PACLITAXEL weekly

INDICATION (ICD10) C49, C50, C56

1. Palliative treatment of head and neck squamous cell carcinoma.
2. 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.
3. Adjuvant breast cancer patient who is contraindicated to docetaxel following on from the anthracycline containing treatment (eg in EC-docetaxel).
4. Neoadjuvant breast cancer patient who is contraindicated to docetaxel following on from the anthracycline containing treatment (eg in EC-docetaxel).
5. Metastatic or locally advanced breast cancer (weekly paclitaxel is not licensed treatment).

PS 0, 1 or 2
Weekly schedule is unlicensed treatment

REGIMEN

Day 1	**Premedication** 30 minutes prior to paclitaxel: Chlorphenamine 10mg IV bolus Dexamethasone 8mg IV bolus			
	PACLITAXEL	80mg/m^2	IV infusion	#ml sodium chloride 0.9% 60 minutes

diluent volume for dose prescribed as per national standardised product specification

CYCLE FREQUENCY AND NUMBER OF CYCLES

Breast - every 7 days for 9 to 12 weeks
Head and neck - every 7 days for 12 weeks then review
Ovarian – every 7 days for 8 weeks (may continue up to a maximum 16 weeks in responding patients)

ANTI-EMETICS

Low risk day 1

CONCURRENT MEDICATION REQUIRED

Paclitaxel	Ensure premedication given before paclitaxel

EXTRAVASATION AND TYPE OF LINE / FILTERS

Paclitaxel – vesicant

Administer paclitaxel via polyethylene lined or DEHP free administration set with ≤0.22micron filter
Central line

INVESTIGATIONS

Blood results required before SACT administration

U&E including Mg^{++} (>0.4) and LFTs	baseline and every week (gynae and breast if normal on testing then every 4th week (ie may omit tests for next 3 weeks)
FBC (or POCHI), Neutrophils x 10^9/L ≥1.0 (breast adjuvant or neoadjuvant) (0.8-1.0 on the day of chemo go ahead with GCSF support as per local policy) ≥1.5 (breast metastatic) (<1.5 omit dose) ≥1.5 (head and neck) ≥1.5 day 1, ≥1.0 days 8 & 15 (gynae) (delay day 1 but omit days 8 & 15) Platelets x 10^9/L ≥90 (breast) ≥100 (head and neck and breast metastatic) ≥100 day 1, ≥75 days 8 & 15 (gynae) (delay day 1 but omit days 8 & 15	baseline and every week
GFR assessed using EDTA result (BMI <19 or >30 or calculated creatinine clearance at the Consultant's discretion	baseline and every cycle
Serum creatinine	baseline and every cycle
CA125 (gynae patients)	baseline and day 1 every cycle
Virology	before cycle 1 if not previously checked
Weight	baseline and every cycle

MAIN TOXICITES 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.

INTERACTIONS WHICH MAY REQUIRE DOSE MODIFICATIONS

(not exhaustive list check SPC/BNF/Stockleys)

Paclitaxel	NOACs 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 (e.g erythromycin, fluoxetine, gemfibrozil) use with caution. inducers (e.g rifampicin, carbamazepine, phenytoin, phenobarbital, efavirenz, nevirapine) use with caution.

DOSE MODIFICATIONS

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 paclitaxel dose reduction

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

Hepatic impairment

Paclitaxel

In the absence of Gilberts syndrome:

Transaminase <10xULN and bilirubin ≤1.25xULN	no dose reduction
Transaminase <10xULN and bilirubin 1.26-2xULN	clinician discretion
Transaminase <10xULN and bilirubin 2·01-5xULN	clinician discretion
Transaminase ≥10xULN or bilirubin >5xULN	contraindicated

Renal impairment

Paclitaxel

No need for dose adjustment is expected

REFERENCES

1. Andrew D. Seidman, Donald Berry, Constance Cirrincione, Lyndsay Harris, Hyman Muss, P. Kelly Marcom, Grandella Gipson, Harold Burstein, Diana Lake, Charles L. Shapiro, Peter Ungaro, Larry Norton, Eric Winer and Clifford Hudis. JCO 2008. Randomized Phase III Trial of Weekly Compared With Every-3-Weeks Paclitaxel for Metastatic Breast Cancer, With Trastuzumab for all HER-2 Overexpressors and Random Assignment to Trastuzumab or Not in HER-2 Nonoverexpressors: Final Results of Cancer and Leukemia Group B Protocol 9840
2. Joseph A. Sparano, M.D., Molin Wang, Ph.D., Silvana Martino, D.O., Vicky Jones, M.D., Edith A. Perez, M.D., Tom Saphner, M.D., Antonio C. Wolff, M.D., George W. Sledge, Jr., M.D., William C. Wood, M.D., and Nancy E. Davidson, M.D. N Engl J Med. 2008 Apr 17; 358(16): 1663–1671. doi: 10.1056/NEJMoa0707056 Weekly Paclitaxel in the Adjuvant Treatment of Breast Cancer
3. Grau JJ et al Weekly paclitaxel for platin-resistant stage IV head and neck cancer patients.
4. Acta Otolaryngol. 2009 Nov;129 (11):1294-9.

Assessments

	Pre	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Ongoing
Clinical assessment	X		Pre cycle		Pre cycle	Every cycle
SACT assessment (PS and toxicities)	X	X	X	X	X	Every cycle
FBC	X	X	X	X	X	Every dose
U&E, calcium, magnesium & LFT	X	X	X	X	X	Every cycle (see above)
CrCl	X	X	X	X	X	Every cycle
CT scan	X					At cycle 6, Inform consultant team if not booked
Informed consent	X					Verbal each cycle
Height	X					
Weight recorded	X	X	X	X	X	Every cycle