

## Provincial Small Cell Lung Cancer Treatment Guidelines

# Approved at the Provincial Thoracic Oncology meeting, March 12, 2011 (Updated on April 1, 2015)

Clinical practice guidelines have been developed after multi-disciplinary consensus based on best available literature. As the name suggests, these are to be used as a guide only. These guidelines do not replace physician judgment which is based on multiple factors including, but not limited to, the clinical and social scenario, comorbidities, performance status, age, available resources and funding considerations. The Saskatchewan Cancer Agency disclaims all liability for the use of guidelines except as expressly permitted by the Agency. No portion of these guidelines may be copied, displayed for redistribution to third parties for commercial purposes or any non-permitted use without the prior written permission from the Agency.

Benefits and risk of the proposed should be discussed with patient.

Participating in clinical trials is encouraged when available. Involvement of a multidisciplinary team is strongly recommended.

#### **SCREENING**

Screening low dose CT chest showed mortality improvement however there are many unanswered questions such as to identify at risk population, duration of follow-up and incorporation of smoking cessation. Canadian Partnership Against Cancer is currently working on publishing lung cancer screening guidelines for the provinces to implement.

### **WORK-UP**

- Biopsy: For peripheral lesion consider CORE biopsy. For central lesion consider bronchoscopy/endobronchial ultrasound guided (EBUS) or mediastinoscopy. Goal of the biopsy is obtain maximal amount of tissue for immunohistochemical stains and molecular studies.
- 2. Molecular studies for EGFR and ALK mutation in non-squamous carcinoma for stage IIIB and stage IV:
- 3. History & Physical Exam, Performance status, Weight loss.
- 4. Basic Labs: CBC, Renal Panel, LFTs.
- 5. CT chest, abdomen and pelvis.
- 6. PET/CT as indicated.
- 7. Mediastinal lymph node staging in early stage SCLC for surgical resection.
- 8. CT/MRI brain as clinically indicated and consider if stage II or higher.
- 9. Bone scan as indicated.
- 10. PFTs if surgery or radiotherapy is considered.

### **LIMITED STAGE**

- 1. Surgical resection
  - Solitary lung lesion with no evidence of loco regional metastasis after discussion in multidisciplinary rounds.
  - Adjuvant chemotherapy: Cisplatin + Etoposide 4 cycles.

- Consider adjuvant chemo radiotherapy if mediastinal lymph node involvement.
- 2. Concurrent chemotherapy and radiation
  - Cisplatin + Etoposide 4 to 6 cycles .
  - Concomitant RT (45Gy in 30 fractions using BiD treatment schedule OR 50-60Gy in 2 Gy per fraction)
  - RT to start with cycle 1 or 2 of chemotherapy.
- 3. Prophylactic Cranial Radiation, PCI (25Gy/10# whole brain RT)
  - Consider in patients who have significant response to chemotherapy and radiation.

#### **EXTENSIVE STAGE**

- 1. Combination 1<sup>st</sup> line chemotherapy: Cisplatin/Caboplatin + Etoposide 4 to 6 cycles.
- 2. If relapse >6 months: original regimen, if <6 months: Topotecan
- 3. Consolidation radiation to residual disease. 50Gy in 25#, 40Gy in 16#, 36Gy in 12#, 30Gy in 10# and 20Gy in 5# are all acceptable options.
- 4. PCI (25Gy/10# whole brain RT)
  - Same indications as in limited stage disease.

#### **FOLLOW UP**

- In patients treated with curative intent, perform a history and physical examination every 3-6 months for the first 3 years, every 6-12 months for the next 2 years, annually thereafter.
- Consider CT chest/abdomen with iv contrast every 6 months for the first 2 years and then yearly for the next 3 years in limited stage small cell lung cancer.
- Consider CT chest/abdomen with IV contrast in extensive stage small cell lung cancer as clinically indicated.

Appendix (Limited stage: chemotherapy for 4 - 6 cycles)

1	Cisplatin 60mg/2 Day 1 + Etoposide 120mg/m2	Every 21 days
	mg/m2 Day 1-3 with RT	
2	Cispaltin 80mg/m2 Day 1 + Etoposide 100mg/m2	Every 21 days
	mg/m2 Day 1-3 with RT	
3	Carboplatin AUC 5-6 Day 1+ Etoposide 100mg/m2	Every 21 days
	mg/m2 Day 1-3 with RT	

(Extensive stage: chemotherapy for 4 o 6 cycles)

1	Cisplatin 80mg/2 Day 1 + Etoposide 100mg/m2	Every 21 days
	mg/m2 Day 1-3 with RT	
2	Carboplatin AUC 5-6 Day 1+ Etoposide 100mg/m2	Every 21 days
	mg/m2 Day 1-3 with RT	
3	Topotecan 1.5mg/m2 Day 1- 5	Every 21 days