

BCCA Protocol Summary for Treatment of Extensive Small Cell Lung Cancer (SCSC) with Cyclophosphamide, Doxorubicin and Vincristine (CAV) (Interim Version)

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

ELIGIBILITY:

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

TESTS:

- Baseline: CBC & differential, platelets, creatinine, liver function tests, bilirubin
- If clinically indicated: ECG
- Before each treatment: CBC & differential, platelets, creatinine
- If clinically indicated: bilirubin

PREMEDICATIONS:

- Antiemetic protocol for High Moderate emetogenic chemotherapy protocols

TREATMENT:

Drug	Dose	BCCA Administration Guideline
Doxorubicin	50 mg/m ²	IV Push
Vincristine	1.2 mg/m ² (Max ^m 2 mg)	in 50 mL NS over 5-15 mins
Cyclophosphamide	1000 mg/m ²	IV in 100-250* mL NS over 20-60 min (*use 250 mL for doses > 1000 mg)

- Repeat every 3 weeks for 4 cycles

DOSE MODIFICATIONS:

1. HEMATOLOGY

For cyclophosphamide and doxorubicin:

ANC (x 10 ⁹ /L)		Platelets (x 10 ⁹ /L)	Cyclophosphamide and Doxorubicin Dose
≥ 1.5	and	≥ 100	100%
1.0-1.4	or	75-99	50%
< 1.0	or	< 75	Delay

2. HEPATIC DYSFUNCTION

For doxorubicin:

Bilirubin (µmol/L)	Doxorubicin Dose
25-50	50%
51-85	25%
> 85	Delay

3. NEUROTOXICITY

For vincristine:

Neuropathy	Vincristine 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 50-100% for Creatinine Clearance < 0.3 mL/sec

PRECAUTIONS:

1. **Extravasation:** Doxorubicin and vincristine cause pain and tissue necrosis if extravasated. Refer to BCCA Extravasation Guidelines.
2. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.

3. **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 BCCA Cancer Drug Manual for more information.

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

Activated: 11 Aug 1999

Revised: 01 Dec 2007 (vincristine administration revised)

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.