Staging and Classification

After a diagnosis of cancer is made, anatomic staging is performed to describe the rate of growth and the extent of the disease. The practice of dividing cancer cases into groups according to stages arose from the fact that survival rates were higher for cases where the disease was localized than when the disease had spread beyond the organ or site of origin. Staging helps to establish treatment options, predict life expectancy, and determine the prognosis for a complete recovery.

Factors noted in staging include:

- Location and size of the primary site of the tumor
- Extent of lymph node involvement
- Presence or absence of metastasis
- Type of tumor and the tumor-host relationship

Tumors are classified according to the American Joint Committee on Cancer using the TNM Clinical Classification System. In this system, T stands for tumor, N stands for node, and M stands for metastasis. This system is based on criteria for classification by specific anatomic sites.

Staging of cancer

is determined and noted as Stages 0 to IV. This system is used to describe the extent of the disease, for example, 0 indicates undetectable, and I, II, III, and IV indicate a progressive increase in the size or the extent of the disease. A code letter or number that represents a particular designation or description follows each letter in the TNM 20

Classification System.

The TNM Clinical Classification System is represented as follows: Tumor (T) codes:
TX: Cannot be assessed
T0: No evidence of a primary tumor
Tis: Carcinoma in situ
T1, T2, T3, and T4: Increasing size, local extent, or both, of primary tumor

Regional lymph node (N) codes:

- NX: Cannot be assessed
- N0: No metastasis
- N1, N2, and N3: Increasing involvement of regional lymph nodes

The spread of cancer cells from the primary site, or site of origin, is called metastasis. Cancer cells can spread throughout the body through the bloodstream, the lymphatic system, or through local invasion and infiltration into surrounding tissues.

Metastasis (M) codes:

- MX: Cannot be assessed
- M0: No distant metastasis
- M1: Distant metastasis

Combining the TNM Clinical Classification codes leads to the actual tissue staging.

The following are the stages of cancer:

Stage	Code	Description
Stage 0	Tis	Cancer in situ (encapsulated)
Stage I	T2, N0, M0	Cancer is limited to original site or organ
Stage II	T2, N1, M0	Cancer has spread to surrounding tissue in same anatomic region
Stage III	T3, N2, M0	High probability of metastatic disease
Stage IV	T4, N3, M1	Metastatic spread to other anatomic regions