PACLITAXEL & CARBOPLATIN & EPIRUBICIN (TEC)

Malignant mixed mesodermal tumours (MMMTs) and recurrent sarcomas – not NICE approved

Drugs/Dosage:

Epirubicin*	50mg/m^2	IV	Day 1
Paclitaxel**	175mg/m^2	IV	Day 1
Carboplatin	AUC 5	IV	Day 1

N.B. Carboplatin dose of AUC 6 should be considered if Cockcroft and Gault predicts GFR > 60ml/min and fit patient. Adjust to AUC 5 once EDTA available.

*Epirubicin may be omitted according to individual patient case and Consultant preference e.g. for patients with poor performance status, or poor cardiac function as specified below.

**Paclitaxel may also be omitted, as specified by Consultant, for those with predominantly papillary-serous pattern and poor performance status.

Administration:

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

Epirubicin via fast running infusion 0.9% sodium chloride
followed by
Paclitaxel in 500ml 0.9% sodium chloride over 3 hrs via non-PVC administration set
followed by
Carboplatin in 250ml 5% glucose over 30 minutes

Frequency:

3 weekly cycle for 6 cycles
Clinical review after Cycle 3

Main Toxicities:

infusion-related reactions during paclitaxel infusion; myelosuppression; mucositis; alopecia; myalgia / arthralgia; peripheral neuropathy; cardiomyopathy

Anti-emetics:

highly emetogenic

Extravasation:

paclitaxel and epirubicin are vesicants

Regular Investigations:

FBC	Day 1
U&Es	Day 1
LFTs	Day 1
CA 125	Day 1
EDTA	Prior to Cycle 1
MUGA	see Comments

Comments:

Maximum Cumulative Dose of epirubicin = 950mg/m^2

A baseline MUGA scan should be performed where the patient is considered at risk of having impaired cardiac function e.g. significant cardiac history, hypertension, obese, smoker, elderly, previous exposure to anthracyclines, previous thoracic radiotherapy. MUGA scan should be repeated if there is suspicion of cardiac toxicity at any point during treatment.

Reason for Update: general update; C&G cap added	Approved by: Dr A Michael
Version: 4	Approved by Lead Chemotherapy Nurse: P Deery
Supersedes: Version 3	Date: 15.6.16
Prepared by: S Taylor	Checked by: C Tucker

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 Alliance Carboplatin Hypersensitivity Guidelines.

Dose Modifications

Haematological Toxicity:

WBC < 3.0 x 10^9/l
or
Neutrophils < 1.5 x 10^9/l
or
Platelets < 100 x 10^9/l

Delay treatment for 1 week.
Repeat FBC, and if within normal parameters, give 100% dose

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

Hepatic Impairment:

Bilirubin (µmol/litre)	Epirubicin Dose
24 – 51	Give 50%
52 - 85	Give 25%
> 85	Not recommended

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 neuropathy develops, paclitaxel should be reduced to 135mg/m^2 for all subsequent cycles. If progressive neuropathy is observed after this dose reduction, then treatment with paclitaxel should be discontinued.

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

Reference: Modified from EORTC 55981Trial