

CAV

Second-line treatment of small cell lung cancer and other primary tumours with small cell histology
May also be used as a second-line treatment for bronchial neuroendocrine tumours

Drugs/Dosages:	Cyclophosphamide	1000* mg/m ²	IV	Day 1
	Doxorubicin	40mg/m ²	IV	Day 1
	Vincristine	1mg/m ² (max 2mg)	IV	Day 1

*Consider reducing dose of cyclophosphamide to 600 - 800mg/m² in patients with poor performance status

Administration: Cyclophosphamide is a bolus injection
Doxorubicin injection infused via fast running infusion 0.9% sodium chloride
Vincristine diluted in 50ml 0.9% sodium chloride and infused over 5-10 minutes

Frequency: 3 weekly cycle for 4 – 6 cycles
Clinical review after cycle 2

Main Toxicities: myelosuppression (see Comments); alopecia; peripheral neuropathy;
constipation; mucositis; haemorrhagic cystitis; cardiomyopathy;
ovarian failure / infertility

Anti-emetics: highly emetogenic

Extravasation: doxorubicin & vincristine are vesicants

Regular Investigations: FBC Day 1
U&Es Day 1
LFTs Day 1
MUGA scan see Comments

Comments: Maximum cumulative dose of doxorubicin = 450 - 550mg/m²

A baseline MUGA scan should be performed where the patient is considered at risk of having significantly impaired cardiac contractility. If ejection fraction is less than 50%, an alternative regimen should be given.

MUGA scan should be repeated if there is suspicion of cardiac toxicity at any point during treatment.

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.

The use of G-CSF should be discussed with the Consultant.

Dose Modifications

Haematological Toxicity:	Neutrophils < 1.5 x 10 ⁹ /l or Platelets < 100 x 10 ⁹ /l	Delay treatment for 1 week. Repeat FBC and, if recovered, proceed with treatment. A dose reduction of 25% for doxorubicin and cyclophosphamide may be considered for subsequent cycles.
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Reason for Update: WBC cut-off removed; carcinoid indication added	Approved by Consultant: Dr V Ezhil
Version: 7	Approved by Lead Chemotherapy Nurse: P Deery
Supersedes: Version 6	Date: 22.1.15
Prepared by: S Taylor	Checked by: C Tucker

Renal Impairment:

CrCl (ml/min)	Cyclophosphamide Dose
> 20	Give 100%
10 – 20	Give 75%
< 10	Give 50%

Hepatic impairment:

ALT / AST	Bilirubin (µmol/l)	Doxorubicin Dose
2 – 3 x ULN	-	Give 75%
> 3 x ULN or	20 – 50	Give 50%
	51 – 85	Give 25%
	> 85	Omit

Bilirubin (µmol/l)	ALT / AST (units/l)	Vincristine Dose
26 – 51 or	60 – 180	Give 50%
> 51 and	< 180	Give 50%
> 51 and	> 180	Omit

Reference: Roth, BJ et al, JCO, 1992; Vol 10 (2): 282-291

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