tr>
<tr>
<td>counts (&lt; 200 CD4 lymphocytes/mm³) and extensive mucocutaneous or visceral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>disease</td>
<td></td>
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</tbody>
</table>

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 patient's 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.

Day | Drug                        | Dose     | Route | Diluent & Rate                      | Cycle               
--- |------------------------------|----------|-------|-------------------------------------|---------------------
1   | Pegylated Liposomal DOXOrubicin (Caelyx) | 20mg/m² | IV infusion | a250ml glucose 5% at rate of 1mg/min for first cycle (see note) | Repeat every 21 days |

*For doses ≥ 90mg, use 500mL infusion bag
Do not use with in-line filters

NOTE: If no infusion reaction observed subsequent infusions may be administered over 60min.

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.

ELIGIBILITY:

- Indications as above
- ECOG 0-3

EXCLUSIONS:

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

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 (CAELYX) in haematological toxicity

<table>
<thead>
<tr>
<th>ANC (x10^9/L)</th>
<th>Platelets (x10^9/L)</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥1 and ≥75</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>0.5-0.99 or 50-74</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>&lt;0.5 or &lt;50</td>
<td></td>
<td>Delay</td>
</tr>
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</table>

Renal and Hepatic Impairment:

Table 2: Dose modification of pegylated liposomal DOXOrubicin (CAELYX) in renal and hepatic impairment

<table>
<thead>
<tr>
<th>Renal Impairment</th>
<th>Hepatic Impairment</th>
</tr>
</thead>
<tbody>
<tr>
<td>No dose reduction necessary</td>
<td>Bilirubin (micromol/L)</td>
</tr>
<tr>
<td></td>
<td>20-51</td>
</tr>
<tr>
<td></td>
<td>&gt;51</td>
</tr>
</tbody>
</table>
Management of adverse events:

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

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

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...
NCCP Chemotherapy Regimen

450mg/m². Cardiac toxicity also may occur at cumulative anthracycline doses lower than 450mg/m² in patients with prior mediastinal irradiation or in those receiving concurrent cyclophosphamide therapy.

- **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.

**ATC CODE:**

DOXOrubicin L01DB01

**REFERENCES:**


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<tr>
<th>Version</th>
<th>Date</th>
<th>Amendment</th>
<th>Approved By</th>
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<tr>
<td>1</td>
<td>16/02/2018</td>
<td></td>
<td>Prof Maccon Keane</td>
</tr>
<tr>
<td>2</td>
<td>26/02/2020</td>
<td>Reviewed.</td>
<td>Prof Maccon Keane</td>
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Comments and feedback welcome at oncologydrugs@cancercontrol.ie.