GEMCITABINE CARBOPLATIN

INDICATION (ICD10) C56, C80

1. Metastatic bladder cancer when cisplatin is contra-indicated or unsuitable.
2. Second line onwards treatment of ovarian cancer
3. Unknown primary if appropriate
   PS 0, 1, 2

REGIMEN

Day 1	**GEMCITABINE**	1000mg/m^2**	IV infusion	#ml sodium chloride 0.9% over 30 minutes
	CARBOPLATIN	AUC* 5	IV infusion	#ml glucose 5% over 30 minutes
Day 8	**GEMCITABINE**	1000mg/m^2**	IV infusion	#ml sodium chloride 0.9% over 30 minutes

Non-ovarian indications - maximum dose when using CrCl 125+25 x AUC
Ovarian cancer - maximum dose when using CrCl is 700mg
**Ovarian heavily pretreated or elderly patients consider reducing gemcitabine doses to 750mg/m^2.

diluent volume for dose prescribed as per national standardised product specification or licensed dose

CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 21 days for 6 cycles

ANTI-EMETICS

Moderate risk day 1
Low risk day 8

CONCURRENT MEDICATION REQUIRED

Carboplatin	Anaphylaxis treatment should be prescribed if the patient has had an anaphylactic episode previously. Dexamethasone 20mg IV bolus Chlorphenamine 10mg IV bolus H_2 antagonist Carboplatin should be given at a slower rate e.g 2-4 hours.

EXTRAVASATION AND TYPE OF LINE / FILTERS

Carboplatin - irritant
Gemcitabine – neutral

No filters required
Central or peripheral line

INVESTIGATIONS

Blood results required before SACT administration

FBC, U&E including Mg^{++} (>0.4) and LFTs Neutrophils x 10^9/L ≥1.5 (gynae day 1 and 8 neutrophils ≥1 (low threshold for omitting day 8 gynae)) Platelets ≥100x10^9/L (gynae day 8 platelets ≥75)	baseline and every cycle
GFR assessed using EDTA result (BMI <19 or >30 (gynae patients) or calculated creatinine clearance at the Consultant's discretion	baseline and every cycle
Patients with hydronephrosis or serum creatinine ≥100micromol/L	baseline and every cycle
CA125 (ovarian patients)	baseline and day 1 every cycle
Virology	before cycle 1 if not previously checked
Weight	baseline and every cycle

MAIN TOXICITES AND ADVERSE REACTIONS

Carboplatin	Ototoxicity – monitor Neurotoxicity - monitor
Gemcitabine	Diarrhoea – see dose modifications, treat with loperamide or codeine Mucositis – see dose modifications, use routine mouthcare

DOSE MODIFICATIONS

Haematological

Gemcitabine

Neutrophils >1.5x10^9/L and platelets >100x10^9/L	give 100% dose
Neutrophils <1.5x10^9/L or platelets <100x10^9/L	delay treatment (day 1) or omit bladder treatment (day 8), or gynae see investigations above (day 8) (low threshold for omitting day 8)

Non-haematological

Gemcitabine

Diarrhoea and/or mucositis grade 2	omit until toxicity resolved then restart at 100% dose
Diarrhoea and/or mucositis grade 3	omit until toxicity resolved then restart at 75% dose
Diarrhoea and/or mucositis grade 4	omit until toxicity resolved then restart at 50% dose

Hepatic impairment

Carboplatin

No need for dose adjustment is expected

Gemcitabine

Bilirubin >27µmol/L	initiate treatment with 80% dose

Renal impairment

Carboplatin

GFR / calculated CrCl ≤20ml/min or ≤30ml/min with pre-existing severe renal impairment	contraindicated

Gemcitabine

No need for dose adjustment

REFERENCES

Assessments

	Pre	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Ongoing
Clinical assessment	X		Pre cycle		Pre cycle	Every cycle
SACT assessment (PS and toxicities)	X	X	X	X	X	Every cycle
FBC	X	X	X	X	X	Every SACT
U&E, calcium, magnesium & LFT	X	X	X	X	X	Every cycle
CrCl	X	X	X	X	X	Every cycle
CA125 (ovarian patients)	X	X	X	X	X	Every cycle
CT scan	X					At cycle 6, Inform consultant team if not booked
Informed consent	X					Verbal each cycle
Height	X					
Weight recorded	X	X	X	X	X	Every cycle