Systemic Anti Cancer Treatment Protocol

Docetaxel

PROTOCOL REF: MPHADOCLU
(Version No: 1.0)

Approved for use in:

Non-Small Cell Lung: Second line treatment in patients with locally advanced or metastatic non-small cell lung cancer when relapse has occurred after prior platinum chemotherapy.

Dosage:

Drug	Dosage	Route	Frequency
Docetaxel	75mg/m² day 1	IV infusion	Every 21 days

Maximum of 4 cycles.

Pre-medication is required before docetaxel- Dexamethasone 8mg oral bd x3 days to start 24hours pre-docetaxel. This can reduce the incidence and severity of fluid retention as well as the severity of hypersensitivity reactions.

Supportive Treatments:

Anti-emetic risk – Low

Dexamethasone 8mg BD for 3days (Commencing 24 hours prior to docetaxel)

Domperidone 10mg TDS/PRN

Extravasation risk:

Docetaxel- non vesicant

Refer to the network guidance for the prevention and management of extravasation

Interactions:

Clarithromycin

Clarithromycin is predicted to moderately increase the exposure to docetaxel. Manufacturer advises avoid or adjust dose.

Fosphenytoin

Fosphenytoin is predicted to decrease the exposure to docetaxel.

Itraconazole/Ketoconazole/Voriconazole

These are predicted to moderately increase the exposure to docetaxel. Manufacturer advises avoid or adjust dose.

Please consult summary of product characteristics via https://www.medicines.org.uk/emc for full list of interactions.

Administration:

Day	Drug	Dose	Route	Diluent and rate
-1	**Dexamethasone** Commencing 24 hours before docetaxel	8mg BD for three days	PO	
1	Sodium Chloride 0.9%	50ml	IV Infusion	Flush
	Docetaxel	**75mg/m²**	**IV Infusion**	**250mls 0.9% sodium chloride over 60 minutes**
	Sodium Chloride 0.9%	100ml	IV Infusion	Flush

- Ensure pre-medication dexamethasone has been commenced by patient 24hours before treatment (8mg oral bd for 3 days). If dexamethasone premedication has not been commenced then administer 16mg intravenously 30 minutes prior to docetaxel, and then continue with the remainder of the oral doses.

- First 2 cycles of docetaxel to be administered using step up feature of the Hospira Plum A infusion pump. The risk of infusion reactions is increased during these first two cycles, therefore administer with caution. Hypersensitivity reactions normally occur within the first few minutes of the initiation of the infusion.

- Facilities to treat anaphylaxis must be present when administering this regimen. If a patient experiences an **infusion-related reaction**, give future does with premedication cover of IV chlorphenamine 10mg and IV hydrocortisone 100mg.

For severe reactions, discuss with Consultant before continuing with treatment.

Main Toxicities:

Hypersensitivity reactions, flushing, bronchospasm, rash, dizziness, headache, nausea, vomiting, diarrhea, fluid retention, myelosuppresion, alopecia, mucositis, taste changes, palmer plantar, loss of appetite, fatigue, joint and muscle pain, nail changes, neuropathy

Investigations and treatment plan

	Pre	Cycle 1	Cycle 2	Prior to cycle 3	Cycle 3	Cycle 4	Comments
Medical Assessment	x					x	As clinically indicated or at the end of treatment
Nursing Assessment	x	x	x		x	x	Every cycle
On treatment review*				x			
FBC	x	x	x		x	x	Every cycle
U&E & LFT	x	x	x		x	x	Every cycle
CT scan	x						At the end of treatment and if clinically indicated
Informed Consent	x						
Blood pressure measurement	x						Repeat if clinically indicated
Respiratory Rate							If clinically indicated
PS recorded	x	x	x		x	x	Every cycle
Toxicities documented	x	x	x		x	x	Every cycle
Weight recorded	x	x	X		x	x	Every cycle
Blood Glucose	x						Repeat if clinically indicated

***On treatment review: assessment of ongoing benefit including PS, toxicity, patient understanding, symptom control and clinical tumour response (imaging as required based upon assessment)

Dose Modifications and Toxicity Management:

Haematolgical Toxicity:

Proceed on day 1 if-

Plt ≥ 100	ANC ≥ 1.0

Delay 1 week on day 1 if-

Plt ≤ 99	ANC ≤ 0.9

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.

If platelets or ANC still below required levels for treatment at week 2, delay treatment again and patient will need assessment and chemotherapy dose reduction.

If treatment delayed > 1 week or ANC < 0.5 x 10^9/l, or any febrile neutropenia reduce docetaxel to 60mg/m^2 for subsequent cycles.

If platelets < 25 x 10^9/l, consider dose reduction to 60mg/m^2 for subsequent cycles upon recovery. (Discuss with consultant)
If persistent toxicity – stop treatment refer to consultant

Non-haematological toxicity

Renal	No dose adjustments needed
Hepatic	If Bilirubin > 22mmol/l or ALT/AST > 3.5 x ULN and ALP> 6x ULN Not recommended – delay treatment and refer to consultant
Cutenaeous	Grade 1 persistent or Grade 2 – delay treatment until resolved to grade 0-1. Restart at same dose Grade 3 restart once recovered at 60mg/m^2
Neuropathy	Grade 1 persistent or Grade 2 – delay treatment until resolved to grade 0-1. Reduce dose to 60mg/m^2 Grade 3 or 4 – stop docetaxel permanently
Other grade 3-4 reactions	Discontinue treatment – discuss with consultant

References:

- https://www.medicines.org.uk/emc
- Dosage Adjustment for Cytotoxics in Hepatic Impairment. January 2009 UCLH - Dosage Adjustment for Cytotoxics in Hepatic Impairment (Version 3 - updated January 2009)
- Dosage Adjustment for Cytotoxics in Renal Impairment. January 2009 UCLH - Dosage Adjustment for Cytotoxics in Renal Impairment (Version 3 - updated January 2009)
- BNF available via: https://bnf.nice.org.uk/
- NICE: CG121 Lung cancer: diagnosis and management. Published date: April 2011