CHEMO-RADIOTHERAPY WITH WEEKLY PACLITAXEL & CARBOPLATIN

Chemo-radiotherapy for unresectable Stage III NSCLC, only for patients not suitable for cisplatin

Drugs/Dosage:	Paclitaxel	45 mg/m^2	IV once weekly during RT (Day 1, 8, 15, 22, 29 & 35)
	Carboplatin	AUC 2	IV once weekly during RT (Day 1, 8, 15, 22, 29 & 35)

Radiotherapy: 64Gy in 32 fractions
Chemotherapy should be administered before radiotherapy on days when chemotherapy is scheduled

Administration: Premedication for paclitaxel:

Dexamethasone	8mg	IV }	
Chlorphenamine	10mg	IV }	Give 30 minutes prior to paclitaxel
Ranitidine	50mg	IV }	

Paclitaxel in 250ml 0.9% sodium chloride over 1 hour, administered via a PVC-free giving set with a 0.2 micron in-line filter
then
Carboplatin in 250ml 5% glucose over 30 – 60 minutes

Frequency: a 6 week course of chemo-radiotherapy as above, followed by 2 cycles of 3-weekly paclitaxel & carboplatin (see separate protocol)

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

Anti- emetics: paclitaxel & carboplatin: highly emetogenic (but prescribe oral dexamethasone 2mg bd x 2 days as 1st line anti-emetic TTO)

Extravasation: paclitaxel is a vesicant

Regular Investigations:	FBC	once weekly during RT (Days 1, 8, 15, 22, 29 & 35)
	U&Es	once weekly during RT
	LFTs	once weekly during RT
	EDTA	prior to 1st cycle

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.

Reason for Update: new CRT regimen for patients not suitable for vin/cis/RT	Approved by Consultant: Dr V Ezhil
Version: 1	Approved by Lead Chemotherapy Nurse: V Mumford
Supersedes: None	Date: 9.4.14
Prepared by: S Taylor	Checked by: C Tucker

Dose Modifications

Haematological Toxicity:	Neutrophils ≥ 1.5 x 10^9/l or Platelets ≥ 75 x 10^9/l	Proceed with full doses of chemotherapy.
	Neutrophils 1.0 - 1.4 x 10^9/l or Platelets 50 - 74 x 10^9/l	Give 50% dose of both paclitaxel and carboplatin for 1 week. Continue with radiotherapy.
	Neutrophils < 1.0 x 10^9/l or Platelets < 50 x 10^9/l	Omit chemotherapy for 1 week. Continue with radiotherapy

When a chemotherapy dose reduction or omission is required, re-escalation of the doses should be performed for subsequent doses, according to the FBC on the day of treatment.

Renal Impairment: If EDTA or calculated CrCl < 20ml/min, carboplatin is contra-indicated.

Hepatic Impairment: A paclitaxel dose reduction should probably be given initially if impaired hepatic function. Due to lack of data, dose recommendations not available. If in doubt, contact the relevant Consultant.

Neuropathy: If Grade 1-2 peripheral neuropathy develops, seek advice from Consultant regarding future paclitaxel dosing.

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

References: Belani, CP et al; JCO 2005; 23: 5883 – 5891 (LAMP trial)