Thyroid Cancer - Latest Research [1]

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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 thyroid 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.

Updated surgical methods.

- New surgical procedures, including video-assisted thyroid surgery, are being developed that are aimed at reducing scarring on the skin and recovery periods. This includes surgery that uses special robotic tools to reach the thyroid gland through an incision (cut) in your armpit. Currently, this type of endoscopic surger [4] y has limited availability, and not all centers have the expertise to perform these types of procedures. In addition, this type of surgery is not recommended for every patient. Talk with your surgeon about the surgical options best for you.

- A study is underway to determine if examining a person?s sentinel lymph node is helpful in diagnosing and staging small papillary thyroid cancer. In this procedure, the surgeon finds and removes the sentinel (first) lymph node closest to the tumor for examination.

New treatments. Clinical trials for thyroid cancer include testing new medications, including drugs known as targeted therapy. As explained in Treatment Options [5], targeted therapy [6] is a treatment that targets specific genes, proteins, or the tissue environment that contributes to cancer growth and survival. In addition, researchers are looking at new combinations of chemotherapy and other treatments.

- Radio-labeled antibodies, an antibody made in the laboratory attached to a radioactive substance, are being tested for MTC.

- Also for MTC, researchers continue to study the drugs vandetanib and cabozantinib (see Treatment Options [5]

), including targeted therapy use with children who have advanced hereditary MTC.

- For anaplastic thyroid cancer, clinical trials are studying combination chemotherapy. One study is comparing the results of either carboplatin (Paraplatin) and paclitaxel (Taxol) alone or with an experimental drug, combretastatin A4 phosphate (CA4P, fosbretabulin, Zybrestat).

- For later-stage differentiated thyroid cancer that does not respond to surgery and/or I-131 treatment, or stops responding, clinical trials are studying several targeted therapies called vascular endothelial growth factor (VEGF) inhibitors, which may block the formation of new blood vessels that are necessary for tumor growth. VEGF inhibitors being studied include axitinib, nintedanib, and pazopanib.

  Another VEGF inhibitor, AMG 706 or motesanib diphosphate, was shown in a phase II clinical trial to shrink tumors or delay the growth of them in some people with advanced thyroid cancer. Also, in patients whose tumors showed a genetic mutation known as *BRAF V600E*, the tumors responded better to the investigational drug. Dabrafenib and trametinib are also being researched for those tumors with the *BRAF* genetic mutation.

- New approaches being tested for thyroid cancer that doesn?t respond to I-131. One drug being studied is called selumetinib (AZD6244), which is being tested to see if it helps boost I-131 absorption in treating advanced thyroid cancer. Other drugs being looked at include the combination of temsirolimus and sorafenib.

- For follicular and anaplastic thyroid cancers, valproic acid is being researched as a possible treatment.

- Investigations are underway to fine-tune diagnosis and predict treatment outcomes based on the molecular biology (the study of the structure and function of cells at the molecular level) of the tumor.

- Researchers continue to investigate the best use of I-131, including different dosages, in treating thyroid cancer. In one study, researchers are looking at whether taking a drug called sunitinib (Sutent) after I-131 is helpful to those with advanced disease.

- The genetic testing and the refinement of *RET* oncogenes (see Risk Factors [7]) is an ongoing area of active research that will improve selection of treatment and give more precise prognosis.

Data collection. There is an effort to create a volunteer registry of people with a history of thyroid cancer, to help doctors research this disease in the future. Participants are asked to provide information, tissue samples, and/or blood and urine samples.

Palliative care. Clinical trials are underway to find better ways of reducing symptoms and side effects of current thyroid 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 thyroid 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 [8].
- Visit ASCO?s *CancerProgress.Net [9]* website to learn more about the historical pace of research for thyroid 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.*

Links:
[1] http://www.cancer.net/cancer-types/thyroid-cancer/latest-research
[2] http://www.cancer.net/about-us
[3] http://www.cancer.net/node/19301
[4] http://www.cancer.net/node/24511
[5] http://www.cancer.net/node/19300
[6] http://www.cancer.net/node/24729
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[9] http://cancerprogress.net/timeline/major-milestones-against-cancer
[10] http://www.conquercancerfoundation.org/get-involved
[11] http://www.cancer.net/node/19302