

ONCOLOGY KNOWLEDGE HUB · FOR HEALTH PROFESSIONALS

Small Cell Lung Cancer

A mini review for clinicians

For postgraduate residents (medical and radiation oncology, pulmonary medicine, thoracic and general surgery, medicine), practising clinicians and medical students

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Updated 9 October 2026. Educational summary written in our own words from current guidelines and primary trials; no drug doses; not advice for an individual patient. Verify current guidelines and Indian regulatory approvals before treatment decisions. Patients and families: please see the patient guides at drharitha.co.in.

Small Cell Lung Cancer

Limited stage · extensive stage · relapse · paraneoplastic syndromes · Key points for clinicians · Last updated 9 October 2026

01 At a glance

- About 13–15% of lung cancers; almost always in current or former heavy smokers. A high-grade neuroendocrine carcinoma with a very short doubling time and early, wide spread.
- About two thirds of patients have extensive-stage disease at diagnosis. Symptoms are usually brief because the tumour grows so fast.
- Exquisitely sensitive to chemotherapy and radiotherapy at first, but most cancers relapse: typically within 5–6 months of extensive-stage and 9–16 months of limited-stage treatment.
- Immunotherapy has moved the curve at both stages: durvalumab after chemoradiation for limited stage ([ADRIATIC^{\[1\]}](#)) and checkpoint inhibitors with chemotherapy for extensive stage ([IMpower133^{\[2\]}](#), [CASPIAN^{\[3\]}](#)). DLL3-directed tarlatamab now leads relapse treatment ([DeLLphi-304^{\[4\]}](#)).
- Small cell lung cancer is an oncological emergency: aim to start treatment within days of diagnosis.

Small cell lung cancer at diagnosis: about one third limited, two thirds extensive

Limited · ~30–40%	Extensive · ~60–70%
Limited stage One hemithorax ± regional nodes, fits a tolerable RT field (TNM I–III) • T1–2 NO (rare, <5%): lobectomy → chemotherapy • Others: platinum–etoposide × 4 + early thoracic RT • Then durvalumab up to 2 years • PCI or brain-MRI surveillance Aim: cure · median survival ~4–5 years with durvalumab	Extensive stage Beyond one RT field: distant metastases, malignant effusion (TNM IV) • Carboplatin–etoposide + atezolizumab or durvalumab × 4–6 • Maintenance immunotherapy (± lurbinectedin) • Thoracic RT for residual chest disease • PCI or brain-MRI surveillance Aim: control · median survival ~1 year; small durable tail

Staging: CT chest–abdomen with contrast, PET-CT, brain MRI. Invasive mediastinal staging only for apparent T1–2 NO (possible surgery). If extensive disease is obvious, start treatment within days and complete staging in parallel: the tumour can double in weeks.

Figure 1. Limited versus extensive stage. Two thirds of patients present with extensive disease; the distinction decides between curative chemoradiation and palliative chemo-immunotherapy.

02 Pathology, presentation & paraneoplastic syndromes

Pathology

- Small, round, blue cells two to three times the size of lymphocytes, with scant cytoplasm, finely granular (“salt and pepper”) chromatin, no visible nucleoli, nuclear moulding, crush artefact and many mitoses (Ki-67 usually very high).
- The diagnosis is morphological; neuroendocrine markers (synaptophysin, chromogranin, CD56, INSM1) support it, and most tumours are TTF-1 positive (so TTF-1 does not separate them from adenocarcinoma). Keratin is dot-like.
- Differential: crushed lymphocytes or lymphoma, basaloid squamous carcinoma, large-cell neuroendocrine carcinoma, carcinoid, and metastatic small-cell carcinoma from other sites. **Combined small cell carcinoma** contains a non-small-cell component and is treated as small cell.
- Biology: near-universal loss of *TP53* and *RB1*; *EGFR* and *KRAS* mutations are rare except in small-cell transformation of *EGFR*-mutant adenocarcinoma (3–14% of TKI resistance, more likely with *TP53* + *RB1* loss). Transcriptional subtypes (*ASCL1*, *NEUROD1*, *POU2F3* and an inflamed group) are research tools for now.

How it presents

- Central mass with bulky hilar and mediastinal nodes: cough, breathlessness, haemoptysis, chest pain, hoarseness, dysphagia.
- **Superior vena cava obstruction** is common; chemotherapy (with immunotherapy) usually relieves it quickly, with stenting for severe symptoms and radiotherapy if needed. Take tissue first unless the airway is threatened.
- Metastases at presentation: liver, bone, bone marrow, adrenals and brain (brain metastases in a substantial minority at diagnosis).

Paraneoplastic syndromes (small cell is the commonest cancer behind neurological paraneoplastic disease)

Syndrome	Mechanism	Clue	Note
SIADH (about 1 in 10)	Ectopic ADH	Euvolaemic hyponatraemia, concentrated urine	Fluid restriction; hypertonic saline for severe symptoms; correct no faster than about 8–10 mmol/L in 24 h; chemotherapy treats the cause
Ectopic ACTH (Cushing)	Tumour ACTH	Hypokalaemic alkalosis, oedema, hyperglycaemia; little classic habitus	Worse prognosis and infection risk; control cortisol before chemotherapy
Lambert-Eaton myasthenic syndrome	Antibodies to P/Q-type voltage-gated calcium channels	Proximal leg weakness that improves briefly with effort, absent reflexes, dry mouth	May precede the cancer by months to years: screen with CT/PET
Anti-Hu encephalomyelitis, sensory neuronopathy; cerebellar degeneration	Onconeural antibodies	Subacute, often disabling, neurological syndromes	Treat the cancer early; deficits often persist

03 Diagnosis & staging essentials

- **Tissue:** usually from EBUS-TBNA of a node or biopsy of a metastasis; cytology often suffices for the diagnosis.
- **Staging:** contrast CT of chest and abdomen, PET-CT (bone scan only if PET is unavailable) and brain MRI (contrast CT if MRI is not possible). Blood count, electrolytes and sodium, calcium, liver tests, LDH.
- **Limited versus extensive** is the working classification; use TNM (9th edition) as well, because it identifies the rare T1–2 NO patient who can have surgery and is needed for registries and trials.
- **Invasive mediastinal staging** (EBUS or mediastinoscopy) only for apparent T1–2 NO disease being considered for surgery.
- **Speed matters more than completeness:** when extensive disease is obvious, start chemotherapy and finish staging during the first cycle.
- **Pleural effusion:** a cytology-positive effusion makes the disease extensive; a repeatedly cytology-negative exudate can be ignored for staging if there is no other evidence.
- **Fitness:** performance status is often poor because of the cancer itself and can improve dramatically with treatment; do not withhold chemotherapy for cancer-related poor PS.

04 Biology and biomarkers

- **No actionable driver** in classic small cell lung cancer: routine NGS is not needed, except in never-smokers or when transformation from *EGFR*- or *ALK*-positive adenocarcinoma is suspected (where the original driver persists).
- **PD-L1 and tumour mutational burden do not select** patients for immunotherapy in small cell lung cancer.
- **DLL3**, an inhibitory Notch ligand on the surface of most small cell cancers, is the target of tarlatamab; testing is not required before treatment.
- Serum neuron-specific enolase and pro-GRP are not used to diagnose or follow patients in routine care.
- **Small-cell transformation**: suspect when an *EGFR*-mutant cancer on a TKI progresses rapidly with rising NSE, liver or bone spread; re-biopsy and switch to platinum–etoposide.

05 Local therapy: surgery, thoracic radiotherapy & the brain

Surgery

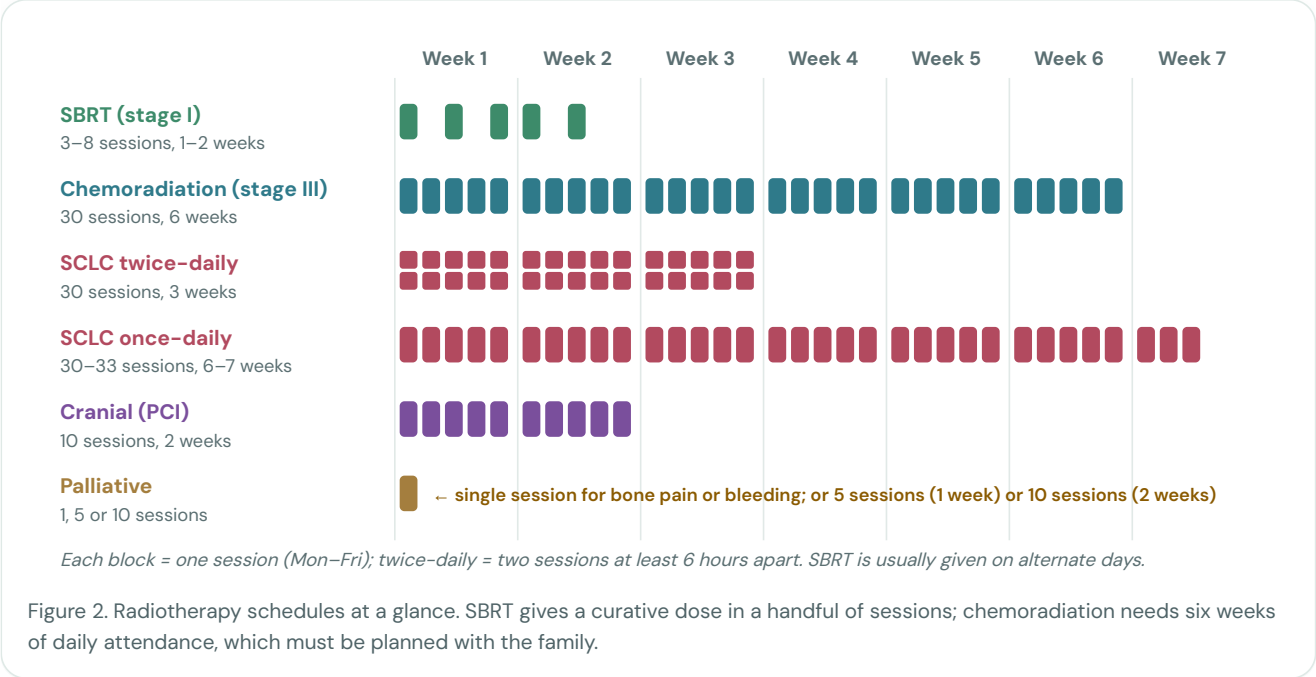
- Only for clinical T1–2 NO disease (fewer than 5% of patients) after PET–CT, brain MRI and invasive mediastinal staging: lobectomy with nodal dissection.
- Then adjuvant chemotherapy if the nodes are negative; chemotherapy with radiotherapy if they are positive. PCI or MRI surveillance afterwards.
- Patients with interstitial lung disease and T1–2 NO disease: surgery is preferred to avoid radiation pneumonitis.

Thoracic radiotherapy

- **Limited stage:** thoracic radiotherapy improves survival and is started with the first or second chemotherapy cycle. Twice-daily treatment over 3 weeks ([Turrisi^{\[5\]}](#)) and once-daily treatment over 6–7 weeks ([CONVERT^{\[6\]}](#)) gave similar results; choose by logistics and fitness. Plan fields on post-chemotherapy disease plus initially involved nodes, using a baseline PET.
- Superior vena cava obstruction in limited stage: concurrent chemoradiation with curative intent remains the standard.
- **Extensive stage:** consolidative thoracic radiotherapy for residual chest disease after a good response ([CREST^{\[7\]}](#)) reduced chest relapse and improved 2-year survival; data with chemo-immunotherapy are limited.
- Palliative radiotherapy for bone pain, cord compression, bleeding or obstruction at any stage.

Brain: PCI or MRI surveillance

- **Limited stage:** prophylactic cranial irradiation after a complete or very good response reduces brain metastases and improved survival in the older [Aupérin meta-analysis^{\[8\]}](#) (done before routine MRI).
- **Extensive stage:** with MRI surveillance as the comparator, PCI did not improve survival ([Takahashi trial^{\[9\]}](#)). Either PCI or MRI every 3 months in year 1 (then every 6 months) is acceptable; the SWOG MAVERICK trial is testing this in both stages.
- If PCI is used: hippocampal avoidance and memantine to reduce cognitive harm; avoid in older or frail patients and those with poor cognition.
- Brain metastases at diagnosis: if asymptomatic, start systemic therapy and treat remaining lesions with radiosurgery or whole-brain radiotherapy after induction; if symptomatic, radiotherapy first.



o6 Systemic therapy: indications & options

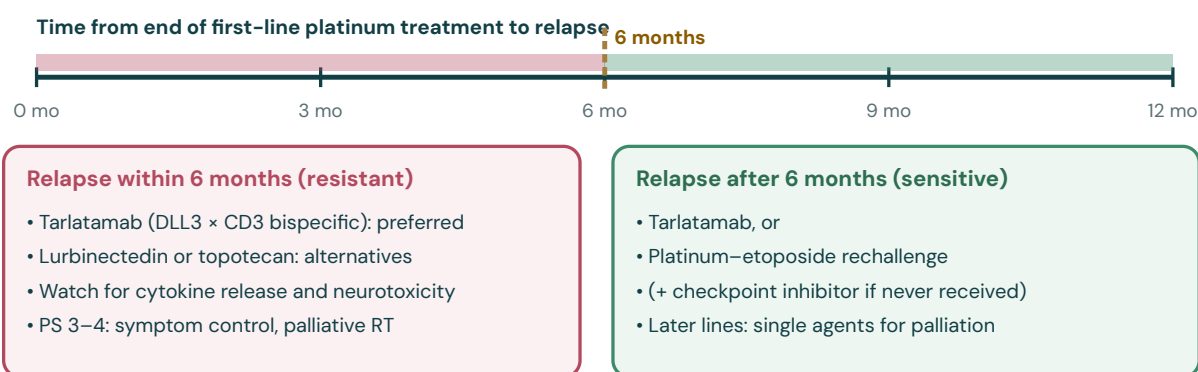
Limited stage

Component	Standard	Evidence
Chemotherapy	Cisplatin–etoposide × 4 (carboplatin if cisplatin is unsuitable; cisplatin–irinotecan is an alternative)	Compatible with concurrent radiotherapy
Radiotherapy	Concurrent, starting with cycle 1 or 2	Turrisi^[5] , CONVERT^[6]
Consolidation	Durvalumab for up to 2 years if no progression after chemoradiation	ADRIATIC^[1] : median survival 55.9 vs 33.4 months
Brain	PCI after good response, or MRI surveillance	Aupérin^[8]

Extensive stage

Component	Standard	Evidence
Induction	Carboplatin–etoposide (preferred to cisplatin) + atezolizumab or durvalumab × 4–6	IMpower133^[2] : median survival 12.3 vs 10.3 months; CASPIAN^[3] : 13.0 vs 10.3 months; a small group survives for years
Maintenance	Continue the antibody until progression; add lurbinectedin to atezolizumab for fit patients without brain metastases	IMforte^[10] : longer progression-free and overall survival
Not suitable for immunotherapy	Platinum–etoposide alone (or platinum–irinotecan)	Autoimmune disease, organ transplant, very poor PS from comorbidity
Older patients	Same regimens if fit; adjust if frail	Comprehensive geriatric assessment helps

Relapsed disease



Relapse usually comes 5–6 months after extensive-stage and 9–16 months after limited-stage treatment. Re-image the brain at every relapse.

Figure 3. Relapsed small cell lung cancer. The interval since first-line platinum is the single most useful guide to the next treatment.

Setting	Options	Evidence
Relapse within 6 months	Tarlatamab (preferred); lurbinectedin or topotecan	DeLLphi-304^[4] : tarlatamab improved overall survival over chemotherapy with fewer severe adverse events; DeLLphi-301^[11] (phase 2); lurbinectedin phase 2^[12]

Setting	Options	Evidence
Relapse after 6 months	Tarlatamab, or platinum–etoposide rechallenge (+ checkpoint inhibitor if never received)	Choose by performance status, toxicity and access
Later lines	Tarlatamab or lurbinectedin if not used; single-agent chemotherapy	Aim is palliation and quality of life
PS 3–4 after first line	Symptom control, palliative radiotherapy	No data support further systemic therapy

Toxicities to know

- **Tarlatamab:** cytokine release syndrome (common, mostly grade 1–2; fever, hypotension, hypoxia) and immune effector cell-associated neurotoxicity (confusion, dysphasia). First doses need monitoring; tocilizumab and steroids treat severe CRS.
- **Immunotherapy:** thyroid, adrenal, pneumonitis, colitis, hepatitis. **Lurbinectedin and topotecan:** neutropenia (G-CSF support), fatigue.
- **Tumour lysis** can occur with bulky, very sensitive disease: hydrate and monitor electrolytes in the first cycle.

Immune-related side effects (atezolizumab, durvalumab) and tarlatamab toxicity

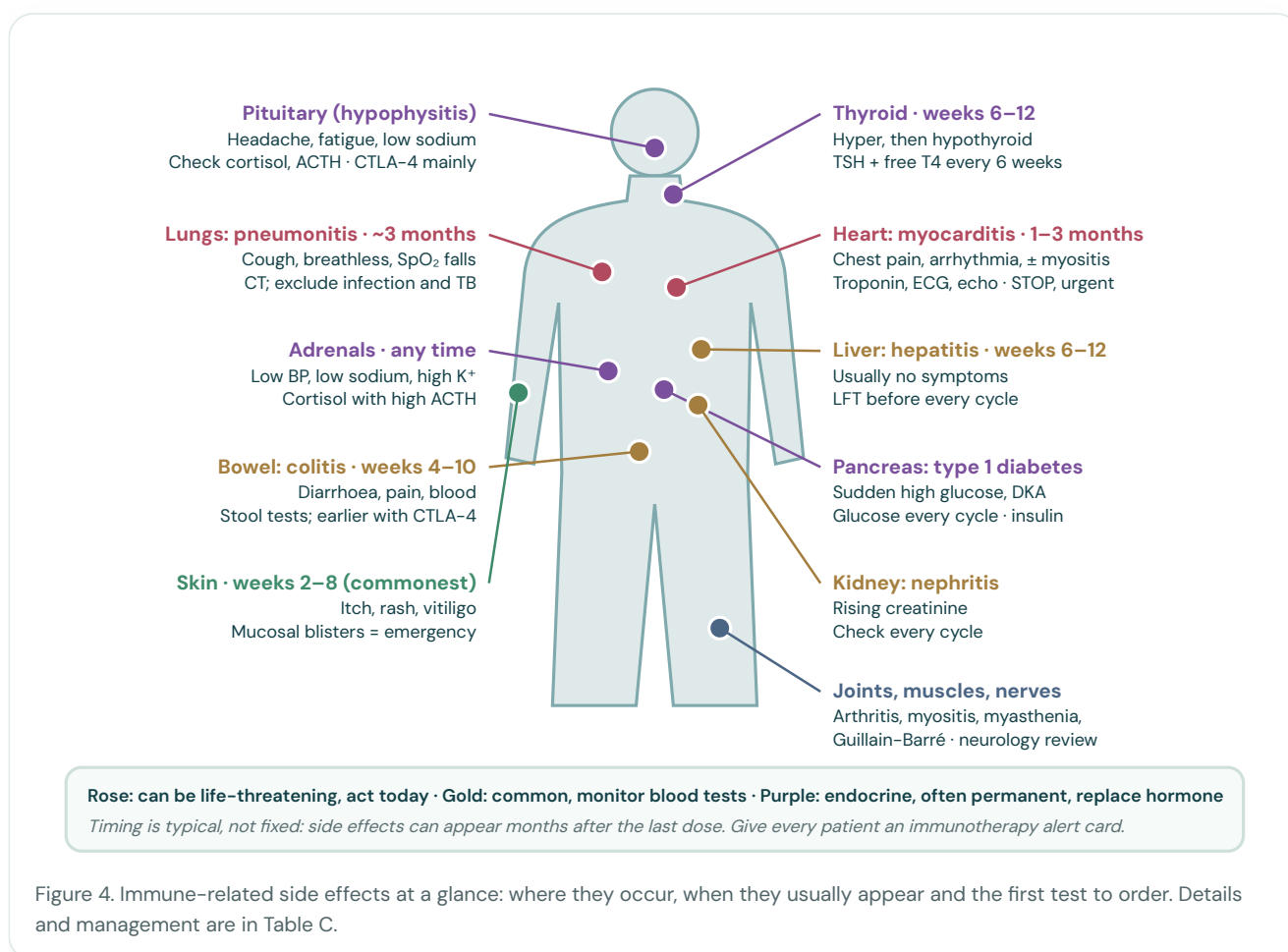


Figure 4. Immune-related side effects at a glance: where they occur, when they usually appear and the first test to order. Details and management are in Table C.

Immune-related side effect	How it presents · when	Check	Management principle (no doses)
Skin (commonest)	Itch, rash, vitiligo; rarely blistering (SJS/TEN) · weeks 2–8	Extent of body surface; mucosa	Emollients, topical steroids, antihistamines; hold for severe; stop permanently for SJS/TEN
Colitis / diarrhoea	Diarrhoea, pain, blood · weeks 4–10 (earlier with CTLA-4)	Stool tests for infection (C. difficile), CT or colonoscopy if severe	Grade 1: fluids, continue. Grade 2: hold, oral steroids. Grade 3–4: IV steroids; infliximab or vedolizumab if no response in 2–3 days
Hepatitis	Raised ALT/AST, usually asymptomatic · weeks 6–12	LFT every cycle; exclude viral hepatitis, drugs, metastases	Hold for grade 2+; steroids; mycophenolate if refractory (avoid infliximab)
Pneumonitis	Cough, breathlessness, fall in saturation · any time, median ~3 months; higher after thoracic RT	CT chest; exclude infection (including TB) and progression; bronchoscopy if unclear	Grade 1: hold, monitor. Grade 2: hold, steroids. Grade 3–4: stop permanently, IV steroids, admit; add immunosuppressant if refractory
Thyroid	Thyroiditis: brief hyperthyroidism then hypothyroidism · weeks 6–12	TSH, free T4 every 6 weeks	Beta-blocker for the hyper phase; thyroxine replacement; immunotherapy usually continues
Hypophysitis (mainly CTLA-4)	Headache, fatigue, low sodium; low ACTH and cortisol, central hypothyroidism	Morning cortisol, ACTH, TSH/T4, MRI pituitary	Replace hydrocortisone first, then thyroxine; lifelong replacement often needed; sick-day rules
Primary adrenal insufficiency	Fatigue, hypotension, low sodium, high potassium	Cortisol with high ACTH	Hydrocortisone ± fludrocortisone; emergency IV steroids if in crisis
Type 1 diabetes	Sudden hyperglycaemia, diabetic ketoacidosis	Glucose every cycle; ketones, C-peptide	Insulin (steroids do not help); immunotherapy can continue when controlled
Myocarditis (rare, can be fatal)	Chest pain, breathlessness, arrhythmia, often with myositis or myasthenia · first 1–3 months	Troponin, ECG, echo, cardiac MRI; CK	Stop permanently; high-dose IV steroids urgently; cardiology; further immunosuppression if needed
Neurological	Myasthenia, Guillain-Barré, encephalitis, neuropathy	Neurology review, MRI, LP as needed	Hold or stop; steroids; IVIG or plasma exchange for myasthenia or Guillain-Barré
Kidney (nephritis)	Rising creatinine	Exclude other causes; urine	Hold for grade 2+; steroids
Joints, eyes, blood	Arthritis, uveitis, cytopenias	Rheumatology or ophthalmology review	NSAIDs or steroids for arthritis; urgent eye review for uveitis
T-cell engager (tarlatamab)	Cytokine release syndrome (fever, low BP, hypoxia) and neurotoxicity (confusion, dysphasia) · first doses	Temperature, BP, saturation, neurological checks during monitored doses	Supportive care, tocilizumab and steroids by grade; hold or stop by severity

Rules of thumb: grade 1 — usually continue and watch; grade 2 — hold until grade 1 or less, steroids for most organs; grade 3 — hold, high-dose steroids, consider stopping; grade 4 — stop permanently (except endocrine problems controlled by replacement). Taper steroids slowly over at least 4–6 weeks; give PJP prophylaxis and gastric protection on prolonged high-dose steroids; endocrine deficiencies are usually permanent. Side effects can appear months after the last dose: patients should carry an immunotherapy alert card.

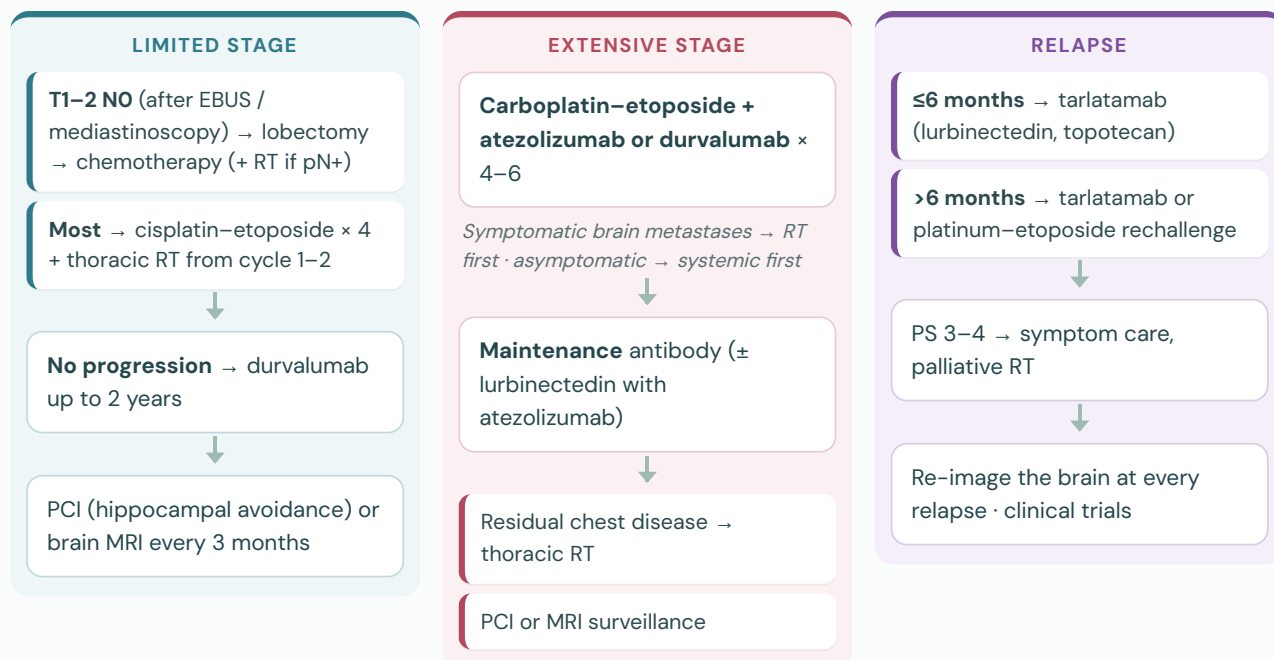
07 Management algorithms

Decision paths for small cell lung cancer. Colours: teal for limited stage, rose for extensive stage, purple for relapse.

ALGORITHM 1

Small cell lung cancer: first-line management

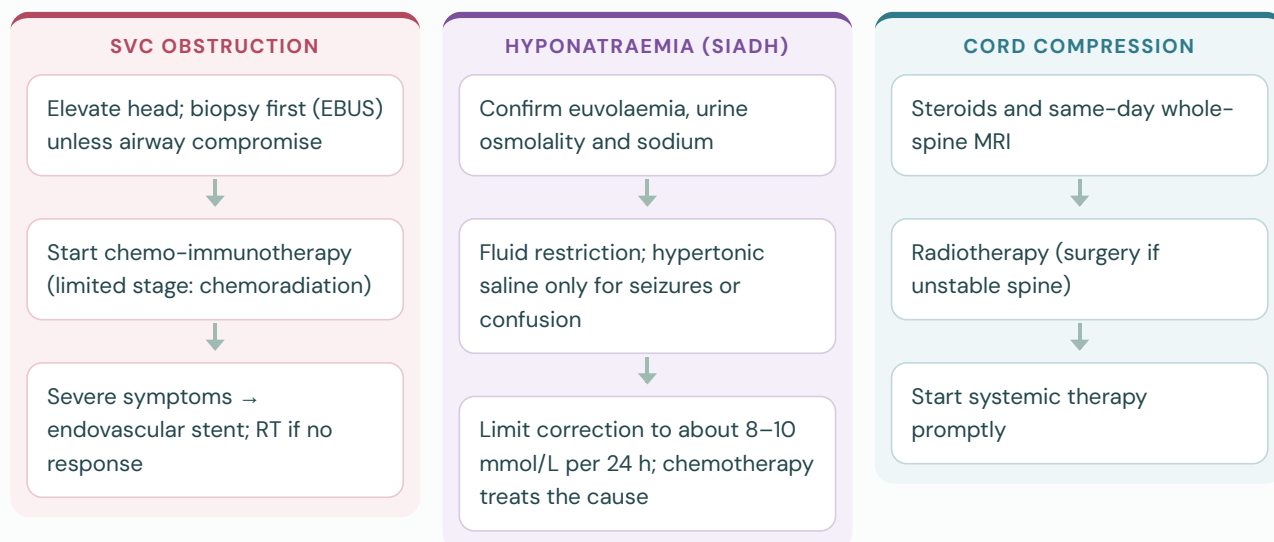
Confirm small cell histology → CT chest-abdomen, PET-CT, brain MRI · sodium, calcium, LDH · start within days; treat SVCO, SIADH and cord compression urgently



Poor performance status caused by the cancer is not a reason to withhold first-line treatment: responses are often rapid. Early palliative care at every stage.

ALGORITHM 2

Emergencies at presentation



Also watch for tumour lysis with very bulky, sensitive disease, and for hypercalcaemia or ectopic ACTH (hypokalaemic alkalosis).

o8 Survivorship & follow-up

- **Follow-up:** history, examination and CT chest–abdomen every 2–3 months in year 1, every 3–4 months in years 2–3, every 4–6 months in years 4–5, then yearly. Brain MRI every 3 months in year 1 (then every 6 months in year 2) if no PCI was given.
- **Stop smoking:** continued smoking after limited-stage treatment is linked with worse survival and many more second cancers.
- **Second cancers:** survivors carry a high lifelong risk of new tobacco-related cancers (lung, head and neck, oesophagus, bladder).
- **Late effects:** cognitive change after PCI, radiation pneumonitis and oesophageal stricture, neuropathy, endocrine failure after immunotherapy (thyroid, adrenal).
- Persisting paraneoplastic neurological deficits need rehabilitation; Lambert–Eaton symptoms usually improve as the cancer responds.
- Early palliative care and frank conversations about prognosis and goals are part of standard care, especially in extensive stage.

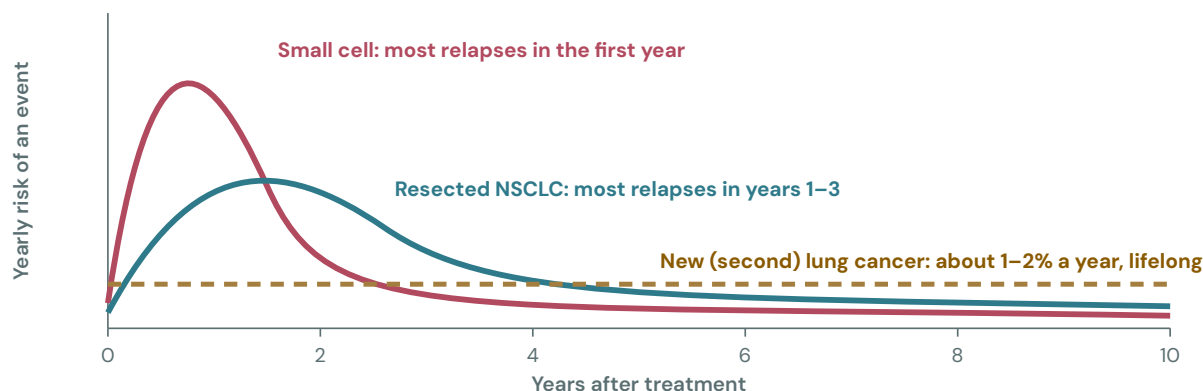


Figure 5. When relapses happen, and when new cancers appear (illustrative shape, not to scale). Early follow-up looks for relapse; later follow-up looks for a new lung cancer, which is why stopping smoking and yearly CT continue.

09 Landmark trials

- **Turrisi (INT 0096)^[5]**: twice-daily versus once-daily thoracic radiotherapy with cisplatin–etoposide in limited stage. Twice daily improved 5-year survival (to about a quarter) at the cost of more oesophagitis. → Established early accelerated concurrent radiotherapy.
- **CONVERT^[6]**: once-daily (66 Gy) versus twice-daily (45 Gy). No significant difference. → Both schedules are acceptable.
- **ADRIATIC^[1]**: durvalumab after chemoradiation in limited stage. Median survival 55.9 vs 33.4 months. → New standard consolidation.
- **IMpower133^[2]** and **CASPIAN^[3]**: adding a PD-L1 antibody to platinum–etoposide in extensive stage. Median survival gain of about 2–3 months with a durable tail. → Chemo-immunotherapy is standard.
- **Takahashi^[9]**: PCI versus MRI surveillance in extensive stage. No survival benefit from PCI. → MRI surveillance is a valid choice.
- **DeLLphi-304^[4]**: tarlatamab versus chemotherapy after platinum. Overall survival improved. → Tarlatamab is the preferred relapse treatment.

10 Practice pearls & pitfalls

- Treat small cell lung cancer as an emergency: biopsy and start treatment within days; finish staging during cycle 1.
- Do not deny chemotherapy because of poor performance status caused by the cancer; responses can be dramatic within a week.
- In SIADH, correct sodium slowly; the chemotherapy is the definitive treatment.
- Proximal weakness with reduced reflexes in a smoker: test for Lambert-Eaton antibodies and look for small cell lung cancer, even with a normal X-ray.
- An *EGFR*-mutant adenocarcinoma that suddenly accelerates on a TKI may have become small cell: re-biopsy.
- Limited stage is curable: insist on concurrent chemoradiation starting early, then durvalumab; avoid long delays for radiotherapy planning.
- Re-image the brain at diagnosis, before PCI and at every relapse.
- In Indian practice, check access to durvalumab, atezolizumab, tarlatamab and lurbinectedin early; chemotherapy with radiotherapy remains effective where they are not available.

11 Case vignettes: lines of management

Four cases for postgraduates and clinicians. No doses are given.

CASE 1 Limited stage

Right hilar mass with mediastinal nodes

58 years, 40 pack-years

cT2 N2 M0 (limited)

ECOG 1

A 58-year-old man has 6 weeks of cough and weight loss. CT shows a right hilar mass with right paratracheal and subcarinal nodes. EBUS shows small cell carcinoma. PET-CT shows no distant disease; brain MRI is clear.

Before you open the answer: what is the stage, what must be done first, and what is the plan?

1

STAGE

Limited stage (all disease fits one radiotherapy field); TNM cT2 N2 M0. Not a surgical case because nodes are involved.

2

TREATMENT

Cisplatin–etoposide × 4 with thoracic radiotherapy starting with cycle 1 or 2: twice daily over 3 weeks or once daily over 6–7 weeks.

3

CONSOLIDATION

No progression → durvalumab for up to 2 years (ADRIATIC).

4

BRAIN

Very good response → PCI with hippocampal avoidance, or MRI every 3 months in year 1 after discussion.

5

FOLLOW-UP

CT every 2–3 months in year 1; stop smoking; watch for late radiation and immune effects.

TEACHING POINTS

- Limited stage is potentially curable.
- Start thoracic radiotherapy early.
- Durvalumab consolidation is now standard.

See: Sections 05, 06 · Algorithm 1 · [ADRIATIC](#)^[1], [CONVERT](#)^[6]

CASE 2 Extensive stage · emergency

Facial swelling and confusion

66 years, 50 pack-years

Extensive stage

Sodium 118 mmol/L

A 66-year-old man has 10 days of facial and arm swelling and is now confused. CT shows a right hilar mass compressing the SVC, bulky nodes and liver metastases.

Before you open the answer: what is the stage, what must be done first, and what is the plan?

1

SAME DAY

Hypertonic saline slowly for symptomatic hyponatraemia (≤ 8 – 10 mmol/L per 24 h); head elevation; stent if severe; avoid steroids before tissue unless the airway is at risk.

2

DIAGNOSIS

EBUS of the subcarinal node: small cell carcinoma. Brain MRI: no metastases.

3 TREATMENT

Carboplatin–etoposide with atezolizumab or durvalumab within 48–72 hours; then maintenance (± lurbinectedin with atezolizumab).

4 AFTER INDUCTION

Residual chest disease → consolidative thoracic RT; PCI or MRI surveillance.

TEACHING POINTS

- Chemotherapy relieves SVCO and SIADH quickly.
- Correct sodium slowly.
- Start treatment within days.

See: Sections 02, 06 · Algorithm 2 · [IMpower133](#)^[2], [CASPIAN](#)^[3]

CASE 3 Relapse**Liver relapse 4 months after first-line treatment**

61 years

Extensive stage, relapsed

ECOG 1

A 61-year-old woman completed carboplatin–etoposide with durvalumab and was on maintenance. Four months after the last platinum dose, CT shows new liver metastases; brain MRI is clear.

Before you open the answer: what is the stage, what must be done first, and what is the plan?

1 CLASSIFY

Relapse within 6 months of platinum: platinum-resistant.

2 TREATMENT

Tarlatamab (DeLLphi-304), with monitoring for cytokine release and neurotoxicity during the first doses; lurbinectedin or topotecan if unavailable.

3 SUPPORT

Early palliative care; G-CSF with topotecan or lurbinectedin; review goals at each scan.

TEACHING POINTS

- The 6-month interval decides the next line.
- Tarlatamab is preferred where available.

See: Section 06 · Figure 3 · [DeLLphi-304](#)^[4]

CASE 4 Paraneoplastic**Weak legs and a dry mouth**

63 years, ex-smoker

Normal chest X-ray

Reflexes absent

A 63-year-old ex-smoker has 3 months of difficulty climbing stairs and rising from a chair, a dry mouth and absent knee jerks. Strength improves briefly after sustained effort. The chest X-ray is normal.

Before you open the answer: what is the stage, what must be done first, and what is the plan?

1 DIAGNOSIS

Suspect Lambert–Eaton myasthenic syndrome: P/Q-type voltage-gated calcium channel antibodies, nerve conduction studies (increment after exercise).

2

SEARCH

CT chest and PET-CT: a 1.5 cm left hilar node; EBUS shows small cell carcinoma, limited stage.

3

TREATMENT

Chemoradiation and durvalumab as for limited stage; symptomatic treatment of weakness (amifampridine) if needed.

4

FOLLOW-UP

Weakness usually improves as the cancer responds.

TEACHING POINTS

- Paraneoplastic syndromes can precede a visible tumour.
- A normal X-ray does not exclude small cell lung cancer.

See: Section 02 · paraneoplastic table

12 References & guidelines

- NCCN Clinical Practice Guidelines: Small Cell Lung Cancer (current version).
- ESMO Clinical Practice Guideline: small cell lung cancer.
- IASLC/UICC TNM Classification, 9th edition.
- Cross-checked in October 2026 against UpToDate topic reviews (limited-stage, extensive-stage and relapsed small cell lung cancer; pathobiology and staging; pathology). All text is in our own words; primary trials are cited.

Core trials cited (12)

Journal, year, volume and first page; each links to the PubMed record by exact citation.

NUMBERED IN ORDER OF FIRST CITATION IN THE TEXT

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2. **IMpower133**: Horn L, Mansfield AS, Szczermska A, et al. First-line atezolizumab plus chemotherapy in extensive-stage small-cell lung cancer. *N Engl J Med* 2018;379:2220. [PubMed](#) **Extensive stage**
3. **CASPIAN**: Paz-Ares L, Dvorkin M, Chen Y, et al. Durvalumab plus platinum–etoposide versus platinum–etoposide in first-line treatment of extensive-stage small-cell lung cancer (CASPIAN). *Lancet* 2019;394:1929. [PubMed](#) **Extensive stage**
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11. **DeLLphi-301**: Ahn MJ, Cho BC, Filip E, et al. Tarlatamab for patients with previously treated small-cell lung cancer. *N Engl J Med* 2023;389:2063. [PubMed](#) **Relapsed disease**
12. **Lurbinectedin basket trial**: Trigo J, Subbiah V, Besse B, et al. Lurbinectedin as second-line treatment for patients with small-cell lung cancer: a single-arm, open-label, phase 2 basket trial. *Lancet Oncol* 2020;21:645. [PubMed](#) **Relapsed disease**

Educational summary for health professionals; no drug doses. Verify current guidelines and Indian approvals before treatment decisions.