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 healthcare 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 becomes 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 National Comprehensive Cancer Network 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.

Systemic Therapy as Primary or Adjuvant Therapy

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

Limited Stage (maximum of 4–6 cycles)

Cisplatin + etoposide

Day 1: Cisplatin 60mg/m² IV
Days 1–3: Etoposide 120mg/m² IV.
Repeat cycle every 3 weeks for at least 4 cycles.

OR

Day 1: Cisplatin 80mg/m² IV
Days 1–3: Etoposide 100mg/m² IV.
Repeat cycle every 4 weeks for 4–6 cycles.

Day 1:

Carboplatin + etoposide

Day 1: Carboplatin AUC 5–6mg • min/mL IV
Days 1–3: Etoposide 100mg/m² IV.
Repeat cycle every 3 weeks for 4–6 cycles.

Extensive Stage (maximum of 4–6 cycles)

Carboplatin + etoposide

Day 1: Carboplatin AUC 5–6mg • min/mL IV
Days 1–3: Etoposide 100mg/m² IV.
Repeat cycle every 3 weeks for 4–6 cycles.

Cisplatin + etoposide

Day 1: Cisplatin 75–80mg/m² IV
Days 1–3: Etoposide 80–100mg/m² IV.
Repeat cycle every 3 weeks for 4–6 cycles.

OR

Days 1–3: Cisplatin 25mg/m² IV + etoposide 100mg/m² IV.
Repeat cycle every 3 weeks for 4–6 cycles.

Carboplatin + irinotecan

Day 1: Carboplatin AUC 5mg • min/mL IV
Days 1, 8, and 15: Irinotecan 50mg/m² IV.
Repeat cycle every 4 weeks for 4–6 cycles.

Cisplatin + irinotecan

Day 1: Cisplatin 60mg/m² IV
Days 1, 8, and 15: Irinotecan 60mg/m² IV.
Repeat cycle every 4 weeks for 4 cycles.

OR

Day 1 and 8: Cisplatin 30mg/m² IV + irinotecan 65mg/m² IV.
Repeat cycle every 3 weeks for 4–6 cycles.

Subsequent Systemic Therapy

Relapse ≤6 months, PS 0-2

Topotecan

Days 1–5: Topotecan 1.5mg/m² IV daily over 30 minutes.
Repeat cycle every 3 weeks.

OR

Days 1–5: Topotecan 2.3mg/m² orally once daily.
Repeat cycle every 3 weeks.

Irinotecan

Day 1: Irinotecan 100mg/m² IV over 90 minutes.
Repeat cycle every week.

Paclitaxel

Day 1: Paclitaxel 80mg/m² IV over 1 hour.
Repeat every week for 6 weeks, followed by a 2-week break.

Docetaxel

Day 1: Docetaxel 100 mg/m² IV over 1 hour.
Repeat cycle every 3 weeks.

continued
## Subsequent Systemic Therapy\(^1\) (continued)

### Relapse ≤ 6 months, PS 0-2\(^1\) (continued)

<table>
<thead>
<tr>
<th>Regimen</th>
<th>Day 1–21:</th>
<th>Repeat cycle every 4 weeks.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Temozolomide</strong>(^{19,20})</td>
<td>Temozolomide 75mg/m(^2) orally.</td>
<td></td>
</tr>
<tr>
<td><strong>Nivolumab ± ipilimumab</strong>(^{21})</td>
<td><strong>Day 1:</strong> Nivolumab 3mg/kg IV. Repeat cycle every 2 weeks until disease progression or unacceptable toxicity. <strong>OR</strong> <strong>Day 1:</strong> Nivolumab 1mg/kg IV + ipilimumab 3mg/kg IV. Repeat cycle every 3 weeks for 4 cycles, followed by nivolumab 3mg/kg IV every 2 weeks. <strong>OR</strong> Nivolumab 3mg/kg IV + ipilimumab 1mg/kg IV. Repeat cycle every 3 weeks for 4 cycles, followed by nivolumab 3mg/kg IV every 2 weeks.</td>
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</tr>
<tr>
<td><strong>Vinorelbine</strong>(^{22,23})</td>
<td><strong>Day 1:</strong> Vinorelbine 25–30mg/m(^2) IV. Repeat cycle every week.</td>
<td></td>
</tr>
<tr>
<td><strong>Etoposide</strong>(^{24,25})</td>
<td><strong>Day 1–21:</strong> Etoposide 50mg/m(^2) orally. Repeat cycle every 4 to 5 weeks.</td>
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</tr>
<tr>
<td><strong>Gemcitabine</strong>(^{26,27})</td>
<td><strong>Days 1, 8, and 15:</strong> Gemcitabine 1,000mg/m(^2) IV. Repeat cycle every 4 weeks.</td>
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</tr>
<tr>
<td><strong>Cyclophosphamide + doxorubicin + vincristine (CAV)</strong>(^{12})</td>
<td><strong>Day 1:</strong> Cyclophosphamide 1,000mg/m(^2) IV + doxorubicin 45mg/m(^2) IV + vincristine 2mg IV. Repeat cycle every 3 weeks.</td>
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</tr>
<tr>
<td><strong>Bendamustine (Category 2B)</strong>(^{28})</td>
<td><strong>Days 1 and 2:</strong> Bendamustine 120mg/m(^2) IV. Repeat cycle every 3 weeks for up to 6 cycles.</td>
<td></td>
</tr>
</tbody>
</table>

### Relapse > 6 months\(^1\)

- Original regimen\(^{29,30}\)
  - The regimens included are representative of the more commonly used regimens for small cell lung cancer. Other regimens may be acceptable.
  - During systemic therapy + radiotherapy, cisplatin/etoposide is recommended (category 1).
  - The use of myeloid growth factors is not recommended during concurrent systemic therapy plus radiotherapy (category 1 for not using GM-CSF).\(^{31}\)

### References


