

## [Head and Neck Cancer - Latest Research](#) [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 05/2015

**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 head and neck 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](#) [3]. Always talk with your doctor about the diagnostic and treatment options best for you.

- **New medications.** Many studies are underway to learn more about new types of drugs that may help treat head and neck cancer.
- **Immunotherapy.** 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. These new drugs are showing promising activity in current clinical trials. Learn more about the [basics of immunotherapy](#) [4].

One active area of immunotherapy research is looking at drugs that block a protein called PD-1. PD-1 is found on the surface of T-cells, which are a type of white blood cell that directly helps the body's immune system fight disease. Because PD-1 keeps the immune system from destroying cancer cells, stopping PD-1 from working allows the immune system to better eliminate the disease. Currently researchers are studying PD-1 immunotherapy for people with recurrent and metastatic head and neck cancer in clinical

trials.

- **Combined therapies.** Most research for head and neck cancer focuses on combining different types of treatments to improve treatment effectiveness and the patient's quality of life.
- **Radiofrequency thermal ablation (RFA).** RFA is a minimally invasive treatment option that applies heat to the tumor to destroy cancer cells. It is usually used to treat a localized tumor that cannot be removed by surgery.
- **Gene therapy.** Gene therapy is a targeted form of treatment that uses biologic gene manipulation to change bits of genetic code in a person's cells. Although gene therapy is relatively new, it appears to show promising potential for treating head and neck cancer.
- **Photodynamic therapy.** In photodynamic therapy, a light-sensitive substance is injected into the tumor that stays longer in cancer cells than in healthy cells. A laser is then directed at the tumor and destroys the cancer cells. The long-term effects of photodynamic therapy are still being investigated.
- **Proton therapy [5].** Proton therapy can be added to a treatment plan to reduce the damage done to healthy tissue. This technique may help protect important structures in the head, such as the brainstem and the optic nerves that run to the eyes, when used for nasopharyngeal cancer, chordoma, or chondrosarcoma. A chordoma is a rare tumor that usually occurs in the spine or the base of the skull. Chondrosarcoma is a tumor that develops in cartilage.
- **HPV [6].** Researchers continue to investigate the link between HPV and head and neck cancer. These studies are evaluating why HPV raises the risk of the disease and how the virus may affect the outcome of some treatments. Studies are also underway to determine whether the HPV vaccine that is currently used to prevent cervical, vaginal, vulvar, and anal cancer is effective at preventing some head and neck cancers as well.
- **Palliative care.** Clinical trials are underway to find better ways of reducing symptoms and side effects of current head and neck 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 head and neck 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](#) [7].
- Review research announced at the [2013, 2014, and 2015 ASCO annual meetings](#) [8].
- Visit ASCO's [CancerProgress.Net](#) [9] website to learn more about the historical pace of research for head and neck cancer. Please note this link takes you to a separate ASCO website.
- Visit the website of the [Conquer Cancer Foundation](#) [10] to find out how to help support research for every cancer type. Please note this link takes you to a separate ASCO website.

*The [next section in this guide is Coping with Side Effects](#) [11], and it offers some guidance in how to cope with the physical, emotional, and social changes that cancer and its treatment can bring. Or, use the menu on the side of your screen to choose another section to continue reading this guide.*

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## Links

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

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

[3] <http://www.cancer.net/node/18916>

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

[5] <http://www.cancer.net/node/24521>

[6] <http://www.cancer.net/node/24561>

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

[8] [http://www.cancer.net/research-and-advocacy/research-summaries?field\\_page\\_topic\\_tid\\_2=All&field\\_page\\_topic\\_tid=275&date\\_filter%5bvalue%5d%5byear%5d=](http://www.cancer.net/research-and-advocacy/research-summaries?field_page_topic_tid_2=All&field_page_topic_tid=275&date_filter%5bvalue%5d%5byear%5d=)

[9] <http://www.cancerprogress.net/timeline/head-and-neck-cancer>

[10] <http://www.conquercancerfoundation.org/research-results>

[11] <http://www.cancer.net/node/18917>