

## **Neuroendocrine Tumor - Overview [1]**

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 04/2014

**ON THIS PAGE:** You will find some basic information about this disease and the parts of the body it may affect. This is the first page of Cancer.Net's Guide to Neuroendocrine Tumor. To see other pages, use the menu on the side of your screen. Think of that menu as a roadmap to this full guide.

### **About the endocrine system and endocrine tumors**

The endocrine system is made up of cells that make hormones. Hormones are chemical substances that are produced by the body and carried through the bloodstream to have a specific effect on the activity of other organs or cells in the body.

A tumor begins when normal cells change and grow uncontrollably, forming a mass. A tumor can be cancerous or benign. A cancerous tumor is malignant, meaning it can spread to other parts of the body if it is not found early and treated. A benign tumor means the tumor will not spread and usually can be removed without it causing much harm.

An endocrine tumor is a mass that begins in the parts of the body that produce and release hormones. Because an endocrine tumor develops from cells that produce hormones, the tumor itself can produce hormones and cause serious illness.

### **About neuroendocrine tumors**

A neuroendocrine tumor begins in the hormone-producing cells of the body's neuroendocrine system, which is made up of cells that are a cross between traditional hormone-producing endocrine cells and nerve cells. Neuroendocrine cells are found throughout the body in organs

such as the lungs and gastrointestinal tract, including the stomach and intestines. They perform specific functions, such as regulating the air and blood flow through the lungs and controlling the speed at which food is moved through the gastrointestinal tract.

## Types of neuroendocrine tumors

There are many types of neuroendocrine tumors. This section focuses on three specific types: pheochromocytoma, Merkel cell cancer, and neuroendocrine carcinoma. Other types of cancer that begin in hormone-producing cells are described in their own sections on Cancer.Net, including [endocrine tumors](#) [3], [carcinoid tumors](#) [4], [thymoma](#) [5], [thyroid cancer](#) [6], and [islet cell tumors](#) [7].

**Pheochromocytoma.** Pheochromocytoma is a rare tumor that begins in the chromaffin cells of the adrenal gland. These specialized cells release the hormone adrenaline during times of stress. Pheochromocytoma most often occurs in the adrenal medulla, the area inside the adrenal glands. This type of tumor increases the production of the hormones adrenaline and noradrenaline, which increase blood pressure and heart rate. Even though a pheochromocytoma is usually benign, it may still be life-threatening because the tumor may release large amounts of adrenaline into the bloodstream after injury. Eighty percent (80%) of people with pheochromocytoma have a tumor on only one adrenal gland, 10% have tumors on both glands, and 10% have a tumor outside the adrenal glands.

**Merkel cell cancer.** Merkel cell cancer, also called neuroendocrine carcinoma of the skin or trabular cancer, is a highly aggressive (fast-growing), rare cancer. It starts in hormone-producing cells just beneath the skin and in the hair follicles, and it is found in the head and neck region.

**Neuroendocrine carcinoma.** Approximately 60% of neuroendocrine tumors cannot be described as a specific type of cancer other than neuroendocrine carcinoma. Neuroendocrine carcinoma can start in a number of places in the body, including the lungs, brain, and gastrointestinal tract.

*To continue reading this guide, use the menu on the side of your screen to select another section.*

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### Links

[1] <http://www.cancer.net/cancer-types/neuroendocrine-tumor/overview>

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

[3] <http://www.cancer.net/node/18743>

[4] <http://www.cancer.net/node/18645>

[5] <http://www.cancer.net/node/19673>

[6] <http://www.cancer.net/node/19293>

[7] <http://www.cancer.net/node/18941>