

Small Cell Lung Cancer Treatment Regimens

Clinical Trials: The NCCN recommends cancer patient participation in clinical trials as the gold standard for treatment.

Cancer therapy selection, dosing, administration, and the management of related adverse events can be a complex process that should be handled by an experienced health care team. Clinicians must choose and verify treatment options based on the individual patient; drug dose modifications and supportive care interventions should be administered accordingly. The cancer treatment regimens below may include both U.S. Food and Drug Administration-approved and unapproved indications/regimens. These regimens are provided only to supplement the latest treatment strategies.

These Guidelines are a work in progress that may be refined as often as new significant data become available. The NCCN Guidelines® are a consensus statement of its authors regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult any NCCN Guidelines® is expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient's care or treatment. The NCCN makes no warranties of any kind whatsoever regarding their content, use, or application and disclaims any responsibility for their application or use in any way.

Note: All recommendations are Category 2A unless otherwise indicated.

► Systemic Therapy as Primary or Adjuvant Therapy¹

REGIMEN	DOSING
Limited Stage (maximum of 4–6 cycles)^{a,c}	
Preferred Regimens	
Cisplatin + Etoposide ^{3,6}	Day 1: Cisplatin 60mg/m ² IV over 60 minutes Days 1–3: Etoposide 120mg/m ² IV over 60 minutes. Repeat cycle every 3-4 weeks for 4-6 cycles. OR Day 1: Cisplatin 75mg/m ² IV over 60 minutes Days 1–3: Etoposide 100mg/m ² IV over 60 minutes. Repeat cycle every 3-4 weeks for 4–6 cycles
Other Recommended Regimens	
Carboplatin + Etoposide ^{5,8,d}	Day 1: Carboplatin AUC 5–6 IV over 30 minutes Days 1–3: Etoposide 100mg/m ² IV over 60 minutes. Repeat cycle every 3-4 weeks for 4–6 cycles.
Cisplatin + Etoposide ^{3,6}	Days 1-3: Cisplatin 25mg/m ² IV over 60 minutes Days 1-3: Etoposide 100mg/m ² IV over 60 minutes. Repeat cycle every 3-4 weeks for 4-6 cycles.
Extensive Stage SCLC (maximum of 4–6 cycles)¹	
Preferred Regimens	
Carboplatin + Etoposide + Atezolizumab (Category 1) ^{9,10,e,f}	Day 1: Carboplatin AUC 5 IV over 30 minutes Days 1-3: Etoposide 100mg/m ² IV over 60 minutes Day 1: Atezolizumab 1,200mg IV. Repeat cycle every 3 weeks for 4 cycles. Day 1: Atezolizumab 1,200mg IV. Repeat cycle every 3 weeks.
Carboplatin + Etoposide + Durvalumab (Category 1) ^{11,12,e,f}	Day 1: Carboplatin AUC 5-6 IV over 30 minutes Days 1-3: Etoposide 80-100mg/m ² IV over 60 minutes Day 1: Durvalumab 1,500mg IV over 60 minutes Repeat cycle every 3 weeks for 4 cycles, followed by maintenance therapy with: Day 1: Durvalumab 1,500mg IV over 60 minutes. Repeat cycle every 4 weeks.
Cisplatin + Etoposide + Durvalumab (Category 1) ^{11,12,e,f}	Day 1: Cisplatin 75-80mg/m ² IV over 120 minutes Days 1-3: Etoposide 80-100mg/m ² IV over 60 minutes Day 1: Durvalumab 1,500mg IV over 60 minutes Repeat cycle every 3 weeks for 4 cycles, followed by maintenance therapy with: Day 1: Durvalumab 1,500mg IV over 60 minutes. Repeat cycle every 4 weeks.
Other Recommended Regimens	
Carboplatin + Etoposide ⁵⁻⁸	Day 1: Carboplatin AUC 5–6 IV over 30 minutes Days 1–3: Etoposide 100mg/m ² IV over 60 minutes. Repeat cycle every 3-4 weeks for 4–6 cycles.

continued

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► Systemic Therapy as Primary or Adjuvant Therapy¹ (continued)

REGIMEN	DOSING
Primary or Adjuvant Therapy for Extensive Stage SCLC (maximum of 4-6 cycles) ¹ (continued)	
Other Recommended Regimens (continued)	
Cisplatin + Etoposide ^{5,6,13-15}	<p>Day 1: Cisplatin 75mg/m² IV over 60 minutes Days 1–3: Etoposide 100mg/m² IV over 60 minutes. Repeat cycle every 3-4 weeks for 4–6 cycles.</p> <p>OR</p> <p>Day 1: Cisplatin 80mg/m² IV over 60 minutes Days 1–3: Etoposide 80mg/m² IV over 60 minutes. Repeat cycle every 3-4 weeks for 4–6 cycles.</p> <p>OR</p> <p>Days 1–3: Cisplatin 25mg/m² IV over 60 minutes Days 1–3: Etoposide: 100mg/m² IV over 60 minutes. Repeat cycle every 3-4 weeks for 4-6 cycles.</p>
Useful in Certain Circumstances	
Carboplatin + Irinotecan ^{5,6,16}	<p>Day 1: Carboplatin AUC 5 IV over 30 minutes Days 1, 8, and 15: Irinotecan 50mg/m² IV over 90 minutes. Repeat cycle every 4 weeks for 4–6 cycles.</p>
Cisplatin + Irinotecan ^{5,6,15,16,e}	<p>Day 1: Cisplatin 60mg/m² IV over 60 minutes Days 1, 8, and 15: Irinotecan 60mg/m² IV over 90 minutes. Repeat cycle every 4 weeks for 4 cycles.</p> <p>OR</p> <p>Day 1 and 8: Cisplatin 30mg/m² IV over 60 minutes Day 1 and 8: Irinotecan 65mg/m² IV over 90 minutes. Repeat cycle every 3 weeks for 4–6 cycles.</p>

► Subsequent Systemic Therapy^{1,g}

Relapse ≤6 months, PS 0-2	
Preferred Regimens ^h	
Lurbinectedin ¹⁹	<p>Day 1: Lurbinectedin 3.2 mg/m² IV over 60 minutes. Repeat cycle every 3 weeks</p>
Topotecan ²⁰⁻²²	<p>Days 1–5: Topotecan 1.5mg/m² IV daily over 30 minutes. Repeat cycle every 3 weeks.</p> <p>OR</p> <p>Days 1–5: Topotecan 2.3mg/m² orally once daily. Repeat cycle every 3 weeks.</p>
Other Recommended Regimens	
Bendamustine (Category 2B) ²³	<p>Days 1 and 2: Bendamustine 120mg/m² IV over 10 minutes or 60 minutes (based on product selection). Repeat cycle every 3 weeks for 6 cycles.</p>
Cyclophosphamide + Doxorubicin + Vincristine (CAV) ²¹	<p>Day 1: Cyclophosphamide 1,000mg/m² IV over 60 minutes Day 1: Doxorubicin 45mg/m² IV push Day 1: Vincristine 2mg IV over 5-10 minutes. Repeat cycle every 3 weeks.</p>
Docetaxel ²⁴	<p>Day 1: Docetaxel 60-100 mg/m² IV over 60 minutes. Repeat cycle every 3 weeks.</p>
Gemcitabine ²⁵⁻²⁶	<p>Days 1, 8, and 15: Gemcitabine 1,000mg/m² IV over 30 minutes. Repeat cycle every 4 weeks.</p>
Irinotecan ²⁷	<p>Days 1,8,15,22: Irinotecan 100mg/m² IV over 90 minutes. Repeat cycle every 4 weeks.</p>

continued

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► Subsequent Systemic Therapy^{1,g}

Relapse ≤6 months, PS 0-2	
Other Recommended Regimens	
Nivolumab ^{28-30,e,f}	<p>Day 1: Nivolumab 240mg IV over 30 minutes Repeat cycle every 2 weeks.</p> <p>OR</p> <p>Day 1: Nivolumab 480mg IV over 30 minutes Repeat cycle every 4 weeks.</p>
Nivolumab + Ipilimumab ^{28-31,e,f}	<p>Day 1: Nivolumab 1mg/kg IV over 30 minutes Day 1: Ipilimumab 3mg/kg IV over 90 minutes Repeat cycle every 3 weeks for 4 cycles, followed by: Day 1: Nivolumab 240mg IV over 30 minutes. Repeat cycle every 2 weeks.</p> <p>OR</p> <p>Day 1: Nivolumab 1mg/kg IV over 30 minutes Day 1: Ipilimumab 3mg/kg IV over 90 minutes Repeat cycle every 3 weeks for 4 cycles, followed by: Day 1: Nivolumab 480mg IV over 30 minutes. Repeat cycle every 4 weeks.</p>
Oral Etoposide ^{35,36}	<p>Days 1–21: Etoposide 50mg/m² orally once daily. Repeat cycle every 4 weeks.</p>
Paclitaxel ^{34,35}	<p>Day 1: Paclitaxel 175mg/m² IV over 3 hours. Repeat cycle every 3 weeks.</p> <p>OR</p> <p>Days 1,8,15,22,29,36: Paclitaxel 80mg/m² IV over 60 minutes. Repeat cycle every 8 weeks (6 weeks on followed by 2 weeks off).</p>
Pembrolizumab ^{36-38,e,f}	<p>Day 1: Pembrolizumab 200mg IV over 30 minutes. Repeat cycle every 3 weeks.</p>
Temozolomide ^{39,40}	<p>Days 1–21: Temozolomide 75mg/m² orally once daily. Repeat cycle every 4 weeks.</p> <p>OR</p> <p>Days 1-5: Temozolomide 200mg/m² orally once daily. Repeat cycle every 4 weeks.</p>
Vinorelbine ^{41,42}	<p>Days 1, 8, 15: Vinorelbine 25–30mg/m² IV over 5-10 minutes. Repeat cycle every 3 weeks.</p>
Relapse >6 months ¹	
Preferred	
Original regimen ^{5,6}	
Other Recommended Regimen	
Lurbinectedin ¹⁹	<p>Day 1: Lurbinectedin 3.2mg/m² IV over 60 minutes. Repeat cycle every 3 weeks</p>

^a Planned cycle length should be every 21-28 days during concurrent RT.

^b During systemic therapy + radiotherapy, cisplatin/etoposide is recommended (category 1).

^c The use of myeloid growth factors is not recommended during concurrent systemic therapy plus radiotherapy (category 1 for not using GM-CSF).²

^d Cisplatin contraindicated or not tolerated.

^e Regimen is not recommended for relapsed disease in patients on maintenance atezolizumab at time of relapse. For patients who relapse after >6 months of atezolizumab in maintenance therapy, recommend re-treatment with carboplatin + etoposide alone.

^f Contraindications for treatment of PD-1/PD-L1 inhibitors may include active or previously documented autoimmune disease and/or concurrent use of immunosuppressive agents.

^g Subsequent systemic therapy refers to second-line and beyond therapy.

continued

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References

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