

## It's not cancer: Removing cancer label from some conditions may greatly improve care

In 2015, about 10,000 people were diagnosed with a specific type of thyroid cancer. In 2016 that number will be zero. This marked reduction isn't the result of a high-power prevention campaign or early detection and treatments. It was a change of definition.

Patients with encapsulated follicular variant of papillary thyroid carcinoma should not undergo radiation, thyroidectomy or lifelong follow up for the condition, a panel of experts writing in [JAMA Oncology](#), said. Because their prognosis is as good with or without the expensive and painful treatments, their tumors aren't cancer. The experts said the new definition for the condition will affect about 45,000 patients each year, which includes the newly diagnosed and those currently undergoing follow up treatment.

The reclassification is the first in decades. But other groups are working to rename certain types of early breast and prostate tumors in the same vein. It's currently under debate whether ductal carcinoma in situ (DCIS), an early and often slow-growing breast cancer, is a cancer at all, or rather a benign cellular abnormality, Sharon Begley writes at [STAT](#):

Surgery for DCIS has not reduced the incidence of invasive breast cancers, casting doubt on the conventional wisdom that these are precursors to real malignancies. A 2015 study found that, six years out, 98.6 percent of women who had surgery were still alive, versus 98.8 percent of those who did not, adding support to the idea that DCIS can be managed with active surveillance.

It might seem unbelievable that a tumors we treated as cancer for decades are actually be harmless. But that's part of cancer's mystery. The disease isn't caused by a virus or bacteria. It's not like a clogged artery or failing kidney. It's our own cells that due to age or mutation or exposure to toxins start growing uncontrollably and don't stop. Our immune system has [mechanisms](#) to spot and block this sort of growth, but cancers often develop a way around those systems. Normally, our immune systems can identify micro-cancers, tag them and clear them from the body. But once a tumor reaches a certain size or hijacks one of these molecular tagging processes, our built in cancer defenses no longer work.

In the last five years scientists have homed in on these immunological processes as a way to treat disease. The PD-1 inhibitor that famously sent President [Jimmy Carter's cancer](#) into remission is one of the best-studied immunotherapies for cancer. The drug shuts down one of the natural inhibitors of the immune system, which turns up the natural cancer-fighting process of the immune system. The drugs don't work for everyone. Like most of these highly-targeted drugs, it only works if a person's cancer is susceptible. That makes gene testing even more important, to match patients with treatments. Now researchers are testing multiple immunotherapies at the same time.

The reclassification of the early thyroid tumor is expected to save about \$5,000 per patient in radiation costs and at least that much more because people will not need the rigorous follow up that thyroid cancer

patients require for the rest of their lifetimes. And the psychological benefit of having 'not cancer' will be significant, from the [New York Times](#):

Dr. [Yuri] Nikiforov, University of Pittsburgh pathologist, says he owes it to patients with reclassified tumors to tell them they never had cancer after all. At the University of Pittsburgh Medical Center, he and others are going to start reviewing medical records and pathology reports to identify previous patients and contact them. He estimates there have been about 50 to 100 each year at the medical center. They no longer have to go back for checkups. They lose the shadow of cancer that the diagnosis hung over their lives.

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