

## 3 day EP (Etoposide, cisplatin)

### Indication

Germ cell tumours with good prognosis where bleomycin is contraindicated

### Regimen details

Day	Drug	Fluid	Time
1	Etoposide 165mg/m <sup>2</sup>	1 litre sodium chloride 0.9%	1 hour
	Cisplatin 50mg/m <sup>2</sup>	500ml sodium chloride 0.9%	2 hours
	Potassium chloride 20mmol and magnesium sulphate 10mmol	1 litre sodium chloride 0.9%	2 hours
	<i>Additional infusion if given as inpatient or patient unable to tolerate adequate oral fluid intake</i>	<i>1 litre sodium chloride 0.9%</i>	<i>2 hours</i>
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3	Etoposide 165mg/m <sup>2</sup>	1 litre sodium chloride 0.9%	1 hour
	<i>Additional infusion if given as inpatient or patient unable to tolerate adequate oral fluid intake</i>	<i>1 litre sodium chloride 0.9%</i>	<i>2 hours</i>

### Cycle frequency

Every 21 days

### Number of cycles

4 cycles

### Administration

Can be given as outpatient subject to patient and clinician preference and suitability

Patient must be able to drink the additional oral hydration of 1000-2000mls per day

Strict fluid balance

Consider Frusemide 20-40mg po if >1000ml positive balance. IV frusemide should only be given if patient is unwell, unable to take oral medication or unresponsive to oral frusemide

Encourage patient to maintain oral fluid intake of 1000-2000ml per day. FOR OUT PATIENT BEP THIS IS MANDATORY

Medical review daily prior to treatment. In the event of a patient being unsuitable to continue with outpatient regime then transfer to ward delivery must be arranged without deferral.

### Pre-medication

N/A

### Emetogenicity

Highly emetogenic

### Additional supportive medication

If bulky disease give rasburicase prior to first day cycle 1 of treatment, monitor for tumour lysis syndrome and discharge with allopurinol 300mg OD

All patients should be prescribed 7 days of filgrastim starting 48 hours post chemotherapy

### Investigations – pre first cycle

Calculated creatinine clearance  
CT thorax/abdo/pelvis  
Audiometry  
Sperm banking  
FBC, U&E, LFT incl. LDH, Uric Acid, Mg, Ca, AFP,  $\beta$ HCG

### Investigations –pre subsequent cycles

Weekly:  
FBC, U&E, LFT incl LDH, Uric Acid, Mg, Ca, AFP,  $\beta$ HCG

Day 1 only:

Chest X-ray (if metastases present)  
Repeat GFR only if calculated clearance <60 ml/min (Cockcroft formula)

### Standard limits for administration to go ahead

**ANY DEFERRAL NEEDS TO BE DISCUSSED WITH CONSULTANT AS TREATMENT DELAYS HAVE NEGATIVE EFFECT ON OUTCOME**

Investigation	Limit
Neutrophil count	$\geq 0.5 \times 10^9/L$
Platelet count	$\geq 50 \times 10^9/L$
HB	Any (transfuse if <90g/l)
Creatinine clearance	$\geq 50 \text{ mL/min}$
Bilirubin	$\leq 1.5 \times \text{ULN}$
AST	$< 1.5 \times \text{ULN}$

### Dose modifications

GFR < 50ml/min or Neurotoxicity > grade 2 - replace Cisplatin with Carboplatin AUC 6

### Adverse effects - for full details consult product literature/ reference texts

Nausea/vomiting  
Alopecia  
Infertility (some reversibility within 2 years of treatment)  
Mucositis  
Skin rash  
Peripheral neuropathy  
Ototoxicity (tinnitus/deafness)  
Renal toxicity, electrolyte disturbance (especially Magnesium loss)  
Myelosuppression

**THIS PROTOCOL HAS BEEN DIRECTED BY DR BIRTLE, DESIGNATED LEAD CLINICIAN FOR GERM CELL TUMOURS**

**RESPONSIBILITY FOR THIS PROTOCOL LIES WITH THE HEAD OF SERVICE**

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