PACLitaxel 80mg/m^2 Day 1, 8 and 15 Monotherapy-28 Day

Note: There is an option for weekly PACLitaxel 80mg/m^2 Day 1, 8, 15 and 22 Monotherapy-28 day as described in regimen NCCP - 00226.

INDICATIONS FOR USE:

INDICATION	ICD10	Regimen Code	HSE approved reimbursement status*
Second line chemotherapy for advanced or recurrent gastric cancer[i]	C16	00621a	N/A
Treatment of metastatic breast carcinoma (mBC) in patients who have either failed or are not candidates for standard, anthracycline-containing therapy[i]	C50	00621b	N/A
Second-line chemotherapy for metastatic ovarian cancer after failure of standard, platinum-containing therapy[i]	C56	00621c	N/A
Relapsed or refractory small cell lung cancer[i]	C34	00621d	N/A
Second line chemotherapy for metastatic bladder cancer[i]	C67	00621e	N/A

* This applies to post 2012 indications.

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.

PACLitaxel is administered on day 1, 8 and 15 of a 28 day treatment cycle until disease progression or unacceptable toxicity develops.

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

Day	Drug	Dose	Route	Diluent & Rate	Cycle
1,8,15	PACLitaxel	80mg/m^2	IV infusion	250mL NaCl 0.9% over 1 hour	Every 28 days
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.					

Note: Administration volumes and fluids have been standardised to facilitate electronic prescribing system builds.

ELIGIBILITY:

- Indications as above
- ECOG status 0-2

EXCLUSIONS:

- Hypersensitivity to PACLitaxel or to any of the excipients
- Breast feeding

- Baseline neutrophil count < $1.5x10^9$ cells/L
- 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
- Assessment of peripheral neuropathy status as clinically indicated

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.

Table 1: Recommended dose reduction schedule for PACLItaxel

Dose Reduction Schedule	Dose Level
Starting dose	$80mg/m^2$
First dose reduction	$65mg/m^2$
Second dose reduction	$50mg/m^2$

Haematological:

Table 2: Recommended dose modification for PACLitaxel for haematological toxicity

ANC ($x10^9$/L)		Platelets	Dose
≥1.0	and	≥90	100%
0.5 – 0.99	and/or	70-90	Delay and consider dose reduction at subsequent cycle
<0.5 for ≥7days	and/or	<70	Delay and reduce by one dose level after recovery Consider addition of G-CSF
Febrile neutropenia			

Renal and Hepatic Impairment:

Table 3: Recommended dose modification for PACLitaxel in renal and hepatic impairment

Renal Impairment	Hepatic Impairment			
No need for dose adjustment is expected.	**Transaminases**		**Bilirubin**	**Dose**
	< 10 x ULN	and	≤ 1.25 x ULN	No dose reduction
	< 10 x ULN	and	1.26-2 x ULN	75% of original dose
Haemodialysis : No need for dose adjustment is expected.	< 10 x ULN	and	2.01-5 x ULN	50% of original dose
	≥ 10 x ULN	and /or	> 5 x ULN	Contraindicated
Renal and hepatic dose modifications as per Giraud et al 2023				

Management of adverse events:

Table 4: Recommended dose modification of PACLitaxel for Adverse Events

Adverse reactions	Dose
Grade 2 motor or sensory neuropathy	Decrease dose by 10mg/m^2
All other grade 2 non-haematological toxicity	Hold treatment until toxicity resolves to ≤ grade 1. Decrease subsequent doses by 10mg/m^2
≥ Grade 3 reaction	Discontinue
Patients who cannot tolerate treatment after 2 dose reductions should be discussed with treating clinician regarding continuation of treatment.	

SUPPORTIVE CARE:

EMETOGENIC POTENTIAL

As outlined in NCCP Classification Document for Systemic Anti-Cancer Therapy (SACT) Induced Nausea and Vomiting - Available on the NCCP website

PACLitaxel: Low **(Refer to local policy).**

For information:

Within NCIS regimens, antiemetics have been standardised by Medical Oncologists and Haemato-oncologists and information is available in the following documents:

- NCCP Supportive Care Antiemetic Medicines for **Inclusion in NCIS** (Medical Oncology) - Available on the NCCP website
- NCCP Supportive Care Antiemetic Medicines for **Inclusion in NCIS** (Haemato-oncology) - Available on the NCCP website

PREMEDICATIONS:

- All patients must be premedicated with corticosteroids, antihistamines, and H_2 antagonists prior to PACLitaxel treatment.
- The H_2 antagonist, famotidine, can potentially be omitted from the pre-medication requirements for PACLitaxel but the risk of hypersensitivity with this approach is unknown.
    - Caution is advised particularly for patients receiving PACLitaxel every 3 weeks. It is recommended that if famotidine is omitted that patients are monitored closely for any signs

of hypersensitivity. Any hypersensitivity should be managed as per local policy.

- Where a patient experiences hypersensitivity, consider the use of alternative H_2 antagonists **(Refer to local policy).**

Table 5: Suggested premedications prior to treatment with PACLitaxel

Day of treatment	Drug	Dose	Administration prior to PACLitaxel
Day 1	dexAMETHasone[a]	8mg IV	30 minutes
Day 1	Chlorphenamine	10mg IV	30 minutes
Day 1	Famotidine	20mg IV	30 minutes
Day 8[b] and thereafter	dexAMETHasone[a]	None	
Day 8 and thereafter	Chlorphenamine	10mg IV	30 minutes
Day 8 and thereafter	Famotidine[c]	20mg IV	30 minutes
[a]Dose of dexamethasone may be altered, in the event of hypersensitivity reaction, to 20 mg of dexamethasone orally 12 hr and 6 hr prior to re-challenge with PACLitaxel according to consultant guidance.			
[b]Dose of dexAMETHasone may be added from day 8 if increased risk or previous hypersensitivity reaction according to consultant guidance.			
[c]Dose of famotidine may be omitted in the absence of hypersensitivity reaction according to consultant guidance.			

OTHER SUPPORTIVE CARE:

Myalgias and arthralgias may occur with PACLitaxel. Analgesic cover should be considered.

ADVERSE EFFECTS:

- Please refer to the relevant Summary of Product Characteristics for details.

DRUG INTERACTIONS:

- Current SmPC and drug interaction databases should be consulted for information.

REFERENCES:

1. Kodera Y, Ito S et al. A Phase II Study of Weekly Paclitaxel as Second-line Chemotherapy for Advanced Gastric Cancer (CCOG0302 Study). Anticancer Research 2007; 27: 2667-2672.
2. Giraud E L, Lijster B D, et al. Dose recommendations for anticancer drugs in patients with renal or hepatic impairment: an update. Available at: https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(23)00216-4/fulltext
3. NCCP Classification Document for Systemic Anti- Cancer Therapy (SACT) Induced Nausea and Vomiting V6 2025. Available at: https://www.hse.ie/eng/services/list/5/cancer/profinfo/chemoprotocols/nccp%20antiemetic%20classification%20document%20v1%202018.pdf
4. Uptodate infusion reactions to systemic chemotherapy available at: https://www.uptodate.com/contents/infusion-reactions-to-systemic-chemotherapy#H37
5. Quock J et al. Premedication strategy for weekly paclitaxel. Cancer investigation. Volume 20, 2002 issue 5-6

6. PACLitaxel 6mg/mL. Summary of Product Characteristics. Last updated: Accessed April 2025.Available at: https://www.hpra.ie/find-a-medicine/for-human-use/authorised-medicines/details/27560

Version	Date	Amendment	Approved By
1	18/12/2020		Prof Maccon Keane
2	14/11/2022	Reviewed. Updated premedications, including Table 4.	Prof Maccon Keane
3	13/06/2025	Regimen reviewed. Updated regular testing section. Addition of table 1-dose reduction schedule for PACLitaxel. Updated Table 2 dose modifications for PACLitaxel for haematological toxicity. Updated renal and hepatic dose modifications table to align with Giraud et al 2023. Updated regimen in line with NCCP standardisation.	Prof Maccon Keane

Comments and feedback welcome at oncologydrugs@cancercontrol.ie.

[i] 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.