

## Anal Cancer - Stages and Grades [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 03/2014

**ON THIS PAGE:** You will learn about how doctors describe a cancer's growth or spread. This is called the stage. In addition, you can read about how doctors evaluate and compare cancer cells to normal cells, called grading. To see other pages, use the menu on the side of your screen.

Staging is a way of describing where the cancer is located, if or where it has spread, and whether it is affecting other parts of the body. Doctors use diagnostic tests to find out the cancer's stage, so staging may not be complete until all of the tests are finished. Knowing the stage helps the doctor to decide what kind of treatment is best and can help predict a patient's prognosis, which is the chance of recovery. There are different stage descriptions for different types of cancers.

One tool that doctors use to describe the stage is the TNM system. TNM is an abbreviation for tumor (T), node (N), and metastasis (M). Doctors look at these three factors to determine the stage of cancer:

- How large is the primary tumor and where is it located? (**Tumor, T**)
- Has the tumor spread to the lymph nodes? (**Node, N**)
- Has the cancer metastasized to other parts of the body? (**Metastasis, M**)

The results are combined to determine the stage of cancer for each person. There are five stages of anal cancer: stage 0 (zero) and stages I through IV (one through four). The stage provides a common way of describing the cancer, so doctors can work together to plan the best treatments.

Here are more details on each part of the TNM system for anal cancer:

**Tumor.** Using the TNM system, the "T" plus a letter or number (0 to 4) is used to describe the size and location of the tumor. Some stages are also divided into smaller groups that help describe the tumor in even more detail. Specific tumor stage information is listed below:

**TX:** The primary tumor cannot be evaluated.

**T0:** There is no tumor.

**Tis:** Carcinoma in situ (early cancer that has not spread to other tissue) is present.

**T1:** The tumor is no larger than 2 centimeters (cm).

**T2:** The tumor is larger than 2 cm but not larger than 5 cm.

**T3:** The tumor is larger than 5 cm.

**T4:** The tumor has invaded other organs, such as the urethra, bladder, or a woman's vagina.

**Node.** The ?N? in the TNM staging system stands for lymph nodes, the tiny, bean-shaped organs that help fight infection. Lymph nodes near the anus are called regional lymph nodes. Lymph nodes in other parts of the body are called distant lymph nodes.

**NX:** Regional lymph nodes cannot be evaluated.

**N0 (N plus zero):** There is no regional lymph node metastasis.

**N1:** Cancer had spread to the perirectal (around the rectum) lymph nodes.

**N2:** Cancer has spread to the internal iliac (pelvic) and/or the inguinal (groin) lymph nodes on the same side of the body.

**N3:** Cancer had spread to the perirectal and inguinal lymph nodes and/or the internal iliac and/or inguinal lymph nodes on both sides of the body.

**Distant metastasis.** The ?M? in the TNM system indicates whether the cancer has spread to other parts of the body.

**MX:** Distant metastasis cannot be evaluated.

**M0 (M plus zero):** There is no distant metastasis.

**M1:** There is metastasis to other parts of the body.

### **Cancer stage grouping**

Doctors assign the stage of the cancer by combining the T, N, and M classifications.

**Stage 0:** Abnormal cells are in the first layer of the lining of the anus only. The abnormal cells may become cancer. This stage is also called carcinoma in situ (Tis, N0, M0).

**Stage I:** The tumor is no larger than 2 cm and has not spread to the lymph nodes or other parts of the body (T1, N0, M0).

**Stage II:** The tumor is larger than 2 cm and has not spread to the lymph nodes or other parts of the body (T2 or T3, N0, M0).

**Stage IIIA:** The tumor may be any size and has spread to either the nearby lymph nodes or to

organs, such as the urethra, bladder, or a woman's vagina (T1 or T2 or T3, N1, M0; or T4, N0, M0).

**Stage IIIB:** The tumor has invaded other nearby organs, but lymph node spread is limited to the area around the rectum; there is no distant spread. Or, the tumor may be of any size; lymph node spread can be local or distant, but there is no disease spread to distant organs (T4, N1, M0; or any T, N2 or N3, M0).

**Stage IV:** The tumor may be any size and has spread to the lymph nodes and to distant parts of the body (any T, any N, M1).

**Recurrent:** Recurrent cancer is cancer that has come back after treatment. If there is a recurrence, the cancer may need to be staged again (called re-staging) using the system above.

## Grading

**Grade.** Doctors also describe this type of cancer by its grade (G), which describes how much cancer cells look like healthy cells when viewed under a microscope. The doctor compares the cancerous tissue with healthy tissue. Healthy tissue usually contains many different types of cells grouped together. If the cancer looks similar to healthy tissue and contains different cell groupings, it is called differentiated or a low-grade tumor. If the cancerous tissue looks very different from healthy tissue, it is called poorly differentiated or a high-grade tumor. The cancer's grade can help the doctor predict how quickly the cancer will spread. In general, the lower the tumor's grade, the better the prognosis.

**GX:** The tumor grade cannot be identified.

**G1:** The cells look more like normal tissue cells (well differentiated).

**G2:** The cells are somewhat different from normal cells (moderately differentiated).

**G3:** The cells do not look like normal cells (poorly differentiated).

**G4:** The cells barely resemble normal cells (undifferentiated).

*Used with permission of the American Joint Committee on Cancer (AJCC), Chicago, Illinois. The original source for this material is the AJCC Cancer Staging Manual, Seventh Edition (2010) published by Springer-Verlag New York, [www.cancerstaging.net](http://www.cancerstaging.net)[3].*

*Information about the cancer's stage will help the doctor recommend a treatment plan. The next section helps explain the treatment options for this type of cancer. Use the menu on the side of your screen to select Treatment Options, or you can select another section, to continue reading this guide.*

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**Links:**

[1] <http://www.cancer.net/cancer-types/anal-cancer/stages-and-grades>

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

[3] <http://www.cancerstaging.net/>