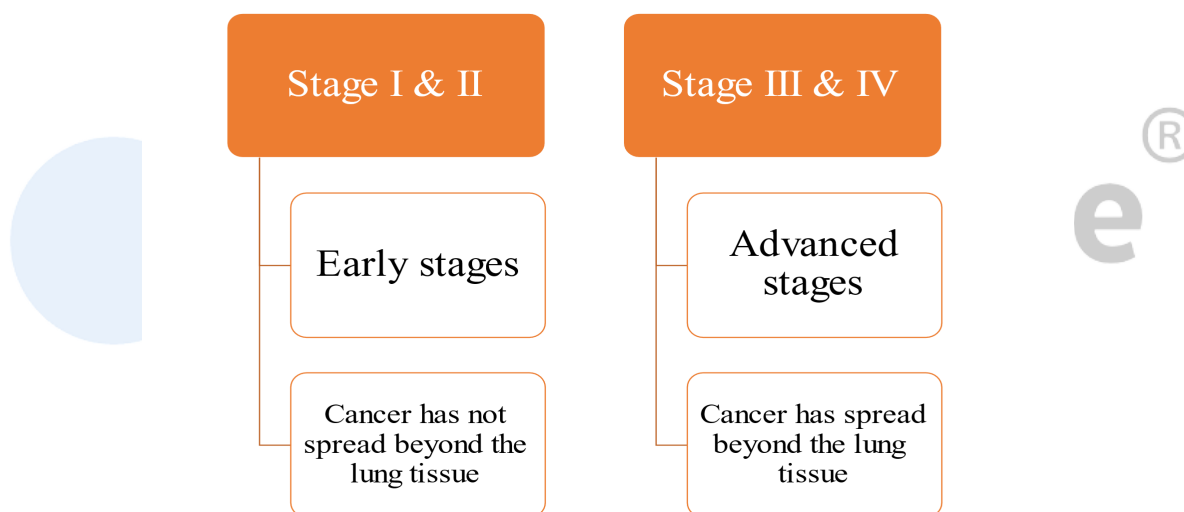

Frequently Asked Questions (FAQs) About Lung Cancer

Prepared by: Dr. Madhuri Mukhe and Ms. Shelly Arora

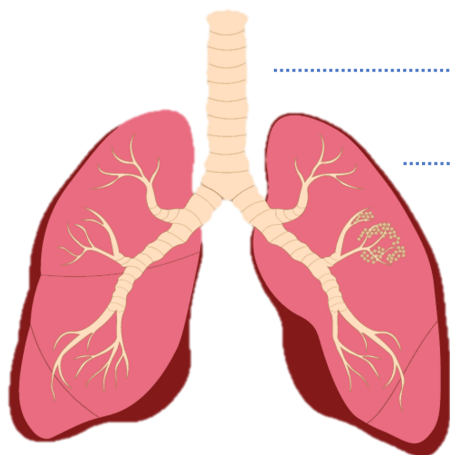
What is lung cancer and what are its stages?

Lung cancer is a disease that results from uncontrolled cell division in lung tissues. The primary factors used to classify a tumor are the size of the initial tumor, the depth to which it has invaded surrounding tissues, and whether it has migrated to lymph nodes or other organs. According to the standard lung cancer staging¹:



What are the other facts about lung cancer?

According to American Cancer Society (2023), the following are the facts about lung cancer globally^{2,3}:



..... **Lung cancer:** Second most common cause of cancer – Both men & women

..... **New cases:** About 238,340 (117,550 men and 120,790 women)
Deaths: About 127,070 (67,160 men and 59,910 women)

..... **Non-small cell lung cancer (NSCLC)** - 80% &
Small cell lung cancer (SCLC) – 20% of all lung cancers

..... **Main Risk Factors:** Smoking , air pollution,
and exposure to hazardous chemicals

..... **Leading cause:** Smoking - 45.3% of men & 1.1% of women.

What is the importance of early lung cancer detection?

Lung cancer is mostly asymptomatic in its early stages. Only 20-30% of cases are detected in their early stages. When lung cancer has advanced, 70-80% of patients experience symptoms, and curative treatment is no longer an option. Patients with early-stage cancer have a better treatment experience, lower treatment morbidity, and a comparatively higher quality of life (QoL) than patients with advanced-stage cancer⁴.

What are the signs and symptoms of lung cancer?

The symptoms associated with lung cancer may vary from person to person. Most lung cancers do not cause symptoms until the disease has progressed. The signs and symptoms of lung cancer are³:



Cough that persists, worsens or produces blood



Wheezing



Chest Pain



Shortness of breath



Fatigue



Unexplained weight loss

How can early detection of lung cancer improve patient outcomes and survival rates?

Globally, patients diagnosed with stage I lung cancer have shown a survival rate of 81–85%, compared with 15–19% for those diagnosed with stage IV lung cancer⁵. The five-year survival rate (percentage of patients who are still alive five years after their diagnosis) is 56% for localized, and only 5% for distant lung cancer². Therefore, early detection and an appropriate treatment plan with biomarker tests may improve the survival rate of patients with lung cancer.

What are the investigations for the detection of lung cancer?

Early detection of lung cancer is quite challenging. Based on the symptoms of lung cancer, the consulting doctor may recommend early detection tests. A wide range of diagnostic tests may be used to determine or confirm the lung cancer diagnosis. These include blood tests, X-rays, a CT scan, an endobronchial ultrasound, bronchoscopy, a biopsy, a PET scan, and biomarkers⁶.

How does biomarker testing help in the detection of lung cancer?

Biomarkers found in blood or tissue samples can be combined with imaging to detect early-stage lung cancer and increase survival rates. They may aid in the diagnosis, prognosis, identification of tumor recurrence, and determining the best treatment options for a patient with lung cancer,

such as targeted or immunotherapy⁷. Tumor markers (CEA, CYFRA 21-1), genetic biomarkers (EGFR, KRAS, ALK), PD-L1 expression levels, and SCLC markers (CD56) all contribute to the identification of lung cancer cells⁸.

How adjuvant treatment is useful for lung cancer patients?

Adjuvant therapy is defined as “an additional cancer treatment given after the primary treatment to lower the risk that the cancer will come back”⁹.

Surgery (resection) is usually considered as a primary curative treatment option for early-stage lung cancer. However, cancer recurs in about 20–50% of the patients who undergo surgery. Therefore, there is a need for an additional treatment in the form of adjuvant therapy, to remove the residual cancer cells thereby preventing cancer recurrence¹⁰.

What are the side effects of lung cancer treatment?

All patients who receive treatment do not respond to it in the same manner. Side effects can range from minor to life threatening problems. Some common side effects of lung cancer treatment are¹¹:

- Breathing problems
- Fatigue
- Infection, bleeding and anemia (chemotherapy can lower blood counts)
- Stomach problems (nausea, vomiting, diarrhea or constipation)
- Changes in appearance, including hair loss
- Pain and discomfort

What kind of lifestyle changes may help to manage the side effects of the treatment?

Making necessary changes in the lifestyle can help to manage with the side effects of the treatment and improve the quality of life. These include¹:

- Diet and nutrition: A balanced diet rich in fruits, vegetables, fiber, poultry, fish, plant-based proteins, and healthy fats help in early recovery and also lower your future risk of cancer. Red meat and processed foods must be avoided.
- Physical activity can help in reducing fatigue, prevent weight gain and loss of muscle strength.

- Quit smoking: People who quit smoking significantly reduce their risk of developing lung cancers.
- Managing stress level can help to stay physically and mentally fit.
- Consult the doctor for regular follow ups even if the signs and symptoms do not appear

Do lung cancer patients need food supplements?

It is important to understand that no food/ dietary supplement can completely treat, cure, or prevent any cancer. During treatment, it is difficult to get the nutrients from whole foods, such as fruits, vegetables, whole grains, and meat, so it is important to take supplements to get those nutrients into the patient's diet. After evaluating a patient's nutritional intake and any imbalances, physicians or dietitians can make recommendations¹².

Disclaimer: Always consult the doctor if there are any symptoms of lung disease to avoid delay in detection and further treatment.

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