CARBOPLATIN ETOPOSIDE

INDICATION (ICD10) C34, C37, C44, C53, M-8246/3

1. Standard first line treatment for SCLC.
2. Merkel cell cancer
3. Neuroendocrine tumour
4. Advanced small cell gynaecological carcinomas
   PS 0, 1, 2

REGIMEN

Day 1	CARBOPLATIN	AUC 5 in 500ml glucose 5% IV infusion over 30 minutes Dose calculated by EDTA GFR or calculated (CrCl + 25) x AUC. Maximum dose when using CrCl 125+25 x AUC
	ETOPOSIDE	100mg/m^2 in 1000ml* sodium chloride 0.9% IV infusion over 60 minutes
Day 2	ETOPOSIDE	100mg/m^2 in 1000ml* sodium chloride 0.9% IV infusion over 60 minutes
Day 3	ETOPOSIDE	100mg/m^2 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%

NB Lung - days 2 and 3 can be given orally ETOPOSIDE 100mg bd but is not recommended as oral absorption is variable (it may cause reduced efficacy or severe toxicity in patients), the intravenous route is preferred, however for logistical reasons the oral route may be necessary.
If days 2 and 3 are given orally the day 1 IV dose should be increased to 120mg/m^2. (This oral dose is not exactly equivalent but is the agreed oral dose).

CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 21 days for 6 cycles (subject to tolerance and response)

ANTI-EMETICS

Moderate emetic risk day 1
Low 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_2 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 10^9/L ≥1.5
Platelets x 10^9/L ≥100
Ideally EDTA GFR should be used
Creatinine clearance (GFR) calculated, at the Consultants discretion
Serum creatinine - each cycle,
Baseline weight and every cycle

MAIN TOXICITES AND ADVERSE REACTIONS

Carboplatin	Ototoxicity - monitor Neurotoxicity – monitor.

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.

DOSE MODIFICATIONS

Haematological

Neutrophil <0.5x10^9/L for more than 5 days, or low neutrophils with fever or infection, or platelets <25x10^9/L subsequent doses should be reduced.

Non-haematological

Any grade 3 or 4 toxicity subsequent doses should be reduced.

Hepatic impairment

Etoposide

Bilirubin ≥50micromol/L or decreased albumin	give 50% dose

Renal impairment

Carboplatin

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

Etoposide

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

REFERENCES

1. Skarlos DV et al. Ann Oncol 1994; 5: 601-607