

# Lung Cancer Clinical Trials: Types & Phases



## What Is a Clinical Trial?

A clinical trial is a carefully designed research study that tests new ways to treat, detect, prevent, or manage cancer and its symptoms. Every cancer treatment available today was once studied in a clinical trial.

## Types of Cancer Clinical Trials

### Treatment Trials

Test new medications, drug combinations, surgery techniques, radiation approaches, or immunotherapy to see if they work better than current treatments.

### Prevention Trials

Study ways to prevent cancer from developing or reduce the risk of cancer returning.

### Screening Trials

Evaluate new methods to detect cancer earlier, such as imaging or blood tests.

### Diagnostic Trials

Test new ways to identify cancer types, subtypes, or genetic mutations more accurately.

### Quality of Life (Supportive Care) Trials

Focus on managing symptoms and side effects to improve comfort and daily functioning.

## Understanding the Phases of Lung Cancer Clinical Trials

### Why Do Clinical Trials Have Phases?

Lung cancer clinical trials are done in steps called phases. Each phase answers a different question about a new treatment — such as a targeted therapy, immunotherapy, chemotherapy combination, or new radiation approach.

The phase tells you what researchers are studying — not whether a trial is "good" or "bad." Every FDA-approved lung cancer treatment today moved through these phases.

## **Phase 1: Safety and Finding the Right Dose**

Main Goal: To determine safety and the best dose.

What researchers are studying:

- Is the treatment safe?
- What dose should patients receive?
- What side effects occur?
- How does the body process the drug?

What participation usually means for lung cancer patients:

- Smaller number of participants
- Frequent visits, labs, and monitoring
- Dose may be adjusted during the study
- Often for patients whose cancer has progressed after standard treatment

**Important:** Many modern targeted therapies for EGFR, ALK, KRAS, and other mutations began in Phase 1 trials.

## **Phase 2: Does the Treatment Work?**

Main Goal: To see if the treatment is effective.

What researchers are studying:

- Does the treatment shrink tumors?
- Does it slow cancer growth?
- How long does it work?
- What side effects continue to appear?

What participation usually means:

- Larger group than Phase 1
- The dose has already been determined, continued safety monitoring
- Often focused on a specific lung cancer subtype or mutation

Phase 2 trials help determine whether a treatment should move forward to larger studies.

## **Phase 3: Is It Better Than Standard Treatment?**

Main Goal: To compare the new treatment to the current standard of care.

What researchers are studying:

- Does it improve survival?
- Does it delay progression?
- Does it reduce side effects?
- Does it improve quality of life?

What participation usually means:

- Large number of patients
- Often randomized (assigned by chance)
- You will receive at least the current standard treatment
- May compare standard treatment vs new treatment, or standard + new therapy

Phase 3 trials are often the final step before FDA approval.

#### **Phase 4: After FDA Approval**

Main Goal: Long-term safety and real-world results.

What participation means:

- You are receiving an FDA-approved lung cancer treatment
- Researchers monitor long-term side effects
- Helps doctors understand how treatments perform outside research settings

	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>
<b>Main Goal</b>	Safety & dose	Does it work?	Better than standard?
<b>Number of Patients</b>	Small group	Moderate group	Large group
<b>Monitoring</b>	Very frequent	Regular monitoring	Standard trial monitoring
<b>What You Receive</b>	New treatment (dose adjusted)	New treatment (set dose)	Standard care or new treatment