Systemic Anti Cancer Treatment Protocol

Paclitaxel
Urology

PROTOCOL REF: MPHAPACUR
(Version No: 1.1)

Approved for use in:

Locally advanced or metastatic bladder cancer, for patients in whom prior cisplatin based therapy has failed, or patients intolerant or not suitable for platinum based treatment.

Dosage:

Drug	Dosage	Route	Frequency
Paclitaxel	80mg/m²	IV	Weekly until progression or development of intolerable side effects

Supportive Treatments:

Chlorphenamine 10mg IV pre chemotherapy

Famotidine 20mg Orally pre chemotherapy

Dexamethasone 8mg IV pre chemotherapy Cycle 2 onward dexamethasone may be reduced to 4mg if no problems with first cycle at 8mg

Domperidone 10mg three times a day when required

Extravasation risk:

Paclitaxel- vesicant.

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	Chlorpheniramine	10mg	IV	Bolus 30 minutes prior to paclitaxel
1	Dexamethasone	8mg	IV	Bolus 30 minutes prior to paclitaxel
1	Famotidine	20mg	Oral	At least 60 minutes before chemotherapy (can be discontinued after three cycles for those patients who do not experience a drug hypersensitivity reaction).
1	**Paclitaxel**	**80mg/m²**	**IV**	**Sodium chloride 0.9% 250mL over 60 minutes**

- Excessive shaking, agitation, or vibration of paclitaxel may induce precipitation and should be avoided.
- Facilities to treat anaphylaxis must be present when administering this regimen.

Main toxicities

Haematological	Myelosuppression, neutropenia, anaemia, thrombocytopenia
Hepatobiliary	Very rare reports of hepatic necrosis
Gastrointestinal	Vomiting, nausea, diarrhoea
Cardiac disorders	Arrhythmia, bradycardia, tachycardia, AV block and syncope, cardiomyopathy, heart failure, atrial fibrillation, supraventricular tachycardia
Neuropathies	Neurotoxicity (mainly: peripheral neuropathy). Rare (≥ 1/10,000, < 1/1,000 motor neuropathy (with resultant minor distal weakness). A neurologic examination must be carried out at regular intervals.
Additional side effects	minor hypersensitivity reactions (mainly excessive flushing and rash), up to anaphylactic reactions

Investigations and Treatment Plan:

	Pre	C1	Ongoing
Medical Assessment	X		As clinically indicated
Nursing Assessment		X	Every cycle
FBC	X	X	Every cycle
U&E & LFTs	X	X	Every Cycle
CT scan	X		As clinically indicated
Informed Consent	X		
Blood glucose	X		Repeat if clinically indicated
Blood pressure measurement	X	X	Every Cycle
PS recorded	X	X	Every Cycle
Toxicities documented	X	X	Every Cycle
Weight recorded	X	X	Every cycle

Dose Modifications:

Consider dose modifications for intolerable grade 2 or any grade 3 toxicities.

Haematological Toxicity:

Proceed on day 1 if-

Plt ≥ 100 x 10^9/L	ANC ≥ 1.0 x 10^9/L

Delay 1 week on day 1 if-

Plt ≤ 99 x 10^9/L	ANC ≤ 0.9 x 10^9/L

These haematological guidelines assume that patients are well with good performance status, that other acute toxicities have resolved and the patient has not had a previous episode of neutropenic sepsis.

Peripheral Neuropathy: NCI-CTC grade 2 peripheral neuropathy withhold paclitaxel only until the neuropathy recovers to grade 1 then dose reduce to 75% of the original dose. Where the peripheral neuropathy is grade 3 again withhold the paclitaxel until it resolves to grade one and then reduce the dose of paclitaxel to 50%. Paclitaxel should be discontinued if the neuropathy does not resolve to grade one.

Recommended dose reduction	Paclitaxel
First dose reduction	75% dose
Second dose reduction	50% dose

Hepatic impairment:

Paclitaxel
Patients with hepatic impairment may be at increased risk of toxicity, particularly Grade 3 to 4 myelosuppression. Patients with severe hepatic impairment should not be treated with paclitaxel.

Renal Impairment:

Paclitaxel
Within 24 to 48 hours following administration, <10% of the dose appears in the urine. In dialysis patients, full dose has been given (on non-dialysis days) with a typical toxicity profile.

References:

Paclitaxel 6 mg/ml Concentrate for Solution for Infusion, Summary of Product Characteristics. Accord Healthcare Limited Middlesex . 15/04/2010. Available from www.medicines.org.uk/emc/medicine. Last updated 12/05/15.

Dosage Adjustment for Cytotoxics in Hepatic Impairment. January 2009 UCLH (Version 3 - updated January 2009)

Dosage Adjustment for Cytotoxics in Renal Impairment. January 2009 UCLH (Version 3 - updated January 2009)

Paclitaxel in advanced urothelial carcinoma: its role in patients with renal insufficiency and as salvage therapy. AU. Dreicer R, Gustin DM, See WA, Williams RD SO J Urol. 1996;156(5):1606.