

Lung Cancer Treatment

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Treatment

The two major types of lung cancers:

Small Cell Lung Cancer SCLC

Non-Small Cell Lung Cancer NSCLC

two completely different diseases

different recommended therapies

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Treatment: NSCLC

Non-small cell lung cancers (squamous, adenocarcinoma and large cell carcinoma)

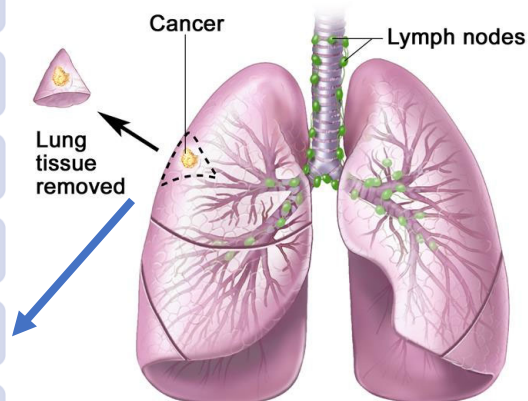
- ▶ Surgery – common Stage I, II, III
- ▶ Radiation - EBRT
- ▶ Ablation – used rarely in lung cancer
- ▶ Chemo – Stage I, II, III
- ▶ Targeted therapy; Immunotherapy

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Surgery NSCLC

20	• Excision or resection of less than one lobe, NOS
23	• Excision NOS
24	• Laser excision
25	• Bronchial sleeve resection only
21	• Wedge resection
22	• Segmental resection incl lingulectomy

Wedge Resection of the Lung



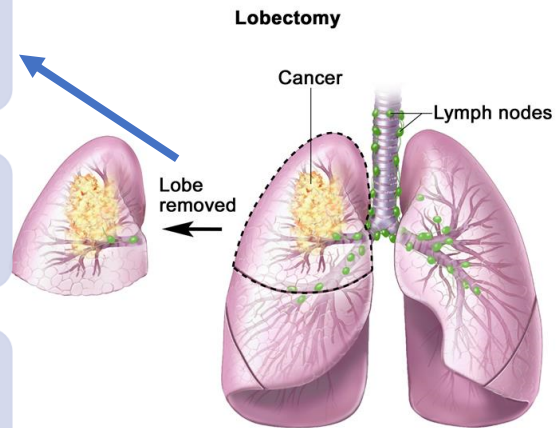
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Surgery NSCLC

- 30**
 - Resection of at least one lobe, bilobectomy, less than whole lung
- 33**
 - Lobectomy with mediastinal LND
- 45**
 - Lobe or bilobectomy extended NOS
 - 46 WITH CHEST WALL
 - 47 WITH PERICARDIUM
 - 48 WITH DIAPHRAGM



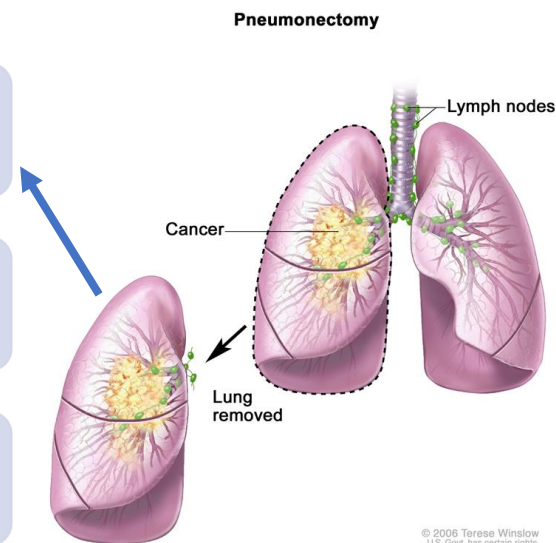
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Surgery NSCLC

- 55**
 - Pneumonectomy, NOS
 - 56 with mediastinal LND (radical pneumonectomy)
- 65**
 - Extended pneumonectomy
- 70**
 - Extended radical pneumonectomy removes other tissue or nodes besides mediastinal nodes



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Surgery NSCLC

- Exploratory thoracotomy
- Mediastinotomy
- Endobronchial laser surgery

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VATS

- Video assisted thoracic surgery
 - Minimally invasive
 - Thoracoscopy through smaller cuts than open surgery
 - Used to remove part of lung because of cancer
- Still code the type of surgery, i.e. lobectomy according to the surgery codes.

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Treatment – Radiation

- External radiation therapy
 - EBRT, ERT, 3D-CRT, IMRT, SABR

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Treatment – Radiation

Stereotactic body radiation therapy

- External radiation therapy
- Uses special equipment
- Also called stereotactic external beam radiation therapy and stereotaxic radiation therapy

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Treatment – Radiation

Stereotactic radiosurgery

- Brain mets from lung cancer
- Does not involve surgery

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Treatment - Radiation

- Palliative radiation therapy is useful in reducing symptoms from metastatic disease, such as bone pain or brain swelling.

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Treatment - Chemo

- ▶ Drugs
 - ▶ By mouth
 - ▶ Intravenous
 - ▶ Directly in CSF or organ

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Treatment - Chemo

Common chemo agents used to treat lung CA include:

- **Cisplatin & VP-16 (Etoposide)**, with or without other agents such as vincristine, methotrexate and adriamycin. **Note:** **Cisplatin/VP-16** is very commonly given as 1st course Tx'ment.
- Cytoxan, Adriamycin, and Vincristine (CAV)

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Treatment - Other

Targeted Drug therapy

- Attacks specific cancer cells
- Examples: Monoclonal antibodies and tyrosine kinase inhibitors
- Used for advanced, metastatic or recurrent NSCLC

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Treatment - Other

Monoclonal Antibodies

- VEGF
- EGFR
- PD-1

Tyrosine kinase inhibitors

- EGFR
- Kinase inhibitors

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NSCLC Neoadjuvant Therapy

- **Neoadjuvant therapy**, which has been considered as an approach to improve survival in patients with resectable **NSCLC**, is a hotly debated topic. A systematic review of 32 randomized trials involving 10,000 patients revealed that there was no difference in survival between preoperative and postoperative **chemotherapy**. **June 6, 2020**

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Treatment: SCLC

- ▶ **Small cell lung cancers**
 - ▶ respond to chemotherapy and radiation
 - ▶ usually too far advanced at diagnosis for a surgical cure
 - ▶ Surgery not recommended

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Treatment: SCLC

▶ Small cell lung cancers

- ▶ Limited-stage disease (LD)
 - ▶ Chemo and radiation
 - ▶ Combined chemo alone
 - ▶ PCI [prophylactic cranial irradiation]
- ▶ Extensive-stage disease (ED)
 - ▶ Combination chemo
 - ▶ Radiation therapy
 - ▶ PCI

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Cyberknife Radiation Therapy

- Brain mets
- Lung tumors
- Non-invasive procedure
- STORE Manual treatment planning technique is 08 for Gammaknife

08	Stereotactic radiotherapy or radiosurgery, Gamma Knife®	Treatment planning using stereotactic radiotherapy/radiosurgery techniques which uses a Cobalt-60 gamma ray source and is specifically described as Gamma Knife®. This is most commonly used for treatments in the brain.
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