

BCCA Protocol Summary for Second-line Treatment of Recurrent Small Cell Lung Cancer (SCLC) with Topotecan

Protocol Code

LUSCTOP

Tumour Group

Lung

Contact Physician

Dr. Christopher Lee

ELIGIBILITY:

- Recurrent/progressive small cell lung cancer following first-line therapy
- ECOG performance status 0-2
- Relative contraindication to LUSCCAV
- A “Class II Drug Registration Form” must be submitted at the time of initiation of treatment. For other indications, an “Undesignated Indications Request” form must be approved.

EXCLUSIONS:

- ECOG performance status 3-4

TESTS:

- Baseline: CBC & diff (including platelets), electrolytes, BUN, creatinine
- Before each treatment: CBC & diff (including platelets), creatinine
- Weekly: CBC & diff (including platelets)

PREMEDICATIONS:

- Antiemetic protocol for Low-Moderate emetogenic chemotherapy (see protocol SCNAUSEA)

TREATMENT:

| Drug | Dose | BCCA Administration Guideline |
|-----------|------------------------------------------------|-------------------------------|
| Topotecan | 1.5 mg/m ² /day x 5 days (days 1-5) | IV in 50mL NS over 30 minutes |

- Repeat 5-day treatment every 21 days x 4-6 cycles

DOSE MODIFICATIONS:

1. Hematology:

a) on treatment day:

| ANC (x 10 ⁹ /L) | | Platelets (x 10 ⁹ /L) | Dose |
|------------------------------|-----|----------------------------------|----------------------|
| greater than or equal to 1.0 | and | greater than or equal to 100 | treat as per nadir |
| less than 1.0 | or | less than 100 | delay until recovery |

b) at nadir:

| ANC (x 10 ⁹ /L) | | Platelets (x 10 ⁹ /L) | Dose |
|----------------------------|----|----------------------------------|------------------------------------------|
| less than 0.5 | or | less than 50 | decrease by 0.25 mg/m ² /day* |

2. **Any Grade 3 or 4 toxicity (except nausea):** decrease dose by 0.25mg/m²/day*

*e.g. if initial dose is 1.5 mg/m²/day x 5 days → 1.25 mg/m²/day x 5 days.
if initial dose is 1.25 mg/m²/day x 5 days → 1.0 mg/m²/day x 5 days.

3. Renal Dysfunction:

| Creatinine Clearance (mL/min) | Topotecan Dose |
|-------------------------------|-----------------|
| greater than or equal to 40 | 100% |
| 20-39 | 50% |
| less than 20 | not recommended |

$$\text{CrCl (mL/min)} = \frac{N \times (140 - \text{age}) \times \text{weight (kg)}}{\text{serum creatinine } (\mu\text{mol/L})}$$

where N = 1.04 for females and 1.23 for males

PRECAUTIONS:

1. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.

Call Dr. Christopher Lee or tumour group delegate at (604) 930-2098 or 1-800-523-2885 with any problems or questions regarding this treatment program.

Date activated: 01 December 2004

Date revised: 01 Aug 2011 (updated dose modification for renal dysfunction)

REFERENCES:

von Pawel J, Schiller JH, Shepherd FA, et al. Topotecan versus cyclophosphamide, doxorubicin and vincristine for the treatment of recurrent small-cell lung cancer. J Clin Oncol 1999; 17: 658-667.