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

Founded by patients and survivors, GO2 for Lung Cancer transforms survivorship as the world's leading organization dedicated to saving, extending, and improving the lives of those vulnerable, at risk and diagnosed with lung cancer. GO2 works to change the reality of living with lung cancer by ending stigma, increasing public and private research funding and ensuring access to care.

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Many have found the support of family, friends, and social or faith groups to be helpful in coping with lung cancer.

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

This booklet was created to help you learn how immunotherapy works, what to expect during treatment and when it is important to contact your healthcare team. If you have any questions after reading this, be sure to ask your team.

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 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.

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.

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**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 block the CTLA-4 protein on the immune cell:
- Yervoy (ipilimumab)

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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 LungMATCH team at 1-800-298-2436 or email support@go2.org.
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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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 sores

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

Non-Small Cell Lung Cancer and Immunotherapy
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?

Ask Your Healthcare Team

Always ask your healthcare team any questions 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.