

## CARBOPLATIN ETOPOSIDE

### INDICATION (ICD10) C34

1. Advanced Ewing
2. High grade sarcoma  
PS 0, 1, 2

### REGIMEN

- Day 1 CARBOPLATIN AUC 5 infusion in 500ml glucose 5% IV infusion over 30 minutes  
ETOPOSIDE 120mg/m<sup>2</sup> in 1000ml\* sodium chloride 0.9% IV infusion over 60 minutes
- Day 2 ETOPOSIDE 120mg/m<sup>2</sup> in 1000ml\* sodium chloride 0.9% IV infusion over 60 minutes
- Day 3 ETOPOSIDE 120mg/m<sup>2</sup> in 1000ml\* sodium chloride 0.9% IV infusion over 60 minutes

\*doses 48mg to 88mg in 250ml, doses 96mg to 180mg in 500ml sodium chloride 0.9%

### CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 21 days for up to 6 to 8 cycles

### ANTI-EMETICS

High emetic risk day 1  
Moderate emetic risk days 2 and 3

### 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 <sub>2</sub> antagonist Carboplatin should be given at a slower rate e.g. 2-4 hours.
GCSF	GCSF starting at least 24 hours after chemotherapy

### EXTRAVASATION AND TYPE OF LINE / FILTERS

Carboplatin – irritant  
Etoposide - irritant

Peripheral line

### INVESTIGATIONS

Blood results required before SACT administration  
FBC, U&E and LFTs every cycle  
Neutrophils x 10<sup>9</sup>/L ≥1.5  
Platelets x 10<sup>9</sup>/L ≥100  
DTPA baseline  
Creatinine clearance (GFR) calculated, at the Consultants discretion  
Serum creatinine - each cycle,  
Baseline weight and every cycle

### MAIN TOXICITIES AND ADVERSE REACTIONS

Carboplatin	Ototoxicity - monitor Neurotoxicity – monitor.
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## INTERACTIONS WHICH MAY REQUIRE DOSE MODIFICATIONS

(not exhaustive list check SPC/BNF/Stockleys)

Carboplatin	Aminoglycosides increased risk of nephrotoxicity and ototoxicity. Renal function should be well monitored and audiometric tests as required. Carboplatin can cause a decrease in phenytoin serum levels. This may lead to reappearance of seizures and may require an increase of phenytoin dosages.
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## DOSE MODIFICATIONS

### Haematological

Haematological delay >14 days reduce etoposide to give 80% dose and reduce carboplatin dose to AUC4.

Further haematological delays reduce etoposide to give 60% dose and reduce carboplatin further for next cycle.

### Hepatic impairment

#### Etoposide

Bilirubin $\geq$ 51micromol/L or decreased albumin	give 50% dose
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### Renal impairment

#### Carboplatin

GFR / calculated CrCl $\leq$ 20ml/min or $\leq$ 30ml/min with pre-existing severe renal impairment	contraindicated
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#### Etoposide

CrCl >50ml/min	give 100% dose
CrCl 15-50ml/min	give 75% dose
CrCl <15ml/min	Further dose reduction

## REFERENCES

1. Annemiek M. van Maldegem, et al, Pediatr Blood Cancer 2015;62:40–4