**Breast Cancer Staging**

**American Joint Committee on Cancer (AJCC) Cancer Staging Manual, Seventh Edition (2010), per Up-To-Date**

**NCI Review – Include Stage I-IIIA (shaded)**

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| Breast Cancer Staging | | | |
|  | **Primary Tumor** | **Regional Lymph Nodes** | **Distant Metastasis** |
| 0 | Tis | N0 | M0 |
| IA | T1 ¥¥ | N0 | M0 |
| IB | T0 | N1mi | M0 |
| T1 ¥¥ | N1mi | M0 |
| IIA | T0 | N1 ‡‡ | M0 |
| T1 ¥¥ | N1 ‡‡ | M0 |
| T2 | N0 | M0 |
| IIB | T2 | N1 | M0 |
| T3 | N0 | M0 |
| IIIA | T0 | N2 | M0 |
| T1 ¥¥ | N2 | M0 |
| T2 | N2 | M0 |
| T3 | N1 | M0 |
| T3 | N2 | M0 |
| IIIB | T4 | N0 | M0 |
| T4 | N1 | M0 |
| T4 | N2 | M0 |
| IIIC | Any T | N3 | M0 |
| IV | Any T | Any N | M1 |

¥¥ T1 includes T1mi.  
‡‡ T0 and T1 tumors with nodal micrometastases only are excluded from Stage IIA and are classified Stage IB.

§§ Anatomic stage:  
- M0 includes M0(i+).  
- The designation pM0 is not valid; any M0 should be clinical.  
- If a patient presents with M1 prior to neoadjuvant systemic therapy, the stage is considered Stage IV and remains Stage IV regardless of response to neoadjuvant therapy.  
- Stage designation may be changed if postsurgical imaging studies reveal the presence of distant metastases, provided that the studies are carried out within 4 months of diagnosis in the absence of disease progression and provided that the patient has not received neoadjuvant therapy.  
- Postneoadjuvant therapy is designated with the "y" prefix. For patients with a pathologic complete response (pCR) to neoadjuvant therapy, no stage group is assigned (ie, yT0N0M0).

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| Primary tumor (T)\*•Δ | |
| TX | Primary tumor cannot be assessed |
| T0 | No evidence of primary tumor |
| Tis | Carcinoma in situ |
| Tis (DCIS) | Ductal carcinoma in situ |
| Tis (LCIS) | Lobular carcinoma in situ |
| Tis (Paget's) | Paget's disease (Paget disease) of the nipple NOT associated with invasive carcinoma and/or carcinoma in situ (DCIS and/or LCIS) in the underlying breast parenchyma. Carcinomas in the breast parenchyma associated with Paget's disease are categorized based on the size and characteristics of the parenchymal disease, although the presence of Paget's disease should still be noted. |
| T1 | Tumor ≤20 mm in greatest dimension |
| T1mi | Tumor ≤1 mm in greatest dimension |
| T1a | Tumor >1 mm but ≤5 mm in greatest dimension |
| T1b | Tumor >5 mm but ≤10 mm in greatest dimension |
| T1c | Tumor >10 mm but ≤20 mm in greatest dimension |
| T2 | Tumor >20 mm but ≤50 mm in greatest dimension |
| T3 | Tumor >50 mm in greatest dimension |
| T4◊ | Tumor of any size with direct extension to the chest wall and/or to the skin (ulceration or skin nodules) |
| T4a | Extension to the chest wall, not including only pectoralis muscle adherence/invasion |
| T4b | Ulceration and/or ipsilateral satellite nodules and/or edema (including peau d'orange) of the skin, which do not meet the criteria for inflammatory carcinoma |
| T4c | Both T4a and T4b |
| T4d | Inflammatory carcinoma§ |
| Posttreatment *ypT*.¥ The use of neoadjuvant therapy does not change the clinical (pretreatment) stage. Clinical (pretreatment) T will be defined by clinical and radiographic findings, while y pathologic (posttreatment) T will be determined by pathologic size and extension. The ypT will be measured as the largest single focus of invasive tumor, with the modifier "m" indicating multiple foci. The measurement of the largest tumor focus should not include areas of fibrosis within the tumor bed. | |

\* The T classification of the primary tumor is the same regardless of whether it is based on clinical or pathologic criteria, or both. Designation should be made with the subscript "c" or "p" modifier to indicate whether the T classification was determined by clinical (physical examination or radiologic) or pathologic measurements, respectively. In general, pathologic determination should take precedence over clinical determination of T size.  
• Size should be measured to the nearest millimeter. If the tumor size is slightly less than or greater than a cutoff for a given T classification, it is recommended that the size be rounded to the millimeter reading that is closest to the cutoff.  
Δ Multiple simultaneous ipsilateral primary carcinomas are defined as infiltrating carcinomas in the same breast, which are grossly or macroscopically distinct and measurable. T stage is based only on the largest tumor. The presence and sizes of the smaller tumor(s) should be recorded using the "(m)" modifier.

¥ If a cancer was designated as inflammatory before neoadjuvant chemotherapy, the patient will be designated to have inflammatory breast cancer throughout, even if the patient has complete resolution of inflammatory findings.

◊ Invasion of the dermis alone does not qualify as T4; dimpling of the skin, nipple retraction, or any other skin change except those described under T4b and T4d may occur in T1, T2, or T3 without changing the classification. The chest wall includes ribs, intercostal muscles, and serratus anterior muscle, but not the pectoralis muscles.

§ Inflammatory carcinoma is a clinical-pathologic entity characterized by diffuse erythema and edema (peau d'orange) involving a third or more of the skin of the breast. These skin changes are due to lymphedema caused by tumor emboli within dermal lymphatics. Although dermal lymphatic involvement supports the diagnosis of inflammatory breast cancer, it is neither necessary nor sufficient, in the absence of classical clinical findings, for the diagnosis of inflammatory breast cancer.

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| Regional lymph nodes (N) | |
| Clinical | |
| NX | Regional lymph nodes cannot be assessed (eg, previously removed) |
| N0 | No regional lymph node metastases |
| N1 | Metastases to movable ipsilateral level I, II axillary lymph node(s) |
| N2 | Metastases in ipsilateral level I, II axillary lymph nodes that are clinically fixed or matted; or in clinically detected‡ ipsilateral internal mammary nodes in the *absence* of clinically evident axillary lymph node metastases |
| N2a | Metastases in ipsilateral level I, II axillary lymph nodes fixed to one another (matted) or to other structures |
| N2b | Metastases only in clinically detected‡ ipsilateral internal mammary nodes and in the *absence* of clinically evident level I, II axillary lymph node metastases |
| N3 | Metastases in ipsilateral infraclavicular (level III axillary) lymph node(s) with or without level I, II axillary lymph node involvement; or in clinically detected‡ ipsilateral internal mammary lymph node(s) with clinically evident level I, II axillary lymph node metastases; or metastases in ipsilateral supraclavicular lymph node(s) with or without axillary or internal mammary lymph node involvement |
| N3a | Metastases in ipsilateral infraclavicular lymph node(s) |
| N3b | Metastases in ipsilateral internal mammary lymph node(s) and axillary lymph node(s) |
| N3c | Metastases in ipsilateral supraclavicular lymph node(s) |
| Pathologic (pN)†\*\* | |
| pNX | Regional lymph nodes cannot be assessed (eg, previously removed, or not removed for pathologic study) |
| pN0 | No regional lymph node metastasis identified histologically |
| pN0(i-) | No regional lymph node metastases histologically, negative immunohistochemistry (IHC) |
| pN0(i+) | Malignant cells in regional lymph node(s) no greater than 0.2 mm (detected by H&E or IHC including isolated tumor cell clusters (ITC)) |
| pN0(mol-) | No regional lymph node metastases histologically, negative molecular findings (RT-PCR)•• |
| pN0(mol+) | Positive molecular findings (RT-PCR)••, but no regional lymph node metastases detected by histology or IHC |
| pN1 | Micrometastases; or metastases in 1-3 axillary lymph nodes; and/or in internal mammary nodes with metastases detected by sentinel lymph node biopsy but not clinically detected ΔΔ |
| pN1mi | Micrometastases (greater than 0.2 mm and/or more than 200 cells, but none greater than 2.0 mm) |
| pN1a | Metastases in 1-3 axillary lymph nodes, at least one metastasis greater than 2.0 mm |
| pN1b | Metastases in internal mammary nodes with micrometastases or macrometastases detected by sentinel lymph node biopsy but not clinically detected ΔΔ |
| pN1c | Metastases in 1-3 axillary lymph nodes and in internal mammary lymph nodes with micrometastases or macrometastases detected by sentinel lymph node biopsy but not clinically detected |
| pN2 | Metastases in 4-9 axillary lymph nodes; or in clinically detected◊◊ internal mammary lymph nodes in the *absence* of axillary lymph node metastases |
| pN2a | Metastases in 4-9 axillary lymph nodes (at least one tumor deposit greater than 2.0 mm) |
| pN2b | Metastases in clinically detected◊◊ internal mammary lymph nodes in the *absence* of axillary lymph node metastases |
| pN3 | Metastases in ten or more axillary lymph nodes; or in infraclavicular (level III axillary) lymph nodes; or in clinically detected◊◊ ipsilateral internal mammary lymph nodes in the *presence* of one or more positive level I, II axillary lymph nodes; or in more than three axillary lymph nodes and in internal mammary lymph nodes with micrometastases or macrometastases detected by sentinel lymph node biopsy but not clinically detected ΔΔ; or in ipsilateral supraclavicular lymph nodes |
| pN3a | Metastases in ten or more axillary lymph nodes (at least one tumor deposit greater than 2.0 mm); or metastases to the infraclavicular (level III axillary lymph) nodes |
| pN3b | Metastases in clinically detected◊◊ ipsilateral internal mammary lymph nodes in the *presence* of one or more positive axillary lymph nodes; or in more than three axillary lymph nodes and in internal mammary lymph nodes with micrometastases or macrometastases detected by sentinel lymph node biopsy but not clinically detected ΔΔ |
| pN3c | Metastases in ipsilateral supraclavicular lymph nodes |
| Posttreatment *ypN*  - Post-treatment yp "N" should be evaluated as for clinical (pretreatment) "N" methods above. The modifier "sn" is used only if a sentinel node evaluation was performed after treatment. If no subscript is attached, it is assumed that the axillary nodal evaluation was by axillary node dissection (AND)  - The X classification will be used (ypNX) if no yp posttreatment SN or AND was performed  - N categories are the same as those for pN | |

‡ *Clinically detected* is defined as detecting by imaging studies (excluding lymphoscintigraphy) or by clinical examination and having characteristics highly suspicious for malignancy or a presumed pathologic macrometastasis based on fine needle aspiration biopsy with cytologic examination. Confirmation of clinically detected metastatic disease by fine needle aspiration without excision biopsy is designated with an (f) suffix, for example, cN3a(f). Excisional biopsy of a lymph node or biopsy of a sentinel node, in the absence of assignment of a pT, is classified as a clinical N, for example, cN1. Information regarding the confirmation of the nodal status will be designated in site specific factors as clinical, fine needle aspiration, core biopsy, or sentinel lymph node biopsy. Pathologic classification (pN) is used for excision or sentinel lymph node biopsy only in conjunction with a pathologic T assignment.  
† Classification is based on axillary lymph node dissection with or without sentinel lymph node biopsy. Classification based solely on sentinel lymph node biopsy without subsequent axillary lymph node dissection is designated (sn) for "sentinel node," for example, pN0(sn).  
\*\* Isolated tumor cell clusters (ITC) are defined as small clusters of cells not greater than 0.2 mm, or single tumor cells, or a cluster of fewer than 200 cells in a single histologic cross-section. ITCs may be detected by routine histology or by immunohistochemical (IHC) methods. Nodes containing only ITCs are excluded from the total positive node count for purposes of N classification but should be included in the total number of nodes evaluated.  
•• RT-PCR: reverse transcriptase/polymerase chain reaction.  
ΔΔ "Not clinically detected" is defined as not detected by imaging studies (excluding lymphoscintigraphy) or not detected by clinical examination.  
◊◊ "Clinically detected" is defined as detected by imaging studies (excluding lymphoscintigraphy) or by clinical examination and having characteristics highly suspicious for malignancy or a presumed pathologic macrometastasis based on fine needle aspiration biopsy with cytologic examination.

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| Distant metastasis (M) | |
| M0 | No clinical or radiographic evidence of distant metastases |
| cM0(i+) | No clinical or radiographic evidence of distant metastases, but deposits of molecularly or microscopically detected tumor cells in circulating blood, bone marrow, or other nonregional nodal tissue that are no larger than 0.2 mm in a patient without symptoms or signs of metastases |
| M1 | Distant detectable metastases as determined by classic clinical and radiographic means and/or histologically proven larger than 0.2 mm |
| Posttreatment *ypM* classification. The M category for patients treated with neoadjuvant therapy is the category assigned in the clinical stage, prior to initiation of neoadjuvant therapy. Identification of distant metastases after the start of therapy in cases where pretherapy evaluation showed no metastases is considered progression of disease. If a patient was designated to have detectable distant metastases (M1) before chemotherapy, the patient will be designated as M1 throughout. | |