

BCCA Protocol Summary for Treatment of Thymoma/Thymic Carcinoma with Cyclophosphamide, Doxorubicin and Vincristine (CAV)

Protocol Code:

LUOTCAV

Tumour Group:

Lung

Contact Physician:

Dr. Christopher Lee

ELIGIBILITY:

- First-line or salvage treatment of thymoma/thymic carcinoma
- Good performance status (ECOG 0, 1)

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 (see protocol SCNAUSEA)

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 15 min
Cyclophosphamide	1000 mg/m ²	IV in 100 to 250* mL NS over 20 to 60 min (*use 250 mL for doses greater than 1000 mg)

- Repeat every 21 days x 4-6 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%
1-1.4	or	75-99	50%
less than 1	or	less than 75	Delay

2. HEPATIC DYSFUNCTION

For doxorubicin:

Bilirubin (micromol/L)	Doxorubicin Dose
25-50	50%
51-85	25%
greater than 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 less than 18 mL/min

PRECAUTIONS:

- Extravasation:** Doxorubicin and vincristine cause pain and tissue necrosis if extravasated. Refer to BCCA 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 BCCA 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.

Activated: 1 Apr 2009 (replacing LUCAV)
Revised: 1 June 2011 (Infusion section 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.
- Kosmidis PA, Iliopoulos E, Pentea S. Combination chemotherapy with cyclophosphamide, adriamycin, and vincristine in malignant thymoma and myasthenis gravis. *Cancer* 1988;61:1736-40.