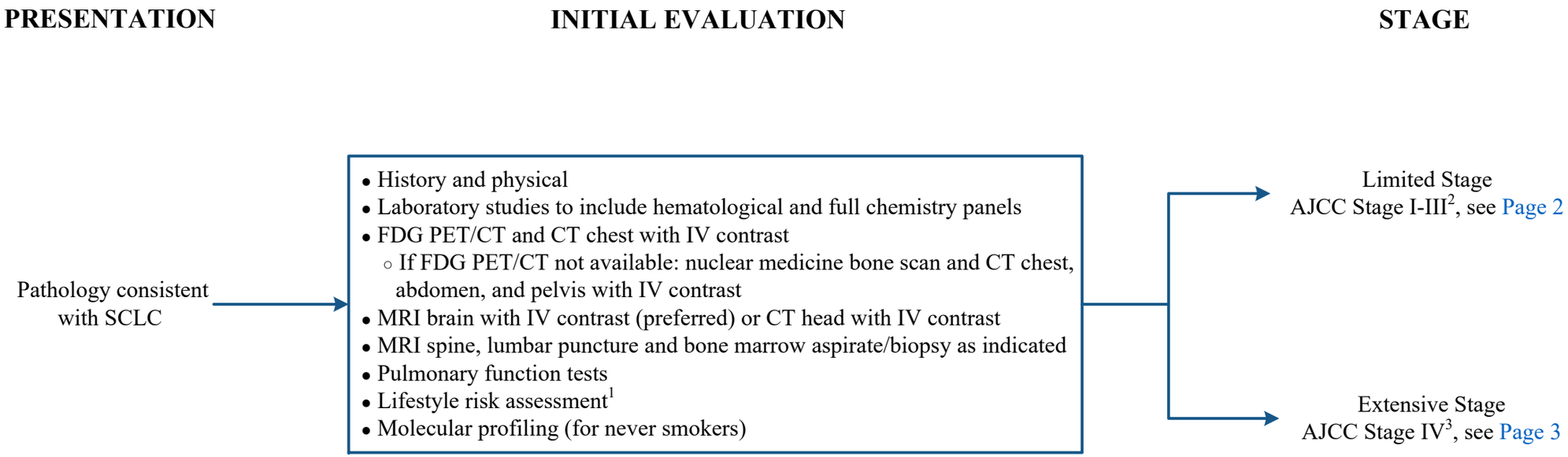
Small Cell Lung Cancer (SCLC)

Note: Consider Clinical Trials as treatment options for eligible patients.



AJCC = American Joint Committee on Cancer

[1] See Physical Activity, Nutrition, Obesity Screening and Management, and Tobacco Cessation Treatment algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice
[2] Limited stage: Stage I-III (T any, N any, M0) per AJCC 8th edition or disease confined to the ipsilateral hemithorax within a single radiation port
[3] Extensive stage: Stage IV (T any, N any, M 1a/b) per AJCC 8th edition or disease beyond ipsilateral hemithorax or malignant pleural effusion or obvious metastatic disease

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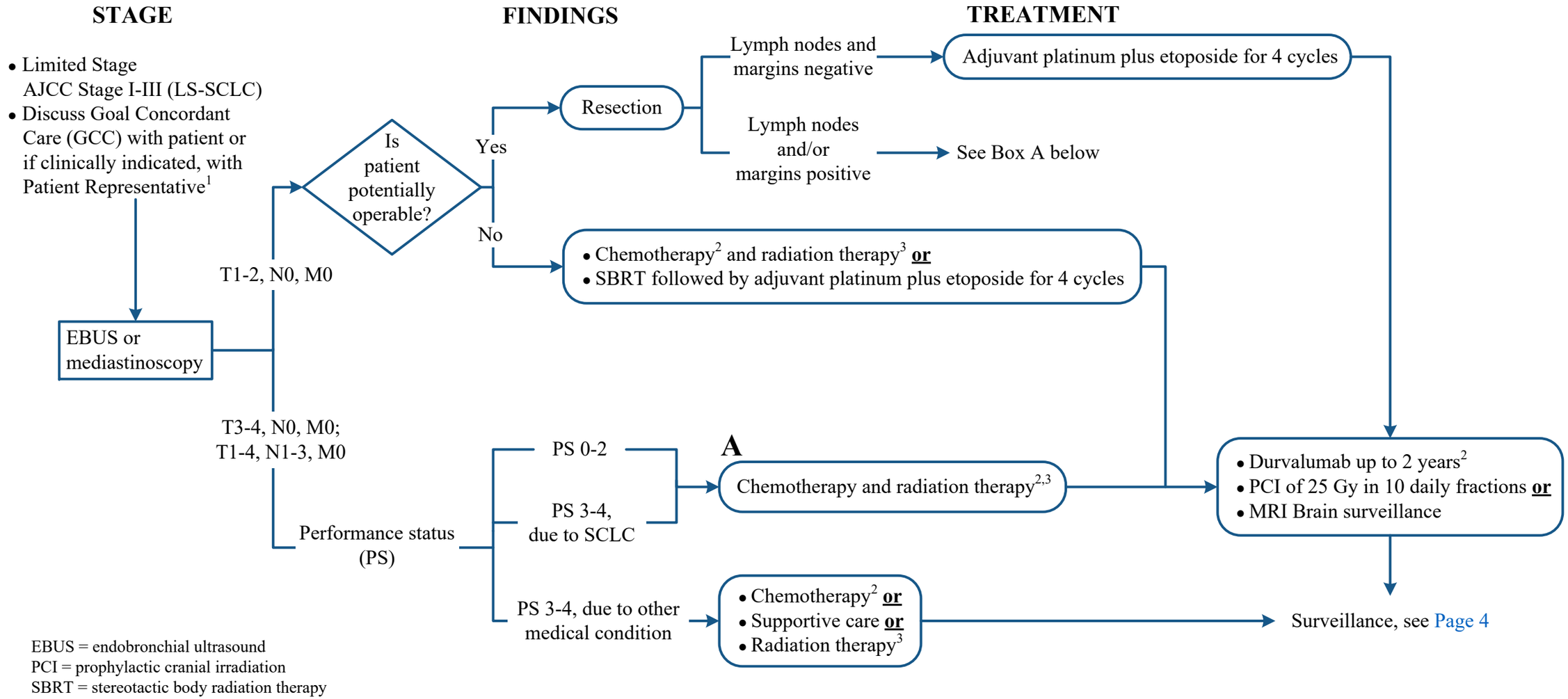
Small Cell Lung Cancer (SCLC)

Note: Consider Clinical Trials as treatment options for eligible patients.



EBUS = endobronchial ultrasound
PCI = prophylactic cranial irradiation
SBRT = stereotactic body radiation therapy

[1] GCC should be initiated by the Primary Oncologist. If Primary Oncologist is unavailable, Primary Team/Attending Physician to initiate GCC discussion and notify Primary Oncologist. Patients, or if clinically indicated, the Patient Representative should be informed of therapeutic and/or palliative options. GCC discussion should be consistent, timely, and re-evaluated as clinically indicated. The Advance Care Planning (ACP) note should be used to document GCC discussion. Refer to GCC home page (for internal use only).

[2] Refer to Principles of Systemic Therapy on Page 5

[3] Start radiation therapy within the first 2 cycles of chemotherapy. Refer to Principles of Radiation Therapy on Page 6.

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Small Cell Lung Cancer (SCLC)

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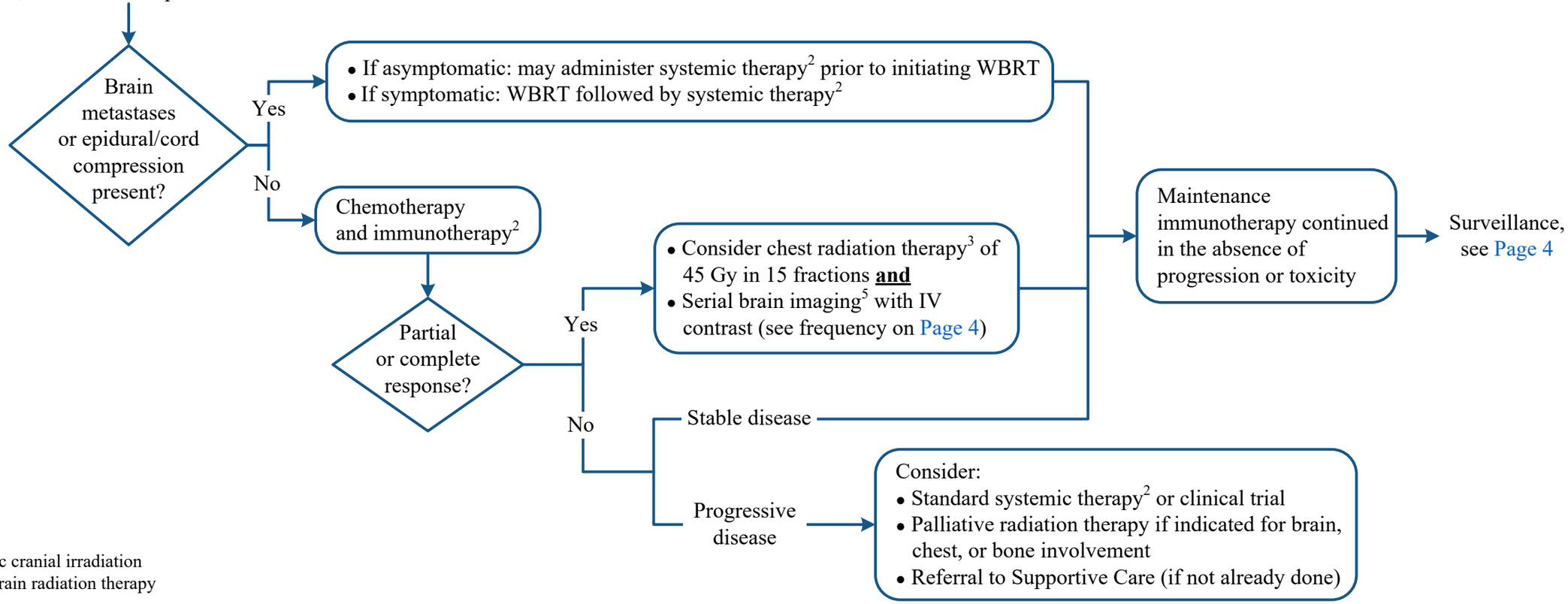
STAGE

- Extensive Stage AJCC Stage IV (ES-SCLC)
- Discuss GCC with patient or if clinically indicated, with Patient Representative[1]

TREATMENT



PCI = prophylactic cranial irradiation
WBRT = whole brain radiation therapy

[1] GCC should be initiated by the Primary Oncologist. If Primary Oncologist is unavailable, Primary Team/Attending Physician to initiate GCC discussion and notify Primary Oncologist. Patients, or if clinically indicated, the Patient Representative should be informed of therapeutic and/or palliative options. GCC discussion should be consistent, timely, and re-evaluated as clinically indicated. The Advance Care Planning (ACP) note should be used to document GCC discussion. Refer to GCC home page (for internal use only).

[2] Refer to Principles of Systemic Therapy on Page 5

[3] For selected patients with residual thoracic disease and low-bulk extrathoracic metastatic disease that has responded to systemic therapy

[4] The role of PCI is controversial in ES-SCLC (without brain metastasis) and is an option to selected patients. Consider holding immunotherapy during radiation.

[5] MRI brain preferred over CT as it is more sensitive in identifying brain metastases

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Small Cell Lung Cancer (SCLC)

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SURVEILLANCE[1]

- History and physical
- Laboratory studies to include hematological and chemistry panels, as clinically indicated
- CT chest, abdomen, and pelvis with IV contrast and FDG PET/CT, as clinically indicated
- Imaging of involved sites every 2-3 months for 2 years, then every 6 months for 3 years, then yearly
- MRI brain[2] with IV contrast recommended with other surveillance imaging as above, for extensive stage patients and for limited stage who did not get PCI

Relapse?

Yes

- Clinical trial (preferred)
- Subsequent systemic therapy (see Page 5 for Principles of Systemic Therapy)
  - For relapsed localized disease, consider salvage concurrent chemotherapy and radiation **or** radiation alone if patient unable to tolerate chemotherapy
- Palliative symptom management including localized radiation therapy
- Discuss GCC with patient or if clinically indicated, with Patient Representative[3]

No

Continue surveillance[1]

SALVAGE/PALLIATION

[1] For patients already on maintenance immunotherapy, continue in the absence of progression or toxicity
[2] MRI brain preferred over CT as it is more sensitive in identifying brain metastases
[3] GCC should be initiated by the Primary Oncologist. If Primary Oncologist is unavailable, Primary Team/Attending Physician to initiate GCC discussion and notify Primary Oncologist. Patients, or if clinically indicated, the Patient Representative should be informed of therapeutic and/or palliative options. GCC discussion should be consistent, timely, and re-evaluated as clinically indicated. The Advance Care Planning (ACP) note should be used to document GCC discussion. Refer to GCC home page (for internal use only).

Small Cell Lung Cancer (SCLC)

Note: Consider Clinical Trials as treatment options for eligible patients.

PRINCIPLES OF SYSTEMIC THERAPY

First-line therapy

Acceptable regimens for limited stage disease (maximum of 4-6 cycles) include:

- Cisplatin 60 mg/m^2 IV on Day 1 and etoposide 120 mg/m^2 IV on Days 1, 2, 3
- Cisplatin 75 mg/m^2 IV on Day 1 and etoposide 100 mg/m^2 IV on Days 1, 2, 3
- Cisplatin 25 mg/m^2 IV on Days 1, 2, 3 and etoposide 100 mg/m^2 Days 1, 2, 3
- Carboplatin AUC 5-6 IV on Day 1 and etoposide 100 mg/m^2 IV on Days 1, 2, 3

Acceptable regimens for extensive stage disease include:

- Carboplatin AUC 5 IV on Day 1 and etoposide 100 mg/m^2 IV on Days 1, 2, 3 and atezolizumab 1,200 mg Day 1 every 21 days for 4 cycles
  - Followed by maintenance atezolizumab 1,200 mg Day 1 every 21 days or atezolizumab 1,680 mg Day 1 every 28 days
- Carboplatin AUC 5-6 IV on Day 1 and etoposide 100 mg/m^2 IV on Days 1, 2, 3 and durvalumab 1,500 mg Day 1 every 21 days for 4 cycles
  - Followed by maintenance durvalumab 1,500 mg Day 1 every 28 days
- Cisplatin 75 mg/m^2 IV on Day 1 and etoposide 100 mg/m^2 IV on Days 1, 2, 3 and durvalumab 1,500 mg Day 1 every 21 days for 4 cycles
  - Followed by maintenance durvalumab 1,500 mg Day 1 every 28 days

Second-line or greater therapy

- Tarlatamab **or**
- Clinical trial **or**
- Lurbinectedin[a] (if > 90 days from last platinum-based chemotherapy)
- If relapse occurs > 6 months after completion of first-line therapy: original regimen
  - For patients who relapsed after 6 months, while on atezolizumab or durvalumab maintenance therapy, consider re-treatment with platinum plus etoposide alone (without atezolizumab or durvalumab)
- If relapse occurs ≤ 6 months and performance status 0-2: Alternative regimens
  - Lurbinectedin
  - Temozolomide PO
  - Irinotecan
  - Docetaxel
  - Topotecan PO or IV
  - Etoposide PO
  - Paclitaxel
  - Gemcitabine

Maintenance therapy for LS-SCLC

- Durvalumab 1,500 mg once every 4 weeks; continue until disease progression or unacceptable toxicity or a maximum of 24 months following the completion of chemoradiation

Growth factor use with systemic therapy and other related considerations

- The use of myeloid growth factors is not recommended during concurrent systemic therapy plus radiation therapy
- Outside of radiation therapy, consider chemotherapy dose reduction or growth factor support for patients with ECOG performance status of 2 or age ≥ 70 years
- In patients with ES-SCLC, trilaciclib may be used as prophylactic option for chemotherapy-induced myelosuppression prior to receiving platinum/etoposide or topotecan on days of chemotherapy

ECOG = Eastern Cooperative Oncology Group

[a] Literature suggests lurbinectedin is less effective in those with chemotherapy free interval < 90 days

Note: Consider Clinical Trials as treatment options for eligible patients.

PRINCIPLES OF RADIATION THERAPY

Radiation therapy for Limited Stage disease

- Radiation therapy should be given 1.5-1.8 Gy twice a day (with at least 6 hours between fractions) to a total dose of 45-54 Gy. In circumstances where twice daily fractionation is not feasible, an acceptable alternate schedule is 1.8-2.0 Gy/day to a dose of 60-70 Gy.
- Radiation therapy should be administered concurrently with chemotherapy, ideally beginning during cycle 1 of chemotherapy
- Radiation therapy should be delivered to original tumor volume unless there is marked risk of radiation pneumonitis; decrease field as tumor shrinks
- In patients receiving radiation therapy or chemoradiation with curative intent, treatment interruptions or dose reductions for temporary and manageable toxicities, such as esophagitis and myelosuppression, should be avoided. Careful patient monitoring and aggressive supportive care are preferable to treatment breaks in potentially curable patients. Patients should be evaluated at least once per every 5 fractions to monitor weight changes and toxicity.
- 45 Gy in 30 fractions over 3 weeks would not be recommended with concurrent chemotherapy on Day 1, if the DVH shows V20 more than 35% of target lesion. If the GTV is too large to meet dose volume constraints, give one cycle of chemotherapy or go daily fraction of radiation and cone down of the GTV after re-simulation after 2-3 weeks treatment. This will apply for patients who have FEV1 or DLCO less than 30% of predicted value.
- Elective nodal radiation therapy is not recommended
- Appropriate schedule for PCI is 25 Gy in 10 fractions

DVH = dose volume histogram
GTV = gross tumor volume

SUGGESTED READINGS

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Limited Stage SCLC

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