# PACLITAXEL & CARBOPLATIN

1. First line use in patients with advanced upper GI cancers, for use only when there is a contra-indication to fluoropyrimidines e.g. coronary artery spasm, active angina, recent MI.
2. Neo-adjuvant use before CRT with paclitaxel/carboplatin/RT for oesophageal or GOJ cancer
3. An option for inoperable locally recurrent or metastatic squamous cell anal cancer

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| Drugs/Dosage: | Paclitaxel | 175mg/m$^2$ | IV | Day 1 |
| | Carboplatin | AUC 5 | IV | Day 1 (see Comments) |

Administration:

Pre-medication for paclitaxel:

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|---|---|---|
| Dexamethasone | 16mg | IV 60 mins prior to paclitaxel administration |
| Chlorphenamine | 10mg | IV 30–60 mins prior to paclitaxel administration |
| Ranitidine | 50mg | IV 30–60 mins prior to paclitaxel administration |

Paclitaxel in 500ml 0.9% sodium chloride over 3 hours via non–PVC administration set with a 0.2 micron in-line filter
*followed by*
Carboplatin diluted in 250ml 5% glucose over 30 – 60 minutes

Frequency: 3 weekly cycle

*Advanced / metastatic use in upper GI or anal cancer*: up to 6 cycles
*Perioperative use in upper GI:* 3 cycles before surgery, plus a further 3 cycles post surgery
*Neo-adjuvant use*: up to 2 cycles before CRT with Paclitaxel/Carboplatin/RT

Main Toxicities: infusion-related hypersensitivity reactions; myelosuppression; alopecia; myalgia / arthralgia; peripheral neuropathy; ovarian failure / infertility

Anti-emetics: highly emetogenic

Extravasation: paclitaxel is a vesicant

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| Regular investigations: | FBC | Day 1 |
| | U&Es | Day 1 |
| | LFTs | Day 1 |
| | EDTA | prior to Cycle 1 (if available – see Comments) |

Comments:

Carboplatin dose should be calculated using the Calvert Formula:
Dose = Target AUC x (25 + GFR)

Cycle 1 may be given using the Cockcroft and Gault formula to predict creatinine clearance if the EDTA is not yet available. When using C&G, a "cap" of 125 ml/min should be used for carboplatin dose calculations.

Carboplatin dose should be re-calculated using the EDTA result for subsequent cycles (do not "cap"). EDTA should only be repeated if there is a 30% change in serum creatinine.

For patients who experience a hypersensitivity reaction to carboplatin, see the SWSH Carboplatin Hypersensitivity Guidelines.


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| Reason for Update: anal indication added | Approved by Consultant: Dr S Essapen |
| Version: 2 | Approved by Lead Chemotherapy Nurse: S Wills-Percy |
| Supersedes: Version 1 | Date: 12.10.17 |
| Prepared by: S Taylor | Checked by: C Tucker |

**Dose Modifications**

Haematological Toxicity:

| | **Neuts ≥ 1.5 x $10^9$/l** | **Neuts < 1.5 x $10^9$/l** |
|---|---|---|
| **Platelets ≥ 100 x $10^9$/l** | Give 100% doses | Delay for 1 week, then give 100% paclitaxel dose and carboplatin AUC 5 |
| **Platelets < 100 x $10^9$/l** | Delay for 1 week, then give 100% doses | Delay for 1 week, then give 75-100% paclitaxel dose and carboplatin AUC 4-5, depending on patient status. If in doubt, discuss with Consultant. |

If neutrophils < 0.5 x $10^9$/l for > 7 days, or febrile neutropenia, or platelets < 50 x $10^9$/l: consider reducing the dose of both drugs in further cycles to paclitaxel 135mg/m2 and carboplatin AUC 4.

Renal Impairment: Carboplatin is contra-indicated if CrCl < 20 ml/min.

Hepatic Impairment: For paclitaxel, if bilirubin < 1.25 x ULN and ALT < 10 x ULN, proceed with full dose. Otherwise, consider a dose reduction. Not recommended in severe hepatic impairment.

Neuropathy: If a Grade 2 or worse peripheral neuropathy develops, paclitaxel should be reduced to 135mg/$m^2$ in all subsequent cycles.
If progressive neuropathy is observed after this dose reduction, then treatment with paclitaxel should be discontinued.

Myalgia / Arthralgia: Due to paclitaxel and often co-exist, usually Grade 1 or 2. Management consists of prescribing NSAIDs and reassuring patient that it is self-limiting.

References:
Gadgeel, SM et al; Am J Clin Onc 2003; 26 (1): 37 – 41
Ilson, DH et al, Current Treatment Options Oncol 2006; 7 (5): 410 – 423
Eng, C et al; ASCO meeting abstracts 2012; 30 (15 suppl): 4060 (anal)
Byer, J et al; JCO 2013; 31 (4): 539 (anal)