

# Resectable **NSCLC**:

The Role of Checkpoint Inhibitors



## Clinician Guide Shared Decision-making With Patients Regarding NSCLC

#### **Elements of Shared Decision-making**

- Define and explain the treatment landscape for NSCLC in the perioperative setting
- Present the options for treatment before and after surgery
- Discuss the benefits, risks, and potential costs
- Explore the patient's values and preferences
- Discuss the patient's resources and support network
- Discuss doctor knowledge and recommendations
- Check/clarify the patient's understanding—teachback
- Make or defer a decision
- Arrange a follow-up

#### Tips to Initiate and Encourage Shared Decision-making

- Use plain language, explain medical jargon, and tailor information to the health literacy level of the patient; if possible, use diagrams and models during the discussion
- Encourage patients to bring their caregiver to appointments and take notes
- Encourage patients and caregivers to write down any questions they might have between visits and bring them to follow-up appointments
- Encourage patients to use the patient portal for clarification of instructions or additional information
- Ask patients to make sure that they bring printed pathology reports, molecular/biomarker testing reports, radiology reports, and prior treatment history to every visit
- Provide links to reputable patient-focused online sources where patients can read about NSCLC and treatments







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#### **FAQs From Patients and Potential Responses**

QUESTION	POTENTIAL RESPONSE
What is NSCLC?	Non-small Cell Lung Cancer (NSCLC) is the most common type of lung cancer. It originates from the cells that provide lining to the airways of the lungs.
What is biomarker testing and what do the results mean?	Biomarkers are proteins or genes of tumors that help predict how a tumor behaves and what types of treatment may work best for that tumor. Biomarkers allow for a more "personalized" approach to treatment of lung cancer. There are many sub-types of NSCLC, with different biomarkers. Biomarkers are very important to determine who may benefit the most from immunotherapy and who may not benefit.
What is the difference between chemotherapy and immunotherapy?	Chemotherapy is a medication typically given intravenously (in the case of lung cancer) that directly kills fast-dividing cells in the body. This can be achieved by interfering with the ability of dividing cells to make or repair DNA. Since the cells dividing the fastest in the body are cancer cells, they are the cells impacted the most by chemotherapy.
	However, normal cells that also divide fast in the body (such as hair follicles, cells of the gastrointestinal tract, and bone marrow cells) may be damaged by chemotherapy, and this is a major reason why chemotherapy results in side effects such as hair loss, mouth sores and a drop in blood counts.
	Immunotherapy is a treatment also typically given intravenously that does not kill cancer cells directly. Instead, it activates the person's immune system, specifically the lymphocytes called "T-cells" so they can recognize and kill cancer cells on their own. The types of immunotherapy drugs approved for treatment of lung cancer currently block inhibitory pathways that put brakes on the immune system (the "checkpoint pathways").



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QUESTION	POTENTIAL RESPONSE
What is the difference between chemotherapy and immunotherapy?	The side effects from immunotherapy are very different from those of chemotherapy. Typically, immunotherapy doesn't cause hair loss or a drop in blood counts. It can, however, cause "auto-immune" side effects. These side effects may occur if the immune system, after becoming "activated," mistakes normal cells for cancer cells and starts destroying them. Any organ of the body can be affected by this reaction. Side effects, such as rash, diarrhea, hepatitis (inflammation of the liver), and pneumonitis (inflammation of the lungs), can occur. However, in head-to-head clinical trials, immunotherapy has been demonstrated to be safer and associated with fewer serious side effects than chemotherapy, based on data from head-to-head clinical trials.
Why must I have both chemotherapy and immunotherapy?	Clinical trials have demonstrated that when chemotherapy and immunotherapy are combined to treat lung cancer, there is a higher chance that cancer cells get killed and killed more quickly. One explanation for this is that when chemotherapy kills cancer cells, their defective and "foreign" proteins become readily available and abundant, allowing T-cells to see and identify them as targets for killing. This combination is considered the most effective in leading to complete or major cancer kill by the time of surgery.
What are my options for chemotherapy and immunotherapy?	You may opt for not having any of these treatments and only having surgery. You may also not be a candidate to receive such treatments because of underlying medical problems you may have or because you may be too weak. However, these treatments are the most effective for killing not only cancer cells in the lung, but also any cancer cells that may have traveled to other parts of the body (even if they are not yet detected in scans such as CT and PET scans).

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QUESTION	POTENTIAL RESPONSE
Why must I have surgery if I'm having chemotherapy and immunotherapy?	Surgery is the best definitive treatment for lung cancer when it is still localized. Approximately 20% (1 in 5) of the people who have chemotherapy and immunotherapy before surgery are found to have 100% kill of the cancer by the treatment. However, 80% (4 in 5) will still have viable cancer that needs complete removal. The only way to assess treatment response is by completely removing the tumor and having the pathologist look under the microscope.
	removed is still viable cancer or just scar tissue. Knowing how much cancer kill was achieved helps your oncologist predict how well you will do in the long run, and how likely it is that you will be cured from this cancer.
How will I feel when on immunotherapy alone?	The majority of patients feel relatively well while receiving immunotherapy. There is a subset of patients who may develop concerning inflammatory conditions associated with immunotherapy and require high doses of steroids.
How will I feel when on immunotherapy with chemotherapy?	The majority of side effects that patients experience are from chemotherapy, such as fatigue, nausea, anorexia, and neuropathy. The immunotherapy added to chemotherapy often does not increase the intensity of chemotherapy-related side effects.
Does adding immunotherapy to chemotherapy after surgery improve my chances of survival from NSCLC?	In clinical trials, for patients with certain stages of NSCLC that has been surgically removed (resected), adding immunotherapy after chemotherapy on average improved chances of survival.







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QUESTION	POTENTIAL RESPONSE
What is neoadjuvant and adjuvant therapy?	Neoadjuvant therapy is treatment given before surgery. Adjuvant therapy is treatment given after surgery. Both aim to kill cancer cells that may have spread from the original tumor before surgery takes place and are already growing in other organs, just not yet forming large enough "lumps" to be seen in CT, PET scans, and MRIs.
If I have neoadjuvant therapy and surgery, what happens if the cancer comes back? Are there still treatment options?	Yes, if the cancer returns after surgery, there are still treatment options, and will depend on how long it took for your cancer to return and where the recurrence occurs. For example, some people who have the cancer return in lymph nodes inside the chest may still be treated with the intention of cure by combining radiation and chemotherapy, followed by immunotherapy. Most commonly, however, the cancer returns in the form of metastasis in other locations (adrenal glands, bones, liver, brain) and the treatment may involve immunotherapy with or without chemotherapy. When this occurs, treatment is given with the intention of cancer control, improving and preventing cancer symptoms, but no longer aiming to cure.
Is it safe to wait many weeks and receive chemotherapy and immunotherapy BEFORE having my tumor removed?	Many clinical trials have demonstrated that not only is it safe, but potentially the most effective way to receive immunotherapy with chemotherapy for your curable cancer. Some studies suggest that it is important for your immune system cells to "see the cancer" in your body to promptly recognize it and effectively eradicate it. However, some people (up to 20% or 1 in 5) who receive this treatment cannot make it to surgery because the cancer gets worse during those weeks, making the operation no longer possible. This may signal a very aggressive type of cancer that does not respond well to chemotherapy and is more likely to relapse fast after surgical resection.







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If I receive immunotherapy treatment before surgery, do I need it after as well?	There are studies supporting the use of immunotherapy only before surgery, only after surgery, and both before and after. Currently, no studies have demonstrated an absolute benefit of receiving treatment both before and after surgical resection. Therefore, you should have a discussion with your medical oncologist to determine what is best for you.
If I decide not to have immunotherapy treatment before surgery, can I have it after?	Yes. If no treatment is given before surgery, despite being indicated (tumor size, involvement of lymph nodes), you may receive it after surgery. You must, however, have an adequate functional status to be able to be treated. Studies have demonstrated that patients are more likely to begin treatment if given before surgery than after surgery because sometimes they cannot recover completely after surgery in a timely fashion to receive chemotherapy and immunotherapy.
For adjuvant treatment, can I go back to work?	The chemotherapy portion is usually given once every 3 weeks and side effects vary. Some patients can return to work, others do not feel up to it. The immunotherapy is usually given about once a month and is often better tolerated than chemotherapy, and often patients may return to work during this time.
What test results does my doctor need to help me decide if immunotherapy may cure the cancer?	There is a need to perform genomic sequencing of your cancer, which is a test done on your biopsy or the cytology specimen obtained from your cancer. It tests for genetic changes in your tumor, such as changes in the EGFR and ALK genes, that can predict response to certain immunotherapies and assist in selecting the therapy that is best for you.







## **Clinician Guide** Shared Decision-making With Patients Regarding NSCLC

#### **Resources and References for Clinicians**

The Agency for Healthcare Research and Quality. <u>The SHARE Approach</u>. Content last reviewed March 2023.

Makoul G, Clayman ML. <u>An integrative model of shared decision making in medical encounters</u>. *Patient Educ Couns*. 2006 Mar;60(3):301-312.

Légaré F, Witteman HO. <u>Shared decision making: examining key elements and barriers to adoption into routine</u> <u>clinical practice</u>. *Health Aff (Millwood)*. 2013;32(2):276-284.

Ottlakan A, Furak J, Rocco G. <u>Shared decision making in the treatment of stage I non small cell lung cancer-a</u> <u>choice which should equally involve both sides</u>. *Ann Transl Med*. 2017;5(17):359.

Katz SJ, Belkora J, Elwyn G. <u>Shared decision making for treatment of cancer: challenges and opportunities</u>. *J Oncol Pract*. 2014;10(3):206-208.

Shickh S, Leventakos K, Lewis MA, Bombard Y, Montori VM. <u>Shared decision making in the care of patients</u> with cancer. *Am Soc Clin Oncol Educ Book*. 2023;43:e389516.

#### **Online Resources for Patients**

NCCN Guidelines for Patients: https://www.nccn.org/patientresources/patient-resources

ASCO Patient Education: https://www.cancer.net/about-us/asco-answers-patient-education-materials



