



Guideline 7-13 Version 2

A Quality Initiative of the
Program in Evidence-Based Care (PEBC), Cancer Care Ontario (CCO)

Initial Management of Small Cell Lung Cancer (Limited and Extensive Stage) and the Role of Thoracic Radiotherapy and First-Line Chemotherapy

Members of the Lung Cancer Disease Site Group

September 12, 2025

Guideline 7-13 was reviewed in 2025 and ENDORSED by the Lung Cancer Disease Site Group (See Section 6: Document Assessment and Review for details)

The systemic treatment recommendations have been superseded by the recommendations in the [ASCO guideline](#). Please refer to the ASCO recommendations.

Guideline 7-13 Version 2 is comprised of 6 sections. You can access the summary and full report here:

<https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/49411>

Section 1:	Recommendations
Section 2:	Guideline - Recommendations and Key Evidence
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Section 6:	Document Assessment and Review

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Initial Management of Small Cell Lung Cancer (Limited and Extensive Stage) and the Role of Thoracic Radiotherapy and First-Line Chemotherapy

Section 1: Recommendations

This section is a quick reference guide and provides the guideline recommendations only. For key evidence associated with each recommendation, the systematic review, and the guideline development process, see the Full Report.

GUIDELINE OBJECTIVES

The objective of this guideline was to make recommendations with respect to thoracic radiotherapy and first-line chemotherapy in the treatment of non-resected patients with small cell lung cancer (SCLC).

As a regular Program in Evidence-Based Care updating process, it was decided to update and combine two guidelines on limited-stage (LS) (stage I, II, and III) SCLC (see Appendix 8) and broaden the scope of the guideline to include extensive-stage (ES) (stage IV) SCLC.

TARGET POPULATION

In keeping with recommendations from the International Association for the Study of Lung Cancer and Cancer Care Ontario, we have transitioned to the use of TNM staging rather than the Veterans Affairs staging of LS versus ES. The target population for this guideline are adult patients with non-resected LS (stage I, II, and III) and ES (stage IV) SCLC who can safely receive definitive radiation.

INTENDED USERS

Clinicians involved in the treatment of non-resected adult patients with LS (stage I, II, and III) and ES (stage IV) SCLC.

RECOMMENDATIONS

The systemic treatment recommendations have been superseded by the recommendations in the [ASCO guideline](#). Please refer to the ASCO recommendations.

Recommendations for Patients with LS (Stage I, II, and III) SCLC

1. Thoracic Radiotherapy

In patients with LS (stage I, II, and III) SCLC, the addition of thoracic radiotherapy to standard chemotherapy is recommended. However, there is no clear evidence to inform definitive recommendations for optimal timing, sequential versus concurrent therapies, and optimal dose or regimen.

a) Optimal Timing

- **Qualifying Statement (Modified in September 2025):**
 - It was the consensus of the Working Group members that consultation of radiation oncology should happen as early as possible to facilitate starting radiation before the third cycle of systemic therapy. (See Section 6 for details).

b) Sequential or Concurrent

- **Qualifying Statement:**

- It was the consensus of the Working Group members that concurrent chemotherapy and radiation would generally be considered the standard of care.

c) Dose or Regimen

- **Qualifying Statement (*Modified in September 2025*):**

- The best outcomes in terms of overall survival have been observed in trials using 45 Gy in 30 fractions twice daily (or a biologically equivalent dose such as 66 Gy in 33 fractions daily or at least 40 Gy in 15 fractions daily). (See Section 6 for details).

2. Chemotherapy

The systemic treatment recommendations have been superseded by the recommendations in the [ASCO guideline](#). Please refer to the ASCO recommendations.

Recommendations for Patients with ES (Stage IV) SCLC

1. Thoracic Radiotherapy

In patients with ES (stage IV) SCLC, there is insufficient evidence to recommend the addition of thoracic radiotherapy to standard chemotherapy as a standard practice for survival benefit; however, it could be considered on a case-by-case basis to reduce local recurrence.

- **Qualifying Statement:**

- The following are examples of subgroups of patients that could be considered for thoracic radiotherapy:
 - Low-volume extra-thoracic disease
 - Residual intra-thoracic disease
- In cases where thoracic radiotherapy is offered to ES SCLC, there is no clear standard for dose or volumes, with dose regimens in trials including 30 Gy in 10 fractions once a day, 45 Gy in 30 fractions twice a day, and 45 Gy in 15 fractions once a day.

There is no evidence to inform definitive recommendations for optimal timing, sequential or concurrent, or dose or regimen.

2. Chemotherapy

The systemic treatment recommendations have been superseded by the recommendations in the [ASCO guideline](#). Please refer to the ASCO recommendations.