

Lung Cancer - Latest Research [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 06/2014

ON THIS PAGE: You will read about the scientific research being done now to learn more about this type of cancer and how to treat it. To see other pages, use the menu on the side of your screen.

Doctors are working to learn more about lung cancer, ways to prevent it, how to best treat it, and how to provide the best care to people diagnosed with this disease. The following areas of research may include new options for patients through clinical trials. Always talk with your doctor about the diagnostic and treatment options best for you.

Personalized therapy [3]. Researchers are looking at specific features of lung tumors that can predict whether a specific chemotherapy or targeted therapy may be effective. To collect this information, patients are increasingly being asked to have additional analyses of the tumor samples taken when the disease is first diagnosed. In many patients for whom chemotherapy is recommended, the amount of tumor tissue removed during the biopsy to diagnose their cancer is not enough for these additional studies. These patients may be asked to have another biopsy to help plan treatment and, if part of a clinical trial, to help researchers find better ways to treat lung cancer.

Immunotherapy [4]. Immunotherapy, also called biologic therapy, is designed to boost the body's natural defenses to fight the cancer. It uses materials made either by the body or in a laboratory to improve, target, or restore immune system function. For example, the PD-1 pathway may be critical in the immune system's ability to control cancer growth. Blocking this pathway with PD-1 and PD-L1 antibodies has stopped or slowed the growth of NSCLC for some patients. These results are leading to more research on using this pathway to help the immune system control lung cancer growth.

Better techniques for surgery and radiation therapy. Doctors are finding ways to improve the effectiveness of surgery and radiation therapy while reducing the side effects of these procedures. For example, a current study is comparing the removal of the cancer and the nearby lung tissue with lobectomy for early-stage NSCLC. Other studies are looking at video-assisted thoracoscopic surgery (VATS), which allows the surgery to be done through smaller openings in the chest, and stereotactic radiation therapy, which is used to focus radiation more directly on the cancer and spare healthy tissue. Advances in all types of treatment will improve doctors' ability to combine chemotherapy, radiation therapy, and surgery for the treatment of all stages of lung

cancer.

Improved screening. Lung cancer is more successfully treated in its early stages, which has raised interest in screening people for lung cancer before it causes symptoms. Advances in imaging techniques, such as low-dose, helical CT scanning, are currently being researched, and may help find better ways to diagnose lung cancer early. In the future, molecular features in the blood or sputum may suggest lung cancer is present before it can be seen on a CT scan. Genetic testing to learn which people have a higher risk of lung cancer is also being researched.

Stopping tobacco use [5]. Even with the best methods for the early detection and treatment of lung cancer, the best way to save lives from lung cancer is through programs to quit cigarette smoking. For most people, lung cancer is a highly preventable disease. Even for people with lung cancer, stopping smoking lets people live longer, lowers side effects, and lessens the chance of getting a second lung cancer. Quitting smoking is hard at any time, and even more so during cancer treatment. The health care team can help make it easier to quit smoking with nicotine replacement and other techniques. Research continues into new ways to help people stop smoking.

Supportive care. Clinical trials are underway to find better ways of reducing symptoms and side effects of current lung cancer treatments in order to improve patients' comfort and quality of life.

Looking for More About the Latest Research?

If you would like additional information about the latest areas of research regarding lung cancer, explore these related items that take you outside of this guide:

- To find clinical trials specific to your diagnosis, talk with your doctor or [search online clinical trial databases now](#) [6].
- Learn about the [research announced at ASCO's Annual Meeting related to lung cancer](#) [7].
- Visit ASCO's [CancerProgress.Net](#) [8] website to learn more about the historical pace of research for lung cancer. Please note this link takes you to a separate ASCO website.

The next section addresses how to cope with the symptoms of the disease or the side effects of its treatment. Use the menu on the side of your screen to select Coping with Side Effects, or you can select another section, to continue reading this guide.

Links:

[1] <http://www.cancer.net/cancer-types/lung-cancer/latest-research>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/24522>

[4] <http://www.cancer.net/node/24726>

[5] <http://www.cancer.net/node/25003>

[6] <http://www.cancer.net/node/24878>

[7] [http://www.cancer.net/research-and-advocacy/research-](http://www.cancer.net/research-and-advocacy/research-summaries?field_page_topic_tid_2=471&field_page_topic_tid=279&date_filter%5bvalue%5d%5byear%5d=)

[summaries?field_page_topic_tid_2=471&field_page_topic_tid=279&date_filter%5bvalue%5d%5byear%5d=](http://www.cancer.net/research-and-advocacy/research-summaries?field_page_topic_tid_2=471&field_page_topic_tid=279&date_filter%5bvalue%5d%5byear%5d=)

[8] <http://www.cancerprogress.net/timeline/lung>