

PACLITAXEL AND CARBOPLATIN

For use in Stage III and IV NSCLC - NICE approved
A useful option for cancers of unknown primary and where lung is suspected, or synchronous primaries (e.g. lung and oesophagus)

Drugs/Dosage:	Paclitaxel	200mg/m ²	IV	Day 1
	Carboplatin	AUC 6	IV	Day 1 (see Comments)
Administration:	Paclitaxel in 500ml 0.9% Sodium Chloride over 3 hours via non-PVC administration set followed by: Carboplatin diluted in 250ml 5% Glucose over 30 minutes			
Frequency:	3 weekly cycle 4 cycles			
Main Toxicities:	infusion-related hypersensitivity reactions; myelosuppression; myalgia/arthralgia; alopecia; peripheral neuropathy; ovarian failure/infertility			
Anti-emetics:	highly emetogenic			
Extravasation:	Paclitaxel is a vesicant			
Regular Investigations:	FBC	Day 1		
	U&Es	Day 1		
	LFTs	Day 1		
	EDTA	Prior to Cycle 1		
Comments:	Premedication: 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			

Carboplatin dose should be calculated using the Calvert Formula:

$$\text{Dose} = \text{Target AUC} \times (25 + \text{GFR})$$

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.

Reason for Update: C&G cap added; CXR requirement removed; indication updated	Approved by Consultant: Dr V Ezhil
Version: 3	Approved by Lead Chemotherapy Nurse: P Deery
Supersedes: Version 2	Date: 22.8.13
Prepared by: S Taylor	Checked by: C Tucker

Dose Modifications

Haematological
Toxicity:

	Neuts $\geq 1.5 \times 10^9/l$	Neuts $< 1.5 \times 10^9/l$
Platelets $\geq 100 \times 10^9/l$	Give 100% doses	Delay for 1 week, then give 100% paclitaxel dose and carboplatin AUC 6
Platelets $< 100 \times 10^9/l$	Delay for 1 week, then give 100% doses	Delay for 1 week, then give 75-100% paclitaxel dose and carboplatin AUC 5-6, depending on patient status. If in doubt, discuss with Consultant.

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

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

Peripheral Neuropathy: If a Grade 2 or worse neuropathy develops, paclitaxel should be reduced by 20% 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: Kelly, K et al; JCO (2001); 19 (13): 3210 – 3218
Schiller, JH et al; NEJM (2002); 346 (2): 92 – 98
Socinski, M et al; JCO (2002); 20 (5): 1335 - 1343

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