Systemic Anti-Cancer Treatment Protocol

Carboplatin and Paclitaxel (chemoradiation)

PROTOCOL REF: MPHACAPAGI
(Version No: 1.0)

Approved for use in

First line concomitant treatment for resectable oesophageal cancer as preoperative treatment as per CROSS trial inclusion criteria.

Dosage

Drug	Dosage	Route	Frequency
Paclitaxel	50mg/m²	IV	Weekly for 5 weeks
Carboplatin	AUC 2	IV	Weekly for 5 weeks

Calvert formula for Carboplatin dosage

Carboplatin dose in mg = AUC x (creatinine clearance + 25)

If estimated GFR is used the **Wright formula** must be used for creatinine clearance.

Creatinine clearance should be capped at 125mL/min for carboplatin

Avoid the use of Cockcroft and Gault formulae as it is less accurate.

Supportive Treatments:

Domperidone tablets 10mg three times a day as required

Extravasation risk

Carboplatin

IRRITANT – refer to trust/network extravasation policy

Paclitaxel

VESICANT – refer to trust/network extravasation policy – specific treatment may apply

Administration

Paclitaxel must be administered using a non-PVC giving set with a 0.22 micron filter.

Day	Drug	Dose	Route	Diluent and rate
1	Chlorphenamine	10mg	IV Infusion	30 minutes prior to paclitaxel
1	Dexamethasone	8mg	IV Infusion	30 minutes prior to paclitaxel
1	Ranitidine	50mg	IV Infusion	30 minutes prior to paclitaxel
1	Ondansetron	8mg	Orally	30 minutes prior to paclitaxel
1	**Paclitaxel**	**50mg/m²**	**IV Infusion**	**250 to 500mL Sodium Chloride 0.9% over 60 minutes**
1	**Carboplatin**	**AUC 2**	**IV Infusion**	**500mL Glucose 5% over 30 to 60 minutes**

Cycle is repeated every 7 days for 5 weeks in total

Main Toxicities

Paclitaxel
Anaphylactic reactions: Dyspnoea and hypotension, angioedema and urticaria In the case of severe hypersensitivity reactions, paclitaxel infusion should be discontinued immediately, symptomatic therapy should be initiated. Diarrhoea, vomiting, nausea, mucositis, peripheral neuropathy, alopecia, transient and mild nail and skin changes, raised bilirubin, AST and/or alkaline phosphatase, neutropenia, anaemia, thrombocytopenia
Carboplatin
Risk of hypersensitivity and anaphylaxis may increase with previous exposure to platinum therapy Nausea, vomiting, diarrhoea, constipation, mucositis, renal function impairment, decreases in serum electrolytes (sodium, magnesium, potassium and calcium), hyperuricaemia, malaise, flu-like syndrome, rash, pruritus, alopecia, neutropenia, anaemia, thrombocytopenia, abnormalities of liver function tests, paraesthesia and decreased deep tendon reflexes, hearing loss

Investigations and Treatment Plan

	Pre	Week 1	Week 2	Week 3	Week 4	Week 5	Ongoing
Medical Assessment	X	X	X	X	X	X	Every treatment
Nursing Assessment		X	X	X	X	X	Every treatment
FBC	X	X	X	X	X	X	Every treatment
U&E & LFT	X	X	X	X	X	X	Every treatment
Informed Consent	X						
PS recorded	X	X	X	X	X	X	Every treatment
Toxicities documented	X	X	X	X	X	X	Every treatment
Weight recorded	X	X	X	X	X	X	Every treatment

Dose Modifications and Toxicity Management

Haematological Toxicity

Proceed with day 1 if:

Platelets ≥ 75 x 10^9/L	ANC ≥ 1.0 x 10^9/L

Omit treatment on day 1 if:

Platelets ≤ 74 x 10^9/L	ANC ≤ 0.99 x 10^9/L

Hepatic Impairment

Paclitaxel
Paclitaxel is not recommended in patients with severely impaired hepatic function
Carboplatin
No adjustments required

Renal Impairment

Paclitaxel
No adjustments required
Carboplatin
Review serum creatinine result at each cycle, if this has changed then recalculate clearance using Wright formula and amend the carboplatin dose if there will be a 10% difference. Carboplatin is contraindicated if glomerular filtration rate is ≤ 20 ml/min.

References:

Neo-adjuvant chemoradiotherapy plus surgery versus surgery alone for oesophageal or junctional cancer (CROSS): long-term results of a randomised controlled trial. Lancet Oncol. 2015; 16 (9): 1090-8

Carboplatin 10 mg/ml concentrate for solution for infusion.
Summary of Product Characteristics. Accord Healthcare Ltd, Middlesex 09/11/2012.
Available from www.medicines.org.uk/emc/medicine last updated 26/02/2014

Paclitaxel 6 mg/ml concentrate for solution for infusion.
Summary of Product Characteristics. Hospira UK Ltd, Warwickshire 12/2016.
Available from www.medicines.org.uk/emc/medicine last updated 23/12/16.

Dosage Adjustment for Cytotoxics in Renal and Hepatic Impairment. University College London Hospital NHS Foundation Trust January 2009.

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