

PACLITAXEL weekly for 3 weeks then 1 week off

INDICATION (ICD10) C50, C56, C66, C67, C68

1. Metastatic or locally advanced breast cancer (weekly paclitaxel is not licensed treatment).
2. Second-line use in metastatic bladder cancer, ureteric cancer or renal pelvis carcinoma.
3. Second line (or subsequent) treatment of women with platinum-refractory or platinum-resistant advanced ovarian cancer, and for women who are allergic to platinum-based compounds.
4. Recurrent platinum refractory endometrial cancer.

PS 0, 1 or 2

Weekly schedule is unlicensed treatment

REGIMEN

Days 1, 8 and 15

Premedication 30 minutes prior to infusion:

Dexamethasone 8mg IV bolus

Chlorphenamine 10mg IV bolus

PACLITAXEL 80mg/m² in 250ml* sodium chloride 0.9% IV infusion over 60 minutes

* doses 162mg to 600mg in 500ml sodium chloride 0.9%

CYCLE FREQUENCY AND NUMBER OF CYCLES

Breast - every 28 days for up to 4 cycles

Urology – every 28 days

Ovarian – every 7 days for 8 weeks (may continue up to a maximum 18 weeks in responding patients, depending on response)

Endometrial – every 7 days until progression

ANTI-EMETICS

Low risk days 1, 8 and 15

CONCURRENT MEDICATION REQUIRED

Paclitaxel	Ensure premedication given before paclitaxel
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EXTRAVASATION AND TYPE OF LINE / FILTERS

Paclitaxel – vesicant

Administer paclitaxel via polyethylene lined administration set with ≤0.22micron filter

Central line - breast patients

Peripheral or central line – urology patients

INVESTIGATIONS

Blood results required before SACT administration

FBC, U&E and LFTs every week

Neutrophils x 10⁹/L ≥1.5 (breast) (<1.5 omit dose)

≥1.0 (urology) (<1.0 omit dose)

≥1.5 day 1, ≥1.0 days 8 & 15 (gynae) (delay day 1 but omit days 8 & 15)

Platelets x 10⁹/L ≥100 (breast and urology)

≥100 day 1, ≥75 days 8 & 15 (gynae) (delay day 1 but omit days 8 & 15)

CA125 baseline and day 1 every cycle for gynae patient

Baseline weight and every cycle

MAIN TOXICITIES AND ADVERSE REACTIONS

Paclitaxel	(2% risk of severe hypersensitivity) Reactions range from mild hypotension (light-headedness) to full cardiac collapse (anaphylactic shock). Discontinue infusion and resuscitate appropriate to reaction. If reaction is mild and settles promptly (i.e. within 5-10 minutes), cautiously restart at a slower rate under close supervision. If further reactions occur stop treatment.
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INTERACTIONS WHICH MAY REQUIRE DOSE MODIFICATIONS

(not exhaustive list check SPC/BNF/Stockleys)

Paclitaxel	DOACs to be used with caution, need dose modifications or to be avoided eg apixaban Clopidogrel interacts with paclitaxel, potentially increasing the concentration of paclitaxel. Paclitaxel is catalysed, by cytochrome P450 isoenzymes CYP2C8 and CYP3A4. inhibitors (eg erythromycin, fluoxetine, gemfibrozil) use with caution. inducers (eg rifampicin, carbamazepine, phenytoin, phenobarbital, efavirenz, nevirapine) use with caution.
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DOSE MODIFICATIONS

Haematological

Paclitaxel

Neutrophils $\geq 1.5 \times 10^9/L$ for breast patients (<1.5 omit dose)

Neutrophils $\geq 1.0 \times 10^9/L$ for urology patients (<1.0 omit dose)

Non-haematological

Paclitaxel

If patient complains of tinnitus, tingling of fingers and/or toes or motor weakness discuss with Consultant or Registrar before administration

If grade ≥ 2 neuropathy, consider giving 75% paclitaxel dose

If grade >3 peripheral neuropathy is $>$ grade 3 omit further paclitaxel

Hepatic impairment

Paclitaxel

In the absence of Gilbert's syndrome:

Transaminase $<10 \times ULN$ and bilirubin $\leq 1.25 \times ULN$	no dose reduction
Transaminase $<10 \times ULN$ and bilirubin $1.26-2 \times ULN$	give 77% of original dose or clinician discretion
Transaminase $<10 \times ULN$ and bilirubin $2.01-5 \times ULN$	give 51% of original dose or clinician discretion
Transaminase $\geq 10 \times ULN$ or bilirubin $>5 \times ULN$	contraindicated

REFERENCES

1. Miller K et al (2007) NEJM; 357: 2666 - 2676
2. Seidman, AD et al; JCO 2008; 26 (10): 1642 – 1649
3. Oncologist. 2014 Jan; 19(1): 82–93 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3903061/>)