

BY BITO HEALTH

LUNG CANCER

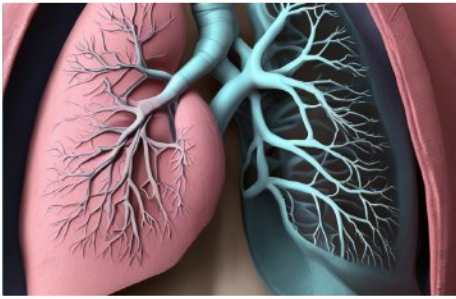


LUNG CANCER AND SURGERY

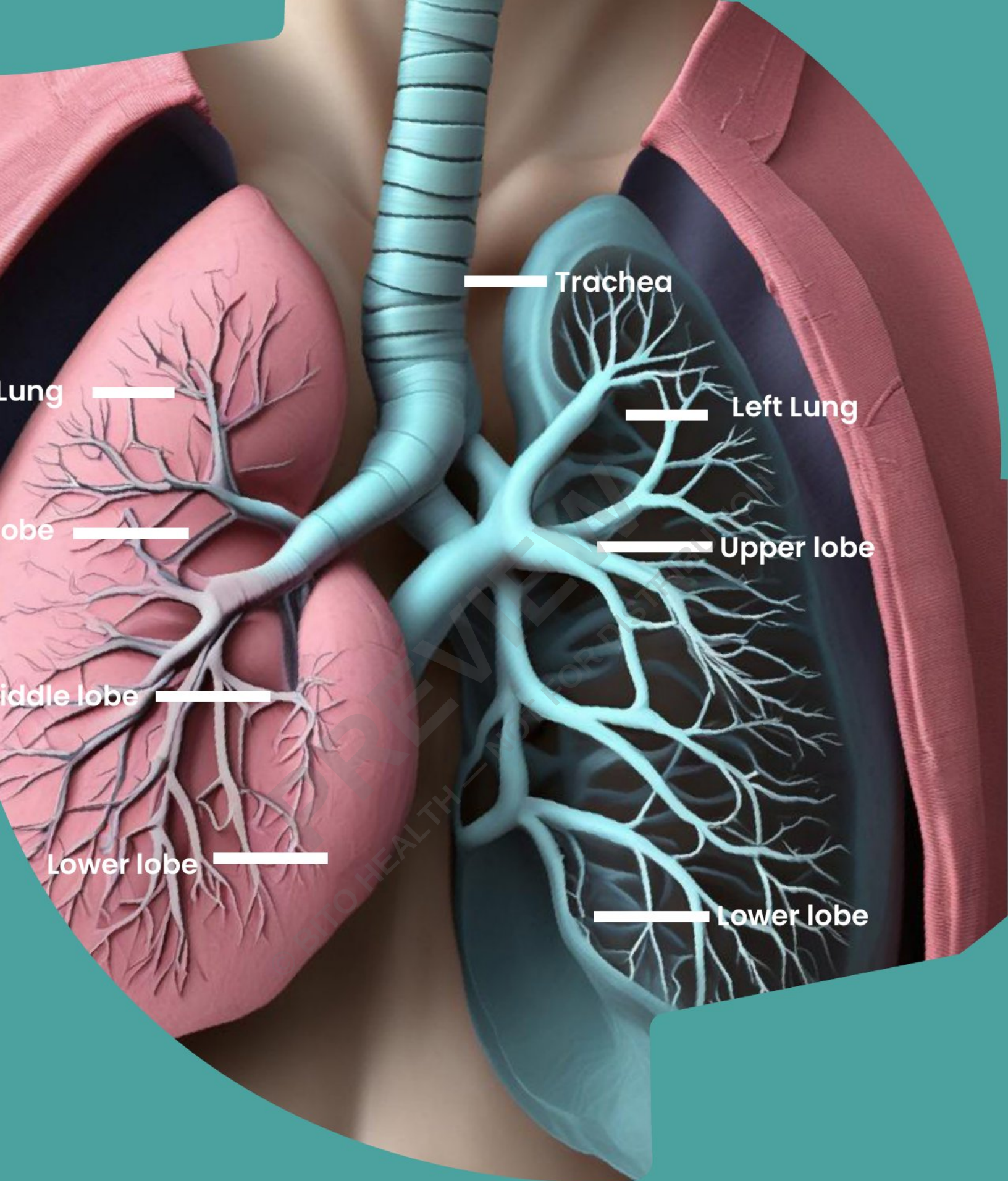
This beautifully designed magazine has been created to give you all the essential information about lung cancer in an easy-to-understand manner. We aim to empower you throughout your cancer journey, enabling you to make informed choices, anticipate treatment and lifestyle changes, and ultimately achieve the best possible outcome.

LET'S START THE JOURNEY.
LET'S BRING IT ON!

CONTENTS



- 5- INTRODUCTION
- 6-PRIMARY VS SECONDARY LUNG CANCER
- 8- PRIMARY LUNG CANCER SCREENING
- 10- SYMPTOMS & SIGNS
- 11- RISK STRATIFICATIONS
- 11- DIAGNOSIS & STUDY
- 12- STAGING OF LUNG CANCER
- 13- MULTIDISCIPLINARY TEAM APPROACH
- 14- QUESTIONS FOR YOUR PHYSICIANS
- 15- LUNG CANCER STAGING SYSTEMS
- 17- ADDITIONAL TUMOR TESTING
- 19- LUNG CANCER TREATMENT
- 20- TREATMENT MODALITIES
- 22- TREATMENT OPTIONS: STAGE 1, 2, 3, ORGAN INVASION
- 23- PULMONARY REHABILITATION PROGRAM
- 24- BREATHING EXERCISES
- 25- SYMPTOMATIC PALLIATION
- 26- SYSTEMIC THERAPY FOR LUNG CANCER
- 27- SIDE EFFECTS OF CHEMOTHERAPY, IMMUNOTHERAPY, OTHERS
- 36- RADIATION FOR LUNG CANCER
- 38- LUNG CANCER SURGERY
- 39- PRE-OPERATIVE PULMONARY ASSESSMENT
- 39- SURGICAL APPROACH
- 40- TYPE OF LUNG RESECTION
- 41- PREHABILITATION & ENHANCED RECOVERY AFTER SURGERY (ERAS)
- 42- PREPARATION FOR LUNG CANCER SURGERY
- 44- PREOPERATIVE PREPARATION
- 45- DAY OF SURGERY
- 46- HOSPITAL STAYS
- 51- AFTER SURGERY & SURGICAL DRAIN CARE
- 52- TROUBLESHOOTING
- 54- SURVEILLANCE RECOMMENDATION
- 55- SIMPLIFIED RECOMMENDATIONS FOR LUNG CANCER PREVENTION
- 58- TREATMENT FOR METASTATIC LUNG CANCER
- 59- CLINICAL TRIAL
- 60- TREATMENT SUMMARY





What is Lung Cancer?

PRIMARY LUNG CANCER SECONDARY LUNG CANCER (LUNG METASTASES)

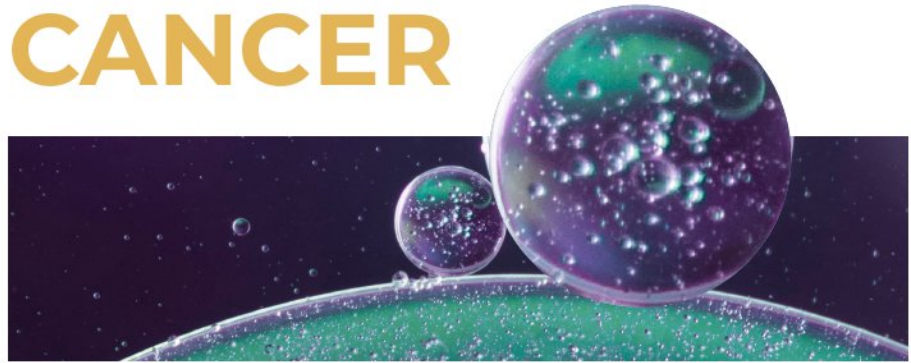
PRIMARY LUNG CANCER

Primary lung cancer is a type of cancer that begins in the lung tissue itself. It can be classified into several types, such as non-small cell lung cancer (NSCLC), small cell lung cancer (SCLC), and rarer variants like carcinoid tumors. The risk factors for developing primary lung cancer include smoking, exposure to radon, asbestos, and air pollution. The symptoms of primary lung cancer vary depending on the type and stage of the cancer but may include a persistent cough, coughing up blood, chest pain, and shortness of breath. Primary lung cancer cells can spread indirectly through the bloodstream, lymphatics, or pleura (membranes around the lung) to other organs or regions of the body.

SECONDARY LUNG CANCER (LUNG METASTASES)

Secondary lung cancer occurs when cancer cells from another body part spread to the lungs. The primary cancer site is where the cancer started. These cancer cells break away from the primary tumor and spread through the bloodstream or lymphatic system, settling in the lungs and forming new tumors. The most common types of cancer that spread to the lungs are breast, colorectal, kidney, prostate, sarcoma, and lymphoma. Most patients do not experience symptoms, but some may have persistent cough, shortness of breath, chest infections, weight loss, coughing up blood, and chest pain.

PRIMARY LUNG CANCER



There are two primary types of lung cancer, each with distinct characteristics and treatment approaches.

A. NON-SMALL CELL LUNG CANCER (NSCLC):

NSCLC can be treated with several options, including surgery, radiation therapy, chemotherapy, immunotherapy, and targeted therapy.

1. ADENOCARCINOMA:

This is the most prevalent type of lung cancer in the United States, which usually starts in the outer sections of the lungs and can occur in people who have never smoked.

2. LARGE CELL CARCINOMAS:

This is a group of cancers characterized by large, abnormal-looking cells that can start anywhere in the lungs and tend to grow quickly.

3. SQUAMOUS CELL CARCINOMA (EPIDERMOID CARCINOMA)

This type of cancer often starts in the bronchi near the middle of the lungs.

*There are also rare types of NSCLC, such as **adenosquamous carcinoma** and **sarcomatoid carcinoma**.*

B. SMALL CELL LUNG CANCER (SCLC):

Small Cell Lung Cancer (SCLC) is a type of cancer that is mainly caused by cigarette smoking. The tumor tends to spread quickly, so the most common treatment options for SCLC are chemotherapy or chemoradiation therapy. Surgery is less frequently used in this case.

1. SMALL CELL CARCINOMA (OAT CELL CANCER):

It is the most common type of SCLC, and it spreads rapidly.

2. COMBINED SMALL CELL CARCINOMA:

Another type of SCLC.



PRIMARY LUNG CANCER Screening

The foundation of screening is believing that detection of lung cancer at an earlier stage increase the likelihood of successful treatment and hence reducing lung cancer related deaths. According to the updated the U.S Preventive Service Task Force (USPSTF):

POPULATION AT RISK

ADULTS AGED 50 TO 80 YEARS WHO HAVE:



- A 20 pack-year smoking history
- Smoking one pack a day for 20 years or
- Two packs a day for ten years, or
- 1½ packs a day for a little longer than 13 years
- Currently smoke or have quit within the past 15 years.



HOW TO SCREEN AND HOW OFTEN

Screening for lung cancer using **low dose computed tomography (LDCT)** should be done **annually**. Screening can be stopped for people who haven't smoked for over 15 years or those with health problems that limit life expectancy or the ability to undergo lung surgery.



SHARED DECISION-MAKING

Healthcare providers are recommended to discuss lung cancer screening eligibility with individuals while engaging in shared decision-making. During this conversation, healthcare providers should thoroughly explain the screening's benefits, limitations, and potential risks. Additionally, they should offer smoking-cessation counseling and discuss the available interventions to help people quit smoking.



PRO AND CONS

The advantages of low-risk CT scans include early detection, risk reduction, and reduced mortality. However, there are some disadvantages, such as false-positive findings, overdiagnosis, and increased care costs.



COSTS

Lung cancer screenings are generally covered by health insurance plans, including Medicare and private health insurance, as long as the individual meets specific screening criteria. However, coverage details such as co-payments and deductibles may vary with each insurance provider. Therefore, you must check with your insurance provider for accurate coverage information.



SYMPTOMS & SIGNS OF PRIMARY Lung Cancer

P rimary lung cancer typically does not cause symptoms in its early stages, but signs become more noticeable as the disease progresses. The following are the common symptoms associated with primary lung cancer:



Persistent Cough:

A new cough that does not go away.

Chest Pain:

Discomfort or pain in the chest area

Coughing Up Blood:

Even a tiny amount of blood in the sputum.

Hoarseness:

Changes in voice quality.

Shortness of Breath:

Difficulty breathing

Wheezing:

High-pitched whistling sound during breathing.

Drooping eyelid

(Horner Syndrome)



When lung cancer spreads to other parts of the body, additional symptoms may occur, such as **bone pain, headache, unintentional weight loss, loss of appetite, swelling in the face or neck**, and others.