

## CARBOPLATIN / ETOPOSIDE

First-line in small cell lung cancer and other primary tumours with small cell histology

Drug / Dosage:	Carboplatin	AUC 5	IV	D1
	Etoposide	100mg/m <sup>2</sup>	IV	D1
	Etoposide	200mg/m <sup>2</sup>	PO	D2 and D3 (see Comments)
Administration:	Carboplatin diluted in 250ml 5% Glucose over 30 minutes. Etoposide IV diluted in 500ml – 1 litre of 0.9% Sodium Chloride (dependent on dosage) and infused over a minimum of 1 hour. Oral Etoposide dose to be rounded to nearest 50mg, and swallowed whole on an empty stomach or an hour before food.			
Frequency:	3 weekly cycle 4 – 6 cycles Review prior to each cycle CT scan after 2 <sup>nd</sup> cycle			
Main Toxicities:	myelosuppression; alopecia; ovarian failure / infertility			
Anti-emetics:	highly emetogenic			
Extravasation:	non-vesicants			
Regular Investigations:	EDTA	Prior to 1 <sup>st</sup> cycle		
	FBC	D1		
	LFTs	D1		
	U&Es	D1		
	CXR	Every cycle		
Comments:	Carboplatin dose should be calculated using the Calvert formula: Dose = Target AUC x (25 + GFR) If EDTA not available on Cycle 1, Cockcroft and Gault may be used to predict GFR, but the carboplatin dose should be corrected according to the measured EDTA for the remaining cycles. EDTA should only be repeated if there is a 30% change in serum creatinine.  Patients with poor performance status or age > 70 years should receive prophylactic ciprofloxacin, 250mg twice daily for 7 days starting on Day 8, to cover the nadir.  As an alternative for patients who cannot swallow capsules; Etoposide 100mg/m <sup>2</sup> IV on Days 2 and 3 can be prescribed <b>or</b> Etoposide injection can be taken orally (diluted with orange juice or similar immediately prior to administration) at a dose of 70% of the usual oral capsule dose on Day 2 and Day 3. <sup>1</sup> (unlicensed use)			

Reason for Update: New indications added	Approved by Lead Chemotherapy Nurse: C Palles-Clark
Version: 2	Approved by Consultant: Dr G Middleton
Supersedes: Version 1	Date: 9.5.07
Prepared by: S Taylor	Checked by: S Punter

## Dose Modifications

Haematological Toxicity: WBC <  $3.0 \times 10^9/l$   
or  
Neutrophils <  $1.5 \times 10^9/l$   
or  
Platelets <  $100 \times 10^9/l$

Delay for 1 week. Repeat FBC and, if within normal parameters, resume treatment.

If significant myelosuppression, consider reduction of oral etoposide dose to  $100\text{mg}/\text{m}^2$  on Day 2 and Day 3. The use of prophylactic G-CSF should be discussed with the consultant.

Renal Impairment: Carboplatin is contra-indicated if  $\text{CrCl} < 20 \text{ ml/min}$ .

CrCl (ml/min)	Etoposide Dose
60	Give 85%
45	Give 80%
30	Give 75%

Hepatic Impairment: Creatinine clearance is the strongest predictor of etoposide clearance. There is conflicting information about dose reduction with hepatic impairment. Use the table below but, if in doubt, discuss with Consultant.

Bilirubin ( $\mu\text{mol/l}$ )	AST (units/l)	Etoposide Dose
26 – 51 or	60 - 180	Give 50% dose
> 51 or	> 180	Clinical decision

References: Kosmidis, PA et al, Seminars in Oncology (1984); Suppl. 621: pp 23 – 30  
<sup>1</sup>Bristol-Myers Squibb Medical Information

Reason for Update: New indications added	Approved by Lead Chemotherapy Nurse: C Palles-Clark
Version: 2	Approved by Consultant: Dr G Middleton
Supersedes: Version 1	Date: 9.5.07
Prepared by: S Taylor	Checked by: S Punter