

BC Cancer Protocol Summary for Treatment of Extensive Stage Small Cell Lung Cancer (SCLC) with Cyclophosphamide, DOXOrubicin and vinCRISTine (CAV)

Protocol Code: LUSCCAV
Tumour Group: Lung
Contact Physician: Dr. Christopher Lee

ELIGIBILITY:

- Relapsed SCLC in patients previously treated with LUSCPE
- Good performance status (ECOG 0, 1)
- First line treatment for extensive SCLC in patients with a contraindication for LUSCPE

TESTS:

- Baseline: CBC & differential, platelets, creatinine, [alkaline phosphatase](#), [ALT](#), [total bilirubin](#), [LDH](#)
- If clinically indicated: ECG
- Before each treatment: CBC & differential, platelets, creatinine
- If clinically indicated: bilirubin

PREMEDICATIONS:

- Antiemetic protocol for highly emetogenic chemotherapy (see protocol SCNAUSEA)

TREATMENT:

Drug	Dose	BC Cancer Administration Guideline
DOXOrubicin	50 mg/m ²	IV Push
vinCRISTine	1.2 mg/m ² (Maximum 2 mg)	IV in 50 mL NS over 15 minutes
cyclophosphamide	1000 mg/m ²	IV in 100 to 250* mL NS over 20 min to 1 hour (*use 250 mL for doses greater than 1000 mg)

- Repeat every 21 days x 4 to 6 cycles

DOSE MODIFICATIONS:

1. HEMATOLOGY

For cyclophosphamide and DOXOrubicin:

ANC (x 10 ⁹ /L)		Platelets (x 10 ⁹ /L)	Cyclophosphamide and DOXOrubicin Dose
greater than or equal to 1.5	and	greater than or equal to 100	100%
1.0 to less than 1.5	or	75 to less than 100	50%
less than 1.0	or	less than 75	Delay

2. HEPATIC DYSFUNCTION

For DOXOrubicin:

Bilirubin (micromol/L)	DOXOrubicin Dose
25 to 50	50%
51 to 85	25%
greater than 85	Delay

3. NEUROTOXICITY

For vinCRISStine:

Neuropathy	vinCRISStine Dose
Areflexia	100%
Abnormal buttoning or writing	67%
Moderate motor neuropathy	50%
Severe motor neuropathy	Omit

4. RENAL DYSFUNCTION

For Cyclophosphamide: Dosage may be halved or interval may be increased from 50 to 100% for Creatinine Clearance less than 18 mL/min

PRECAUTIONS:

- Extravasation:** DOXOrubicin and vinCRISStine cause pain and tissue necrosis if extravasated. Refer to [BC Cancer Extravasation Guidelines](#).
- Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.
- Cardiac Toxicity:** DOXOrubicin is cardiotoxic and must be used with caution, if at all, in patients with severe hypertension or cardiac dysfunction. Cardiac assessment recommended if lifelong dose of 450 mg/m² to be exceeded. Refer to the [BC Cancer Drug Manual](#) for more information.

Contact Dr. Christopher Lee or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.

REFERENCES:

Livingston RB, Moore TN, Heilburn MD, et al. Small-cell carcinoma of the lung: combined chemotherapy and radiation. *Ann Intern Med* 1978;88:194-9.