

Staging Practice

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Case 1 – Case Vignette

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- **HISTORY:** 62 year old Asian female admitted for biopsy of 1cm abnormality noted on mammography. No mass felt in the left breast, left axilla WNL.
- **CT CHEST:** no abnormalities noted
- **MAMMOGRAPHY:** 1cm abnormality in left UOQ, possible malignancy. Recommend biopsy.
- **PATHOLOGY Excision:** Left UOQ Breast biopsy – low grade DCIS (solid, cribriform and papillary subtypes) 6mm area of involvement . ER/PR pos, HER2 not stated
- **PATHOLOGY Wide Excision and SNL Biopsy:** No residual carcinoma. 1 sentinel lymph nodes negative for carcinoma 0/1. IHC stain for Cytokeratin is negative.

Case 1 – Answer & Rationale

3

Practice Case #1			
C50.4 – Left Breast, Upper Outer Quadrant			
8523/21 – Low Grade Intraductal Carcinoma with Mixed Subtypes (Non-Invasive)			
Clinical TNM AJCC Stage Group	<u>pTis</u> cN0 cM0	c0	Clinical Stage for an In-Situ Neoplasm without ANY area(s) of invasion OR ANY area(s) of <u>microinvasion</u> : Tis (and T1mi) - can ONLY be diagnosed microscopically. You cannot assign a clinical Tis. But, you can use <u>pTis</u> for in-situ only. N0 and M0 based on 2 factors, non-invasive only and physical exam negative in axilla (in-situ neoplasm may not get even a SNL biopsy). NOTE: Neither blank or X is valid because of stage of disease (in situ) and workup can include but does not require imaging or physical exam. If neither physical exam nor imaging was performed then N still should be assigned N0 due to Tis. MX not allowed M0 based on negative CT chest and abdomen Clinical Stage <u>pTis</u> cN0 cM0 // Clinical Stage Group 0
Pathologic TNM AJCC Stage Group	<u>pTis</u> pN0(i-) cM0	p0	Pathologic staging is based on histologic review of resection of primary site and regional lymph nodes specimen. Pathologic In-Situ neoplasm only. SLN negative on IHC. No pathologic confirmation of any metastasis - so, you take the clinical M0. Pathologic Stage <u>pTis</u> pN0(i-) cM0 // Path Stage Group 0
SEER Summary Stage 2000		0 Insitu	In Situ Only

Case 2 – Case Vignette

4

- **HISTORY:** 65 year old black female admitted for biopsy and resection of 2cm mass noted on mammography. Palpable mass in UOQ right breast, right axilla WNL.
- **CT CHEST:** no abnormalities noted
- **MAMMOGRAPHY:** 2cm stellate mass in right UOQ, suspicious for malignancy. Recommend biopsy.
- **PATHOLOGY Excision:** Right UOQ Breast biopsy – infiltrating duct carcinoma, 1.6cm in greatest dimension, Nottingham Grade 2. ER/PR neg, HER2 +
- **PATHOLOGY Wide Excision and SNL Biopsy:** No residual carcinoma. 2 sentinel lymph nodes negative for carcinoma 0/2. IHC stain for Cytokeratin is positive.

Case 2 – Answer & Rationale

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Practice Case #2			
C50.4 – Right Breast, Upper Outer Quadrant			
8500/32 – Infiltrating Duct Carcinoma, Nottingham Grade 2 = Grade 2 per 2014 Grade Coding Instructions			
Clinical TNM AJCC Stage Group	cT1c cN0 cM0	clA	Clinical Tumor Size = 2cm from imaging = cT1c. Clinical Nodes = none noted on physical exam = cN0. Clinical Mets = none CT chest = cM0 MX not allowed Clinical Stage = cT1c cN0 cM0 // clinical Stage Group IA
Pathologic TNM AJCC Stage Group	pT1c pN0(i+) cM0	plA	Pathologic staging is based on histologic review of resection of primary site and regional lymph nodes specimen. Pathologic Tumor size = 1.6cm = pT1c. Pathologic Lymph Nodes noted only with positive IHC (Cytokeratin Stain) for Isolated Tumor Cells or ITCs = pN0(i+). ITC + lymph nodes are still counted as N0. DO NOT COUNT ITCs as + LN. No pathologic confirmation of any metastasis - so, you take the clinical M0. Pathologic Stage pT1c pN0(i+) cM0 // Path Stage Grp IA
SEER Summary Stage 2000		1 localized	Localized

Case 3 – Case Vignette

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- **HISTORY:** 57 year-old Hispanic female with 2.5cm mass at 10:00 in right breast and prominent axillary node noted on screening mammography and on PE.
- **CT CHEST:** few small (<1cm) nonspecific hilar lymph nodes noted in chest. Exam otherwise negative.
- **PROCEDURE:** Lumpectomy, right breast with core biopsy of sentinel axillary lymph nodes (2) – Level I
- **PATHOLOGY:** Moderately differentiated infiltrating duct carcinoma with extensive associated DCIS, high nuclear grade; cribriform, papillary and solid types. Invasive component 1.5cm in greatest linear dimension, Nottingham Grade 2 (3+2+1=6), core biopsies (3) of suspected axillary lymph node showing tumor present in all core fragments (3/3).

Case 3 – Answer & Rationale

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Practice Case #3			
C50.4 – Right Breast, Upper Outer Quadrant (10:00 position)			
8500/32 – Infiltrating Duct Carcinoma NOTE: Do not use any terms describing the in-situ components or combo code			
Clinical TNM AJCC Stage Group	cT2 cN1 cM0	<u>cIIIB</u>	Clinical Tumor Size = 2.5cm from imaging and physical exam = cT2. Clinical Nodes = prominent axillary node is clinically positive lymph node warranting core needle biopsy to rule out mets = cN1. Clinical Mets = nonspecific <1cm hilar nodes are not positive = cM0 MX not allowed, M0 based on CT chest Clinical Stage cT2 cN1 cM0 // Clinical Stage Group IIB
Pathologic TNM AJCC Stage Group	pT1c pN1a cM0	<u>oIIA</u>	Pathologic staging is based on histologic review of resection of primary site and regional lymph nodes specimen. Pathologic Tumor Size = 1.5cm (invasive component only), Pathologic Lymph Nodes = N1a (you can still code N1a even though a complete axillary node dissection was not performed because the node was prominent (clinically positive) then proven to be metastatic with 3 core biopsies of the lymph node. Not ITCs or <u>Micromets</u> - so is <u>Macromets</u> for LN noted. No pathologic confirmation of any metastasis - so, you take the clinical M0. Pathologic Stage pT1 pN1a cM0 // Path Stage Group IIA
SEER Summary Stage 2000		3 Regional Lymph Nodes Only	Regional Lymph Nodes, only

Case 4 – Case Vignette

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- **HISTORY:** 61 yr old white female, lifelong smoker, with multiple medical problems including recent suspicious result on routine screening mammography. PE negative.
- **CT CHEST:** Negative
- **STEREOTACTIC NEEDLE BIOPSY UIQ LEFT BREAST:** Infiltrating duct carcinoma, Nottingham Grade 1. DCIS, low grade (less than 0.1cm focus)
- **SIMPLE MASTECTOMY:** Infiltrating duct carcinoma, Nottingham Grade 2 (1.3cm) arising from an encapsulated (intracystic) papillary carcinoma, 0.9 x 0.7cm, DCIS, intermediate grade (1.0 x 0.7cm), solid type. All margins negative. Hormone receptor and immunohistochemical stains ordered and results will be reported in supplemental report.

Case 4 – Answer & Rationale

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Practice Case #4			
C50.2 – Left Breast, Upper Inner Quadrant			
8504/32 – Infiltrating Duct Carcinoma arising in Encapsulated Intracystic Papillary Carcinoma, Invasive, Grade 2			
Clinical TNM AJCC Stage Group	cTX cN0 cM0	c99	No Clinical Tumor Size is noted on mammogram or physical exam, cTX because there was imaging and physical exam performed but cannot be assessed because report not available (not cTblank). N based on no mention of suspicious or prominent lymph nodes in axilla on physical exam or imaging. MX not allowed, M0 based on CT chest. Clinical Stage cTX cN0 cM0 // Clinical Stage Group - 99
Pathologic TNM AJCC Stage Group	pT1c cN0 cM0	pIA	Pathologic staging is based on histologic review of resection of primary site and regional lymph nodes specimen. Pathologic Tumor Size = 1.3cm, Pathologic Lymph Nodes = cN0 (you can use the clinical N0 when Tis or T1 tumor size - not clear in instructions but is allowed and valid. Otherwise, this case would be unstaged when it is really just a stage 1 cancer. No pathologic confirmation of any metastasis - so, you take the clinical M0. Pathologic Stage pT1c cN0 cM0 // Path Stage Group IA
SEER Summary Stage 2000		1 Localized	Localized

Case 5 – Case Vignette

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- **HISTORY:** 57 year old obese white female with hard left subareolar solid mass noted by patient and confirmed on imaging. Mass measures 3 x 4 x 2cm. PE shows no enlarged lymph nodes in left axilla but one prominent supraclavicular node is noted on physical examination.
- **FNA Left Breast Mass:** adenocarcinoma
- **Left Modified Mastectomy:** Left Breast with a 5cm area of intraductal carcinoma (solid, cribriform and papillary subtypes) surrounding a 3.8cm area of invasive ductal carcinoma noted. 4 of 6 Level I nodes +, 1/8 Level II nodes +. Supraclavicular node - core bx – positive.
- **ER/PR negative, HER2 negative (triple negative)**

Case 5 – Answer & Rationale

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Practice Case #5			
C50.1 – Left Breast, Subareolar = Central Breast (NOT LOWER BREAST – COMMON ERROR)			
8500/39 – Infiltrating Duct Carcinoma NOTE: Do not use any terms describing the in-situ components or a combo code			
Clinical TNM AJCC Stage Group	cT2 cN3 cM0	cIIIC	Clinical Tumor Size based on physical exam where greatest tumor size dimension = 4cm, N3 based on physical exam with clinically positive supraclavicular (Level III) lymph node without axillary nodes noted (do not use N3c because you lose the clinically negative axillary nodes, MX not allowed so assign M0 unless otherwise indicated. Clinical Stage cT2 cN3 cM0 // Clinical Stage Group IIIC
Pathologic TNM AJCC Stage Group	pT2 pN3c cM0	pIIIC	Pathologic staging is based on histologic review of resection of primary site and regional lymph nodes specimen. Pathologic Tumor size = 3.8cm (invasive size only), N3c because we have positive confirmation of single Level III supraclavicular lymph node in presence of + axillary nodes. No pathologic confirmation of any metastasis - so, you take the clinical M0. Pathologic Stage pT2 pN3c cM0 // Path Stage Group IIIC
SEER Summary Stage 2000		7 Distant Lymph Nodes	Supraclavicular lymph nodes are counted as Distant Lymph Nodes in SS2000.

Case 6 – Case Vignette

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- HISTORY: 49 yr old white female, non-smoker, with large central breast mass on right and multiple suspicious large nodes in right axilla. Patient complains of redness, skin thickening and edema over past 6-12 months, still evident. Recommend pre-surgical treatment.
- CT CHEST: Negative
- BONE SCAN: Abn uptake L4-L5 concerning for metastatic disease
- PLAIN FILM XRAY L-SPINE: osseous mets L4-L5
- FNA BREAST MASS: adenocarcinoma
- RIGHT MODIFIED RADICAL MASTECTOMY: poorly differentiated infiltrating duct carcinoma. Tumor extends to pectoralis muscle and deep margin with involvement of dermal lymphatics. 10/15 axillary lymph nodes involved with largest node measuring 2.8cm in size.
- Biopsy L4 – metastatic adenocarcinoma c/w breast primary
- ER/PR +, HER2 –
- Patient refused pre-operative therapy – mastectomy only

Case 6 – Answer & Rationale

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Practice Case #6			
C50.1 – Right Breast, Central			
8530/33 – Inflammatory Carcinoma(DX includes path-proven dermal lymphatic invasion PLUS clinical criteria), Grade 3			
Clinical TNM AJCC Stage Group	cT4d cN1 cM1	<u>cIV</u>	Clinical Tumor Size based on physical exam and patient history with inflammatory carcinoma clinically and dermal lymphatic involvement proven. N based on physical exam with multiple suspicious large nodes in axilla. M1 is based on bone scan and follow-up plain film confirmation of L4-L5 involvement. Clinical Stage cT4d cN1 cM1 // Clinical Stage Group IV
Pathologic TNM AJCC Stage Group	pT4d pN3a pM1	<u>pIV</u>	Pathologic staging is based on histologic review of resection of primary site and regional lymph nodes specimen and any suspected histological evidence of metastasis, N3a based on 10+ LN in axilla largest 2.8cm size. Pathologic M1 because bone mets were confirmed with biopsy. Pathologic Stage pT4d pN3a pM1 //Path Stage Group IV
SEER Summary Stage 2000		7 Distant Bone Mets	Bone Mets