

## Oral and Oropharyngeal Cancer - Stages and Grades [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 11/2013

**ON THIS PAGE:** You will learn about how doctors describe a cancer's growth or spread. This is called the stage. To see other pages, use the menu on the side of your screen.

Staging is a way of describing where a cancer is located, if or where it has spread, and whether it is affecting other parts of the body. Doctors use diagnostic tests to determine the cancer's stage, so staging may not be complete until all 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. There are different stage descriptions for different types of cancer.

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: 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 oral and oropharyngeal 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:** No evidence of a tumor is found.

**Tis:** Describes a stage called carcinoma (cancer) in situ. This is a very early cancer where cancer cells are found only in one layer of tissue.

**T1:** The tumor is 2 centimeters (cm) at its greatest dimension.

**T2:** The tumor is larger than 2 cm, but not larger than 4 cm.

**T3:** The tumor is larger than 4 cm.

**T4:** Describes any of the following conditions:

**T4a (lip):** The tumor began on the lip but has invaded adjacent tissue, such as the bone floor of the mouth or the skin of the face.

**T4a (oral cavity):** The tumor has invaded through the cortical bone deep into structures in the mouth, such as the muscle of the tongue or into the sinuses.

**T4a (oropharynx):** The tumor has spread to the larynx, tongue, or jawbone.

**T4b (oral cavity):** The tumor has invaded the base of the skull and/or encases the internal arteries.

**T4b (oropharynx):** The tumor has moved into the nasopharynx, skull base, or nearby arteries and muscles.

**Node.** The "N" in the TNM staging system is for lymph nodes, the tiny, bean-shaped organs that help fight infection. Lymph nodes near where the cancer started are called regional lymph nodes. Lymph nodes in other parts of the body are called distant lymph nodes. There are many lymph nodes in the head and neck area, and careful assessment of lymph nodes is an important part of staging.

**NX:** The regional lymph nodes cannot be evaluated.

**N0:** There is no evidence of cancer in the regional lymph nodes.

**N1:** The cancer has spread to a single lymph node on the same side as the primary tumor, and the cancer found in the node is 3 cm or smaller.

**N2:** Describes any of these conditions:

**N2a:** Cancer has spread to a single lymph node on the same side as the primary tumor and is larger than 3 cm, but not larger than 6 cm.

**N2b:** Cancer has spread to more than one lymph node on the same side as the primary tumor, and none measure larger than 6 cm.

**N2c:** Cancer has spread to more than one lymph node on either side of the body, and none measure larger than 6 cm.

**N3:** The cancer found in the lymph nodes is larger than 6 cm.

**Distant metastasis.** The "M" in the TNM system describes cancer that has spread to other parts

of the body.

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

**M0:** Cancer has not spread to other parts of the body.

**M1:** Cancer has spread 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:** Describes a carcinoma in situ (Tis) with no spread to lymph nodes (N0) or distant metastasis (M0).

**Stage I:** Describes a small tumor (T1) with no spread to lymph nodes (N0) and no distant metastasis (M0).

**Stage II:** Describes a tumor that is smaller than 4 cm (T2) and has not spread to lymph nodes (N0) or to distant parts of the body (M0).

**Stage III:** Describes a larger tumor (T3) with no spread to lymph nodes (N0) or metastasis (M0), as well as smaller tumors (T1, T2) that have spread to regional lymph nodes (N1) but have no sign of metastasis (M0).

**Stage IVA:** Describes any invasive tumor (T4a) with either no lymph node involvement (N0) or spread to only a single, same-sided lymph node (N1) but no metastasis (M0). It is also used for any tumor (any T) with more significant nodal involvement (N2) but no metastasis (M0).

**Stage IVB:** Describes any tumor (any T) with extensive nodal involvement (N3) but no metastasis (M0).

**Stage IVC:** Indicates there is evidence of distant spread (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.

**Tumor grade (G).** Doctors also describe a primary tumor by its grade, which is determined by using a microscope to examine tissue from a tumor (called a histologic examination). The doctor compares the tumor tissue with healthy tissue, and the grade describes how closely the cancer cells resemble normal tissue under a microscope. Normal tissue contains many different types of cells grouped together, which is called differentiated. Tissue from tumors usually has cells that look more alike each other (called poorly differentiated). Generally, the more differentiated the tissue, the better the prognosis. A tumor's grade is described using the letter "G" and a number.

**GX:** The grade cannot be evaluated.

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

**G2:** The cells are only moderately differentiated.

**G3 and G4:** The cells don't resemble normal tissue (poorly differentiated).

*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/oral-and-oropharyngeal-cancer/stages-and-grades>

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

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