Understanding the Pathology Report

The following terms and abbreviations are common to most pathology reports. An understanding of their meanings will help patients better understand their diagnosis and pathology.

The first two lists contain breast cancer ***histologic*** and ***histopathologic classifications*** [1-2]

Histology is the study of the microscopic structure of tissue.

Ductal Carcinoma

Intraductal (in situ)

Invasive with predominant intraductal component

Invasive, NOS (not otherwise specified)

Comedo

Inflammatory

Medullary with lymphocytic infiltrate

Mucinous (colloid)

Papillary

Scirrhous

Tubular

Other

Lobular Carcinoma

In situ

Invasive with predominant in situ component

Invasive

Nipple Carcinoma

Paget's disease, NOS (not otherwise specified)

Paget's disease with intraductal carcinoma

Paget's disease with invasive ductal carcinoma

Undifferentiated Carcinoma

Cystosarcoma phyllodes

Inflammatory carcinoma

Other

Source:

1. *Physician Data Query* (*PDQ*) January 24, 1994, modified

2. Breast. In: *American Joint Committee on Cancer: Manual for Staging of Cancer.* Philadelphia: JB Lippincott Co., 4th Ed., 1992, pages 149-154, modified.

The following is a list of breast cancer histologic classifications:

Histopathologic Grade {G} [3]

GX = Grade cannot be assessed

G1 = Well differentiated

G2 = Moderately differentiated

G3 = Poorly differentiated

G4 = Undifferentiated

Source:

3. World Health Organization (WHO) modified.

Staging

The following list contains staging information. ***Staging*** is the process of classifying tumors, especially malignant tumors, based on the histologic and histopathologic information previously described.

Staging helps to determine the following information about a tumor:

Degree of cell differentiation

Potential for responding to treatment

Prognosis

Treatment decisions are influenced in part according to staging categories.

The main factors influencing treatment decisions include:

- Lymph node status
- Estrogen receptor (ER) and progesterone receptor (PR) receptor levels in the tumor tissue
- Menopausal status (pre-,peri-,post-menopausal)

- Overall health status of the patient

Stages are defined by the ***TNM classification*** [1], which is the most widely accepted staging system used to determine the extent and prognosis of tumors. TNM stands for **tumor, node** and **metastasis.** Numbers are added to each of these categories to indicate the degree of dissemination or spread of disease.

Dissemination is a term applied to disease organisms scattered or distributed throughout an organ or body. [4]

Source and Suggested Resource:

1. Physician Data Query (PDQ) January 24, 1994, modified
2. Taber's Cyclopedic Medical Dictionary, 1993, F.A. Davis Company, modified.

TNM Definitions [1]

Primary Tumor (T)

TX = Primary tumor cannot be assessed

T0 = No evidence of primary tumor

Tis = Carcinoma in situ, intraductal carcinoma, lobular carcinoma in situ *or* Paget's disease of the nipple with no associated tumor mass. (Paget's disease associated with tumor mass is classified according to the size of the tumor.)

T1 = Tumor size of 2.0 centimeter (cm) or less in greatest dimension. (Dimpling of the skin, nipple retraction or other skin changes may occur in T1 without changing the classification.)

T1a = 0.5 cm but not more than 1.0 cm in greatest dimension

T1b = More than 0.5 cm but not more than 2.0 cm in greatest dimension

T1c = More than 1.0 cm but not more than 2.0 cm in greatest dimension

T2 = Tumor more than 2.0 cm but not more than 5.0 cm in greatest dimension. (Dimpling of the skin, nipple retraction or other skin changes may occur in T2 without changing the classification.)

T3 = Tumor more than 5.0 cm in greatest dimension. (Dimpling of the skin, nipple retraction or other skin changes may occur in T3 without changing the classification.)

T4 = Tumor of any size with direct extension to chest wall or skin (chest wall includes ribs, intercostal muscles and serratus anterior muscle, but not pectoral muscle).

T4a = Extension to chest wall

T4b = Edema, ulceration of the skin of the breast or satellite skin nodules confined to the same breast

T4c = Both T4a and T4b

T4d = Inflammatory carcinoma

Source: 1. Physician Data Query (PDQ) January 24, 1994, modified

Regional Lymph Nodes (N)

NX = Regional lymph nodes cannot be assessed (may have been previously removed)

N0 = No regional lymph node metastasis

N1 = Metastasis to movable ipsilateral* axillary lymph node(s)

N2 = Metastasis to ipsilateral lymph node(s) fixed to one another or to other structures

N3 = Metastasis to ipsilateral internal mammary lymph node(s)

** Ipsilateral lymph node(s) = on the same side; affecting the same side of the body*

Distant Metastasis (M)

MX = Presence of distant metastasis cannot be assessed

M0 = No distant metastasis

M1 = Distant metastasis present (includes metastasis to ipsilateral supraclavicular* lymph nodes)

** Supraclavicular lymph nodes = located above the clavicle (collarbone)*

Source:

1. Physician Data Query (PDQ) January 24, 1994, modified

The four (4) stages of breast cancer are defined by the following TNM Groups:

Stage Grouping of Primary Tumor Regional Nodes and Distant Metastasis by

TNM Groups

Stage 0 (in situ)

Tis, N0, M0

Stage I

T1, N0, M0

Stage II

Stage IIA

T0, N1, M0

T1, N1, M0

T2, N0, M0

Stage IIB

T2, N1, M0

T3, N0, M0

Stage III

Stage IIIA

T0, N2, M0

T1, N2, M0

T2, N2, M0

T3, N1, M0

T3, N2, M0

Stage IIIB

T4, any N, M0

Any T, N3, M0

Stage IV (Inflammatory)

T4d