**PACLitaxel Monotherapy 80mg/m² – 7 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 metastatic breast carcinoma (mBC) in patients who have either failed or are not candidates for standard, anthracycline-containing therapy(^i)</td>
<td>C50</td>
<td>00226a</td>
<td>Hospital</td>
</tr>
<tr>
<td>Second-line chemotherapy for metastatic ovarian cancer after failure of standard, platinum-containing therapy(^i)</td>
<td>C56</td>
<td>00226b</td>
<td>Hospital</td>
</tr>
<tr>
<td>Second line chemotherapy for advanced or recurrent gastric cancer(^i)</td>
<td>C16</td>
<td>00226c</td>
<td>Hospital</td>
</tr>
<tr>
<td>Relapsed or refractory small cell lung cancer(^i)</td>
<td>C34</td>
<td>00226d</td>
<td>Hospital</td>
</tr>
<tr>
<td>Second line chemotherapy for metastatic bladder cancer(^i)</td>
<td>C67</td>
<td>00226e</td>
<td>Hospital</td>
</tr>
</tbody>
</table>

*If the reimbursement status is not defined, the indication has yet to be assessed through the formal HSE reimbursement process*

**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.*

PACLitaxel is administered once every 7 days until disease progression or unacceptable toxicity develops. PACLitaxel may be administered once every 7 days for three weeks out of every 4 at the discretion of the prescribing consultant.

Facilities to treat anaphylaxis MUST be present when the chemotherapy is administered.

<table>
<thead>
<tr>
<th>Day</th>
<th>Drug</th>
<th>Dose</th>
<th>Route</th>
<th>Diluent &amp; Rate</th>
<th>Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PACLitaxel</td>
<td>80mg/m²</td>
<td>IV infusion</td>
<td>250ml 0.9% sodium chloride 5% over 1hr</td>
<td>Repeat every 7 days</td>
</tr>
</tbody>
</table>

PACLitaxel must be supplied in non-PVC containers and administered using non-PVC giving sets and through an in-line 0.22 μm filter with a microporous membrane.

PACLitaxel should be diluted to a concentration of 0.3-1.2mg/ml.

**ELIGIBILITY:**

- Indications as above.
- ECOG status 0-2.
- Life expectancy > 3 months.

**EXCLUSIONS:**

- Hypersensitivity to PACLitaxel or to any of the excipients.
- Breast feeding
- Baseline neutrophil count < 1.5x10⁹ cells/L
NCCP Chemotherapy Regimen

- Severe hepatic impairment

**PRESCRIPTIVE AUTHORITY:**
The treatment plan must be initiated by a Consultant Medical Oncologist.

**TESTS:**
**Baseline tests:**
- FBC, renal and liver profile

**Regular tests:**
- FBC, renal and liver profile prior to each treatment
- Day 8: FBC

**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>
<thead>
<tr>
<th>ANC (x10^9/L)</th>
<th>Platelets</th>
<th>Dose</th>
<th>Dose after neutropenic sepsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 1.5 and &gt; 90</td>
<td>80mg/m²</td>
<td>65mg/m²</td>
<td></td>
</tr>
<tr>
<td>*1-1.49 or 70-90</td>
<td>65mg/m²</td>
<td>50mg/m²</td>
<td></td>
</tr>
<tr>
<td>&lt; 1 or &lt; 70</td>
<td>Delay and reduce next dose to 65mg/m² or add G-CSF</td>
<td>Delay</td>
<td></td>
</tr>
</tbody>
</table>

Patients who cannot tolerate treatment after 2 dose reductions or require a treatment delay of greater than 2 weeks, should discontinue treatment.

* If ANC 1 to less than 1.5 and patient fit and well can consider full dose of 80 mg/m² at discretion of prescribing Consultant

**Renal and Hepatic Impairment:**

**Renal impairment:** No dose modifications necessary

<table>
<thead>
<tr>
<th>ALT</th>
<th>Total bilirubin</th>
<th>Dose of PACLitaxel</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10xULN and</td>
<td>≤ 1.25xULN</td>
<td>80mg/m²</td>
</tr>
<tr>
<td>&lt; 10xULN and</td>
<td>1.26-2xULN</td>
<td>60mg/m²</td>
</tr>
<tr>
<td>&lt; 10xULN and</td>
<td>2.01-5xULN</td>
<td>40mg/m²</td>
</tr>
<tr>
<td>≥10xULN and/or</td>
<td>&gt;5xULN</td>
<td>Not recommended</td>
</tr>
</tbody>
</table>

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 [http://www.hse.ie/eng/Disclaimer](http://www.hse.ie/eng/Disclaimer). This information is valid only on the day of printing, for any updates please check [www.hse.ie/NCCPchemoprotocols](http://www.hse.ie/NCCPchemoprotocols)
Non-Haematological Toxicity:

<table>
<thead>
<tr>
<th>Grade 2 motor or sensory neuropathy</th>
<th>Discontinue</th>
<th>Recommended dose modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold treatment until toxicity resolves to ≤ grade 1. Decrease subsequent doses by 10mg/m².</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

≥ Grade 3 reaction | Discontinue |

Patients who cannot tolerate treatment after 2 dose reductions or require a treatment delay of greater than 2 weeks, should discontinue treatment.

**SUPPORTIVE CARE:**

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

**PREMEDICATIONS:**

All patients must be premedicated with corticosteroids, antihistamines, and H₂ antagonists prior to PACLitaxel treatment. Table 4 outlines suggested premedications prior to treatment with PACLitaxel.

**ADVERSE EFFECTS / REGIMEN SPECIFIC COMPLICATIONS**

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

- **Hypersensitivity:** Severe hypersensitivity reactions characterised by dyspnoea and hypotension requiring treatment, angioedema and generalised urticaria have occurred in <1% of patients receiving PACLitaxel after adequate premedication. In the case of severe hypersensitivity reactions, PACLitaxel infusion should be discontinued immediately, symptomatic therapy should be initiated and the patient should not be re-challenged with the drug.

- **Extravasation:** PACLitaxel causes pain and tissue necrosis if extravasated. (Refer to local policy).

- **Neutropenia:** This is the dose limiting toxicity. Fever or other evidence of infection must be assessed promptly and treated appropriately.

- **Peripheral neuropathy:** Occurs frequently but the development of severe symptoms is rare.

- **Arthralgia/myalgia:** May be severe in some patients; however, there is no consistent correlation between cumulative dose and infusion duration of PACLitaxel and frequency or severity of the
arthralgia/myalgia. Symptoms are usually transient, occurring within 2 or 3 days after PACLitaxel administration, and resolving within days.

- **Cardiac conduction abnormalities**: If patients develop significant conduction abnormalities during PACLitaxel administration, appropriate therapy should be administered and continuous cardiac monitoring should be performed during subsequent therapy with PACLitaxel. Hypotension, hypertension, and bradycardia have been observed during PACLitaxel administration; patients are usually asymptomatic and generally do not require treatment. Frequent vital sign monitoring, particularly during the first hour of PACLitaxel infusion, is recommended.

- **Hepatic Dysfunction**: Patients with hepatic impairment may be at increased risk of toxicity, particularly grade 3-4 myelosuppression.

**DRUG INTERACTIONS:**

- Risk of drug interactions causing increased concentrations of PACLitaxel with CYP3A inhibitors. Patients should also be counselled with regard to consumption of grapefruit juice.
- Risk of drug interactions causing decreased concentrations of PACLitaxel with CYP3A inducers.
- Current drug interaction databases should be consulted for more information.

**ATC CODE:**

PACLitaxel L01CD01

**REFERENCES:**

5. Hironaka S Zenda S et al. Weekly paclitaxel as second-line chemotherapy for advanced or recurrent gastric cancer Gastric Cancer 2006;9: 14–18
NCCP Chemo therapy Regimen

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Amendment</th>
<th>Approved By</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29/04/2015</td>
<td>NCCP Protocol: PACLitaxel 80mg/m² - 7days</td>
<td>Dr Maccon Keane</td>
</tr>
<tr>
<td>2</td>
<td>14/06/2017</td>
<td>Additions of indications for Small Cell Lung Cancer and for metastatic bladder Cancer. Clarified dosing in haematological toxicity</td>
<td>Prof Maccon Keane</td>
</tr>
<tr>
<td>3</td>
<td>16/03/2018</td>
<td>Updated diluents recommendations and dosing in haematological toxicity</td>
<td>Prof Maccon Keane</td>
</tr>
</tbody>
</table>

Comments and feedback welcome at oncologydrugs@cancercontrol.ie.

1 ODMS – Oncology Drug Management System
CDS – Community Drug Schemes (CDS) including the High Tech arrangements of the PCRS community drug schemes
Further details on the Cancer Drug Management Programme is available at; http://www.hse.ie/eng/services/list/5/cancer/profinfo/medonc/cdmp/

2 This regimen is outside its licensed indication in Ireland. Patients should be informed of the unlicensed nature of this indication and consented to treatment in line with the hospital’s policy on the use of unlicensed medication and unlicensed or “off label” indications. Prescribers should be aware of their responsibility in communicating any relevant information to the patient and also in ensuring that the unlicensed or “off label” indication has been acknowledged by the hospital’s Drugs and Therapeutics Committee, or equivalent, in line with hospital policy.