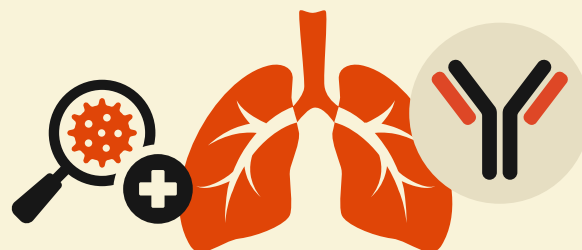


Talking About Immunotherapy: A Guide for Patients With Early-Stage NSCLC

How Does Immunotherapy Work?

Immunotherapy does not directly kill cancer cells. Instead, it helps your immune system to attack and kill cancer cells.¹⁻³ Immunotherapies that are FDA approved for non-small-cell lung cancer (NSCLC) belong to a group of agents called immune checkpoint inhibitors (ICIs).



Understanding Immunotherapy for Early-Stage NSCLC

Surgery is the primary treatment for most people with early-stage NSCLC and offers the best chance of curing the cancer. Your healthcare team will consider many factors when deciding whether adding immunotherapy is right for you. These include the stage and characteristics of your lung cancer, your overall health, and the results of biomarker testing of your cancer.

If immunotherapy is recommended, your care team will also determine when it should be given. Depending on your treatment plan, immunotherapy may be given **before surgery, after surgery, or both**. Together, you and your healthcare team should discuss the potential benefits, possible risks, and treatment goals to determine the approach that best fits your individual situation.³⁻⁵

When Is Immunotherapy Given in Resectable NSCLC?⁴

- ▲ **Neoadjuvant treatment** is given before surgery to help shrink the tumor, make it easier to remove, and reduce the chance that cancer cells have spread.

Immunotherapy in combination with chemotherapy



Treatment duration: 9-12 weeks

Period after treatment
before surgery: 4-6 weeks

Surgery



- ▲ **Adjuvant treatment** is given after surgery to help destroy any remaining cancer cells that cannot be seen on scans or during surgery and lower the risk of the cancer returning.

Chemotherapy



Treatment duration:
9-12 weeks

Period after treatment
before surgery: 4-6 weeks

Surgery



Period after surgery before
treatment: 4-12 weeks

Immunotherapy



Treatment duration:
1-1.5 years

- ▲ **Perioperative treatment** combines both approaches. Immunotherapy is given before surgery and continued after surgery to treat the cancer throughout the surgical process and help reduce the risk of recurrence.

Immunotherapy in combination with chemotherapy



Treatment duration:
9-12 weeks

Period after treatment
before surgery: 4-6 weeks

Surgery



Period after surgery before
treatment: 4-12 weeks

Immunotherapy



Treatment duration:
1-1.5 years

How Can Immunotherapy Help?^{3,5}

When used as part of treatment for early-stage NSCLC, immunotherapy may:

- ▲ Lower the chance of the cancer returning after surgery
- ▲ Treat cancer cells that may have spread but are too small to be detected on scans
- ▲ Shrink the tumor before surgery, which may make it easier to remove completely
- ▲ Increase the likelihood of removing all visible cancer during surgery

When Is Immunotherapy Given in Resectable NSCLC?⁴

ICI Agents Used in Early-Stage NSCLC⁶

ICI Agents Used in Early-Stage NSCLC ⁶		
Neoadjuvant Immunotherapy	Administration Before Surgery	
Nivolumab (Opdivo), given in combination with chemotherapy ^{7,8}	Route of administration: Intravenous infusion or subcutaneous injection Frequency: Every 3 weeks Duration: Up to 3 cycles	
Perioperative Immunotherapy	Administration Before Surgery	Administration After Surgery
Durvalumab (Imfinzi) ⁹	<i>In combination with chemotherapy</i> Route of administration: Intravenous infusion Frequency: Every 3 weeks Duration: Up to 4 cycles	<i>As a single agent</i> Route of administration: Intravenous infusion Frequency: Every 4 weeks Duration: Up to 12 cycles
Pembrolizumab (Keytruda) ^{10,11}	<i>In combination with chemotherapy</i> Route of administration: Intravenous infusion or subcutaneous injection Frequency: Every 3 or 6 weeks Duration: 12 weeks	<i>As a single agent</i> Route of administration: Intravenous infusion or subcutaneous injection Frequency: Every 3 or 6 weeks Duration: Up to 39 weeks
Nivolumab (Opdivo) ^{7,8}	<i>In combination with chemotherapy</i> Route of administration: Intravenous infusion or subcutaneous injection Frequency: Every 3 weeks Duration: Up to 4 cycles	<i>As a single agent</i> Route of administration: Intravenous infusion or subcutaneous injection Frequency: Every 4 weeks Duration: Up to 13 cycles
Adjuvant Immunotherapy	Administration After Surgery	
Atezolizumab (Tecentriq) ^{12,13}	<i>As a single agent</i> Route of administration: Intravenous infusion or subcutaneous injection Frequency: Every 2, 3, or 4 weeks depending on dose Duration: Up to 1 year	
Pembrolizumab (Keytruda) ^{10,11}	<i>As a single agent</i> Route of administration: Intravenous infusion or subcutaneous injection Frequency: Every 3 or 6 weeks depending on dose Duration: Up to 1 year	

Questions to Ask Your Healthcare Team⁵

The best treatment plan is one that reflects your cancer's characteristics, your overall health, and your personal goals and preferences. Consider asking your healthcare team:



About Your Treatment Plan

■ Why are you recommending immunotherapy for me?

■ Are you recommending immunotherapy before surgery, after surgery, or both? Why is this approach the best option for me?

■ Will immunotherapy be given alone or together with chemotherapy?

■ What is the treatment schedule, and how long will treatment last?

■ Will I be receiving intravenous or subcutaneous immunotherapy administration? What are the pros and cons of each?

■ What are the goals of my treatment?

About Biomarker Testing

■ Has my tumor been tested for PD-L1? What do my results mean?

■ Has my tumor undergone comprehensive biomarker testing (also called next-generation sequencing or NGS)?

■ Were any driver mutations, such as EGFR or ALK, found? If so, how do these results affect my treatment options?

About Side Effects

■ What side effects might I experience?

■ Which symptoms should I report right away?

■ Who should I contact if I develop side effects between appointments and how should I contact them?

Learn about immunotherapy side effects and when to call your healthcare team. For information about possible side effects (also called adverse events), symptoms to watch for, and when to call your healthcare team, visit: [mdanderson.org/patients-family/diagnosis-treatment/emotional-physical-effects/immunotherapy-treatment-side-effects.html](https://www.mdanderson.org/patients-family/diagnosis-treatment/emotional-physical-effects/immunotherapy-treatment-side-effects.html)

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