Non-Small Cell Lung Cancer and Immunotherapy
About GO2 for Lung Cancer

GO2 is at the forefront of everything that’s happening in lung cancer. We’re the go-to for one-on-one assistance, supportive connections, treatment information, and finding the best care close to home. We’re the place to go to learn about the latest research and special initiatives that increase survivorship. We’re the source for improving health policies and leading public awareness to shift this disease from one of stigma to one of hope. We are teachers, guides, advocates and supporters. Confronting lung cancer starts here.
Immunotherapy is a type of cancer treatment that helps the body’s own immune system find and attack cancer cells.

Many have found the support of family, friends, and social or faith groups to be helpful in coping with lung cancer. If you would like to connect with other people living with lung cancer and learn more about support groups or GO2’s Phone Buddy program, call us at 1-800-298-2436 or email support@go2.org.

Non-Small Cell Lung Cancer

Lung cancer is one of the most common cancers in the United States. There are two main types of lung cancer, non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC). NSCLC is the most common type. NSCLC is divided into four stages: I, II, III and IV (1, 2, 3 and 4). Each of the 4 stages is further broken down into sub-stages using letters (A, B, C). The stage of the cancer is determined by its size and where it is located in your body. It is very important to know your stage because it guides your treatment options, including whether immunotherapy is right for you.

If you would like to learn more about NSCLC and the stages, please visit go2.org/nsclc.
Immunotherapy

Immunotherapy is a type of cancer treatment that helps your body’s immune system find and attack cancer cells.

Your immune system protects your body against germs and diseases that can make you sick. Most of the time, it knows which cells in the body are healthy and which cells are not healthy. This allows the immune system to attack disease and germ cells without attacking healthy cells.

When your immune system finds cancer cells, it goes to work to destroy them. Sometimes, it has trouble finding cancer cells because they can “hide” and appear like healthy cells. Cancer cells hide from the immune system by attaching themselves to immune cells. Staying attached to immune cells slows down or stops attacks.

The place on the cells where the cancer cell and the immune cell try to attach to each other is called a checkpoint. There are proteins on the surface of each cell that attach the immune cell and the cancer cell together.

- Examples of proteins on the immune cell are PD-1 or CTLA-4
- The protein on the cancer cell is called PD-L1

Without immunotherapy:

PD-1/PD-L1 are attached at the checkpoint. The cancer cell is hidden and protected from attack.

Immunotherapy works by blocking cancer cells from trying to attach to immune cells. This leaves them exposed and allows the immune system to attack them. A checkpoint inhibitor is a type of immunotherapy. It works by blocking the checkpoint proteins from attaching to each other.

With immunotherapy:

PD-1/PD-L1 checkpoint is blocked by a checkpoint inhibitor. The cancer cell can be found and attacked.
Immunotherapies for Non-Small Cell Lung Cancer

There are many immunotherapy drugs used to treat NSCLC, each with its own guidelines. Your healthcare team will decide which one is best for you based on the stage of cancer and the timing of other treatments you may need. The results of biomarker testing can also be helpful information.

Biomarkers are pieces of information that cancer cells carry with them that drive cancer cells to grow and spread. If the results of testing show that you have a high level of certain proteins like PD-L1, immunotherapy may be a good option for you.

**Common Immunotherapy Drugs:**

NSCLC immunotherapy drugs that block the PD-1 protein on the immune cell:
- Optivo (nivolumab)
- Keytruda (pembrolizumab)
- Libtayo (cemiplimab-rwlc)

NSCLC immunotherapy drugs that block the PD-L1 protein on the cancer cell:
- Tecentriq (atezolizumab)
- Imfinzi (durvalumab)

NSCLC immunotherapy drug that blocks the CTLA-4 protein on the immune cell:
- Yervoy (ipilimumab)

It’s important to talk to your healthcare team about your biomarker test results and how they relate to your treatment plan and immunotherapy.

For more information on biomarkers or to get help understanding your biomarker results, contact our treatment and trial navigators team at 1-800-298-2436 or email support@go2.org.
Side Effects

Your healthcare team can help prevent or reduce some side effects from immunotherapy before you have them.

The most common side effects of immunotherapy are:

• Aching joints and muscles
• Constipation and/or diarrhea
• Coughing
• Trouble sleeping and/or feeling tired
• Loss of appetite
• Mouth sores
• Skin reaction
• Throat soreness

Since immunotherapy increases the activity of your immune system, sometimes healthy cells are attacked. Some of the more serious side effects are caused by inflammation of other organs and need medical attention.

Contact your healthcare team right away if you have any of these symptoms:

• Trouble breathing, chest pain, fainting, dizziness or confusion
• Diarrhea with bad cramping or pain, blood in the stool or urine, or dark urine
• Fever of 100.5°F or higher
• Changes in vision, memory or thinking skills
• Swelling in any part of the body

Side Effects Tracker

You may use this form to track your symptoms and share it with your healthcare team.

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>What symptoms or side effects are you having?</th>
<th>How severe is it? (1=mild, 2=medium, 3=severe)</th>
<th>What made it better?</th>
<th>What made it worse?</th>
<th>Did you take all medicines as prescribed today?</th>
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Ask Your Healthcare Team

Always ask your healthcare team any question you have about your treatment. Here are a few questions you may want to ask.

• What are my treatment options?
• What type of treatment do you recommend for me and why?
• What are the risks and benefits of the treatment options?
• What are the possible side effects from my treatments and how can I manage them?
• When do I start treatment? How long will it last?
• How often will I get it?
• Are there any clinical trials that are appropriate for me? If so, how do I get more information?

For more information about lung cancer, current treatments, support options and/or referrals to other resources, please visit go2.org, call our HelpLine at 1-800-298-2436 or email support@go2.org.