Collecting Cancer Data: Breast
NAACCR 2008-2009 Webinar Series

Prizes!

Question of the Month!
• The participant that submits the best question of the session will receive a fabulous Prize!
• Shannon and Jim will announce the winner at end of the session.

Tip of the Month!
• The participant that sends in the best tip related to the topic will win a spectacular prize!
• Shannon and Jim will announce the winner at the end of the session.

Overview
Overview

Breast Cancer

New incidences of breast cancer in the United States in 2008:

- New cases among women:
  - 182,460 Breast
  - 100,330 Lung
  - 71,560 Colorectal

American Cancer Society Facts and Figures

Anatomy

Image Source: SEER Training Website
Collecting Cancer Data: Breast

Anatomy

Quadrants

Coding Primary Site

- Priority order for coding breast subsite
  1. Pathology report
  2. Operative report
  3. Physical examination
  4. Mammogram, ultrasound
Coding Primary Site

• Coding breast subsite
  1. Code to C50.8 when single tumor overlaps 2 or more subsites and subsite of origin is unknown
  2. Code to C50.8 when single tumor is located at 12, 3, 6 or 9 o’clock position
  3. Code to C50.9 when there are multiple tumors in at least 2 quadrants of the breast

Question

• Pathology from a breast case reveals a 1.6 cm tumor. It’s location is reported as the LIQ, and DCIS is located in all 4 quadrants.
  – What is the primary site for this tumor?

Answer

• There is cancer in all 4 quadrants of the breast. This would be reported as C50.9. There is no rule that tells us to code the quadrant where only the invasive disease is seen.
  – Curator
    (I & R Team)
Question

• If a breast mass is described as both 12:00 & subareolar, which subsite takes precedence; C50.1 or C50.8?

Answer

• Subareolar tumors can appear at any position of the breast "clock". Code to C50.1 (central portion of breast) as the more specific information.
  – Curator (I & R Team)

Grade

• Histologic grade, differentiation, codes
  1 = well differentiated
  2 = moderately differentiated
  3 = poorly differentiated
  4 = undifferentiated
Grade

- Bloom-Richardson (BR) Score
  - Frequency of cell mitosis
  - Tubule formation
  - Nuclear pleomorphism

<table>
<thead>
<tr>
<th>Code</th>
<th>BR Score</th>
<th>BR Grade</th>
<th>Nuclear Grade</th>
<th>Terminology</th>
<th>Histologic Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3-5</td>
<td>Low</td>
<td>1/3 or 1/3</td>
<td>Well Differentiated</td>
<td>I or II/III or</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/3</td>
</tr>
<tr>
<td>2</td>
<td>6 or 7</td>
<td>Intermediate</td>
<td>2/3</td>
<td>Moderately Differentiated</td>
<td>II or II/III or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2/3</td>
</tr>
<tr>
<td>3</td>
<td>8 or 9</td>
<td>High</td>
<td>2/2 or 3/3</td>
<td>Poorly Differentiated</td>
<td>III or IV/III or</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/3</td>
</tr>
<tr>
<td>4</td>
<td>--</td>
<td>4/4</td>
<td>4/4</td>
<td>Undifferentiated or Anaplastic</td>
<td>IV or IV/IV or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/4</td>
</tr>
</tbody>
</table>

Tumor Markers

- Estrogen Receptors
- Progesterone Receptors
Human Epidermal Growth Factor Receptor 2

- May be referred to as:
  - HER2
  - HER2neu
  - erbB2
  - c-neu

Human Epidermal Growth Factor Receptor 2

- HER2 over expression indicates a tumor may grow aggressively
- Lack of over expression indicates a patient may not respond to some therapy

2007 Multiple Primary and Histology Rules
Multiple Primary Rules

Breast

Unknown if Single or Multiple Tumors

- Rule M1
  - When it is not possible to determine if there is a single tumor or multiple tumors, opt for a single tumor and abstract as a single primary.
  - Note: Use this rule only after all information sources have been exhausted.

Single Tumor

- Rule M2
  - Inflammatory carcinoma in one or both breasts is a single primary.
- Rule M3
  - A single tumor is always a single primary.
  - Note: The tumor may overlap onto or extend into adjacent/contiguous site or subsite.
Multiple Tumors

- Rule M4
  - Tumors in sites with ICD-O-3 topography codes (Cxxx) with different second (Cxxx) and/or third characters (Cxxx) are multiple primaries.
- Rule M5
  - Tumors diagnosed more than five (5) years apart are multiple primaries.
- Rule M6
  - Inflammatory carcinoma in one or both breasts is a single primary.

Multiple Tumors

- Rule M7
  - Tumors on both sides (right and left breast) are multiple primaries.
- Rule M8
  - An invasive tumor following an in situ tumor more than 60 days after diagnosis is a multiple primary.

Multiple Primaries

- Rule M9
  - Tumors that are intraductal or duct and Paget Disease are a single primary.
- Rule M10
  - Tumors that are lobular (8520) and intraductal or duct are a single primary.
- Rule M11
  - Multiple intraductal and/or duct carcinomas are a single primary.
Table 1
Intraductal (8500/2) and Specific Intraductal Carcinomas

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>8201</td>
<td>Cribriform</td>
</tr>
<tr>
<td>8230</td>
<td>Solid</td>
</tr>
<tr>
<td>8401</td>
<td>Apocrine</td>
</tr>
<tr>
<td>8500</td>
<td>Intraductal, NOS</td>
</tr>
<tr>
<td>8501</td>
<td>Comedo</td>
</tr>
<tr>
<td>8503</td>
<td>Papillary</td>
</tr>
<tr>
<td>8504</td>
<td>Intracytic</td>
</tr>
<tr>
<td>8507</td>
<td>Micropapillary/Clinging</td>
</tr>
</tbody>
</table>

Table 2
Duct (8500/3) and Specific Duct Carcinomas

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>8022</td>
<td>Pleomorphic carcinoma</td>
</tr>
<tr>
<td>8035</td>
<td>Carcinoma with osteoclast-like giant cells</td>
</tr>
<tr>
<td>8500</td>
<td>Duct, NOS</td>
</tr>
<tr>
<td>8501</td>
<td>Comedocarcinoma</td>
</tr>
<tr>
<td>8502</td>
<td>Secretory carcinoma of breast</td>
</tr>
<tr>
<td>8503</td>
<td>Intraductal papillary adenocarcinoma with invasion</td>
</tr>
<tr>
<td>8508</td>
<td>Cystic hypersecretory carcinoma</td>
</tr>
</tbody>
</table>

Multiple Tumors

- Rule M12
  - Tumors with ICD-O-3 histology codes that are different at the first (xxxx), second (xxxx) or third (xxxx) number are multiple primaries. **
- Rule M13
  - Tumors that do not meet any of the above criteria are abstracted as a single primary.
Histologies

Breast

Single Tumor: In situ Only

- Rule H1
  - Code the histology documented by the physician when the pathology/cytology report is not available.
- Rule H2
  - Code the histology when only one histologic type is identified Rule H3

Single Tumor: In situ Only

- Rule H3
  - Code the more specific histologic term when the diagnosis is:
    - Carcinoma in situ, NOS (8010) and a specific carcinoma in situ
    - Adenocarcinoma in situ, NOS (8140) and a specific adenocarcinoma in situ
    - Intraductal carcinoma, NOS (8500) and a specific intraductal carcinoma (Table 1)
Single Tumor: In situ Only

- Note: The specific histology may be identified as type, subtype, predominantly, with features of, major, with ___ differentiation, architecture or pattern. The terms architecture and pattern are subtypes only for in situ cancer.

Single Tumor: In situ Only

- Rule H4
  - Code 8501/2 (comedocarcinoma, non-infiltrating) when there is non-infiltrating comedocarcinoma and any other intraductal carcinoma (Table 1).

- Rule H5
  - Code 8522/2 (intraductal carcinoma and lobular carcinoma in situ) (Table 3) when there is a combination of in situ lobular (8520) and intraductal carcinoma (Table 1).

Single Tumor: In situ Only

- Rule H6
  - Code 8523/2 when there is a combination of intraductal carcinoma and two or more specific intraductal types OR there are two or more specific intraductal carcinomas.

- Rule H7
  - Code 8524/2 when there is in situ lobular (8520) and any in situ carcinoma other than intraductal carcinoma (Table 1).
Single Tumor: In situ Only

- Rule H8
  - Code 8255/2 when there is a combination of in situ/non-invasive histologies that does not include either intraductal carcinoma (Table 1) or in situ lobular (8520).

Single Tumor: Invasive and In situ

- Rule H9
  - Code the invasive histology when both invasive and in situ components are present.

Single Tumor: Invasive Only

- Rule H10
  - Code the histology documented by the physician when there is no pathology/cytology specimen or the pathology/cytology report is not available.
- Rule H11
  - Code the histology from a metastatic site when there is no pathology/cytology specimen from the primary site.
Single Tumor: Invasive Only

- Rule H12 Code the most specific histologic term when the diagnosis is:
  - Carcinoma, NOS (8010) and a more specific carcinoma or
  - Adenocarcinoma, NOS (8140) and a more specific adenocarcinoma or
  - Duct carcinoma, NOS (8500) and a more specific duct carcinoma (8022, 8035, 8501-8508) or
  - Sarcoma, NOS (8800) and a more specific sarcoma

Single Tumor: Invasive Only

- Rule H13
  - Code 8530 (inflammatory carcinoma) only when the final diagnosis of the pathology report specifically states inflammatory carcinoma.
- Rule H14
  - Code the histology when only one histologic type is identified.

Single Tumor: Invasive Only

- Rule H15
  - Code the histology with the numerically higher ICD-O-3 code when there are two or more specific duct carcinomas.
- Rule H16
  - Code 8522 (duct and lobular) when there is a combination of lobular (8520) and duct carcinoma (Table 3).
  - Example-Single tumor with ductal and lobular features
### Table 3

<table>
<thead>
<tr>
<th>Column 1: Required Histology</th>
<th>Column 2: Combined with Histology</th>
<th>Column 3: Combination Term</th>
<th>Column 4: Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infiltrating duct and lobular carcinoma</td>
<td>Infiltrating duct and lobular carcinoma</td>
<td>Infiltrating duct and lobular carcinoma</td>
<td>8522/3</td>
</tr>
</tbody>
</table>

### Single Tumor: Invasive Only

- **Rule H17**
  - Code 8523 when there is a combination of duct and any other carcinoma (Table 3).
- **Rule H18**
  - Code 8524 when the tumor is lobular (8520) and any other carcinoma (Table 3).
- **Rule H19**
  - Code 8255 for multiple histologies that do not include duct or lobular (8520).

### Multiple Tumors Abstracted as Single Primary

- **Rule H20**
  - Code the histology documented by the physician when there is no pathology/cytology specimen or the pathology/cytology report is not available.
- **Rule H21**
  - Code the histology from a metastatic site when there is no pathology/cytology specimen from the primary site.
Multiple Tumors Abstracted as Single Primary

• Rule H22
  – Code 8530 (inflammatory carcinoma) only when the final diagnosis of the pathology report specifically states inflammatory carcinoma.

• Rule H23
  – Code the histology when only one histologic type is identified.

Multiple Tumors Abstracted as Single Primary

• Rule H24
  – Code 8543/2 when the pathology report specifically states that the Paget disease is in situ and the underlying tumor is intraductal carcinoma (Table 1).

• Rule H25
  – Code 8543/3 for Paget disease and intraductal carcinoma (Table 3).

• Rule H26
  – Code 8541/3 for Paget disease and invasive duct carcinoma (Table 3).

Multiple Tumors Abstracted as Single Primary

• Rule H27
  – Code the invasive histology when both invasive and in situ tumors are present.

• Rule H28
  – Code 8522 when there is any combination of lobular (8520) and duct carcinoma. (Table 3).

• Rule H29
  – Code the histology with the numerically higher ICD-O-3 code.
Questions?

Quiz

Collaborative Staging
Breast V01.04.00
### CS Tumor Size: Breast

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>No mass found</td>
</tr>
<tr>
<td>988</td>
<td>989 mm or larger</td>
</tr>
<tr>
<td>989</td>
<td>Microinvasion; microscopic focus /foci only, no size given; &lt; 1mm</td>
</tr>
<tr>
<td>991</td>
<td>Less than 1 cm</td>
</tr>
<tr>
<td>992</td>
<td>Less than 2 cm OR greater than 1 cm OR between 1 cm and 2 cm</td>
</tr>
<tr>
<td>994</td>
<td>Less than 4 cm OR greater than 3 cm OR between 3 cm and 4 cm</td>
</tr>
<tr>
<td>995</td>
<td>Less than 5 cm OR greater than 4 cm OR between 4 cm and 5 cm</td>
</tr>
<tr>
<td>996</td>
<td>Mammographic/xerographic diagnosis only, no size given</td>
</tr>
<tr>
<td>997</td>
<td>Paget's disease of nipple with no demonstrable tumor</td>
</tr>
<tr>
<td>998</td>
<td>Diffuse</td>
</tr>
<tr>
<td>999</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

#### CS Tumor Size: Breast

- Use basic mathematical principles to code tumor size when recorded in fractions of mm
  - 1-4 round down; 5-9 round up
  - Example: Lumpectomy path report documents 1.7 mm infiltrating lobular carcinoma
    - CS Tumor Size = 002

#### CS Tumor Size: Breast

- Code largest tumor size prior to pre-op treatment UNLESS tumor size is greater after pre-op treatment
  - Example: 4 cm malignant tumor per mammogram; patient received pre-op chemotherapy; tumor size per post chemotherapy modified radical mastectomy was 1.1 cm
    - CS Tumor Size = 040
  - Example: 1 cm malignant tumor per mammogram; patient received pre-op chemotherapy; tumor size per post chemotherapy modified radical mastectomy was 2.2 cm
    - CS Tumor Size = 022
CS Tumor Size: Breast

- Code tumor size as stated for purely in situ lesions
  - Example: Right upper outer quadrant lumpectomy documented 8 mm tumor, in situ ductal carcinoma
    - CS Tumor Size = 008

CS Tumor Size: Breast

- Assign CS Tumor Size for breast primary as code 990 when:
  - The tumor is microinvasive only and tumor size is not documented
  - The tumor is a microscopic focus or foci only and size of focus is not documented
    - Behavior may be invasive (3) or in situ (2)
  - Tumor size is described as less than 1 mm
  - Example: Left lumpectomy path documents microscopic focus of in situ ductal carcinoma
    - CS Tumor Size = 990

CS Extension: Breast

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>In situ; non-invasive</td>
</tr>
<tr>
<td></td>
<td><strong>SITE/HISTOLOGY SPECIFIC CODES</strong></td>
</tr>
<tr>
<td>80</td>
<td>Further contiguous extension</td>
</tr>
<tr>
<td>95</td>
<td>No evidence of primary tumor</td>
</tr>
<tr>
<td>99</td>
<td>Unknown extension</td>
</tr>
</tbody>
</table>
**CS Extension: Breast**

- Do not code CS Extension as in situ (code 00) if there is any evidence of nodal or metastatic involvement
  
  - Example: Mammogram documented areas of calcification suspicious for malignancy; dense axillary lymph nodes suspicious for malignancy. Path from lumpectomy showed ductal carcinoma in situ.
    
    - CS Extension = 10
    - Histology = 8500/39

---

**CS Extension: Breast**

- Assign code 51 when there is ulceration of skin of the primary breast
  
  - Do not define erosion as a synonym for ulceration
  
  - Example: Primary tumor of the right breast with direct extension to the skin and tumor erosion
    
    - CS Extension = 20

---

**CS Extension: Breast**

- Assign CS Extension codes 51, 52, 61, or 62 when there is extensive skin involvement as defined in each code WITHOUT a stated diagnosis of inflammatory carcinoma

- Assign CS Extension codes 71 or 73 when there is a diagnosis of inflammatory carcinoma WITH a clinical description of extensive skin involvement as defined in each code
**CS Tumor Size: Breast**

**CS Extension: Breast**

- When multiple lesions of the breast are determined to be a single primary
  - Code the largest tumor size in CS Tumor Size
  - Code the farthest extension of any lesion in CS Extension
  - Information may be from different lesions

---

**Example:** Patient has 2 tumors with ductal carcinoma determined to be a single primary; tumor A is 3 cm in size and confined to the breast; tumor B is 1.5 cm in size and fixated to the pectoral muscle
- CS Tumor Size = 030
- CX Extension = 30

---

**CS TS/Ext-Eval: Breast**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Staging Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Clinical only</td>
<td>c</td>
</tr>
<tr>
<td>1</td>
<td>Invasive techniques</td>
<td>c*</td>
</tr>
<tr>
<td>2</td>
<td>Autopsy (known or suspected diagnosis)</td>
<td>p</td>
</tr>
<tr>
<td>3</td>
<td>Pathology</td>
<td>p</td>
</tr>
<tr>
<td>5</td>
<td>Pre-operative treatment; clinical evidence</td>
<td>c</td>
</tr>
<tr>
<td>6</td>
<td>Pre-operative treatment; pathological evidence</td>
<td>y</td>
</tr>
<tr>
<td>8</td>
<td>Autopsy (tumor unsuspected)</td>
<td>a</td>
</tr>
<tr>
<td>9</td>
<td>Unknown</td>
<td>c</td>
</tr>
</tbody>
</table>

*For some sites, code 1 may be pathologic staging basis.
CS TS/Ext-Eval: Breast

• Select the code that best describes how the information in CS Tumor Size and CS Extension were determined when both tumor size and extension determine the T category
  – T category is based on tumor size for breast when CS Extension code is 10, 20, or 30
  – Example: Physical exam documented involvement of skin of nipple; modified radical mastectomy path documented infiltrating ductal carcinoma, 3 cm tumor
    • CS Tumor Size = 030
    • CS Extension = 20
    • CS TS/Ext Eval = 3

CS TS/Ext-Eval: Breast

• Use code 5 if size or extension of the tumor prior to treatment was basis for neoadjuvant therapy
  – Example: 4 cm malignant tumor attached to pectoral muscle per mammogram; patient received pre-op chemotherapy; tumor size per post chemotherapy modified radical mastectomy was 1.1 cm
    • CS Tumor Size = 040
    • CS Extension = 30
    • CS TS/Ext Eval = 5

CS TS/Ext-Eval: Breast

• Use code 6 if the size or extension of the tumor was greater after presurgical treatment than before treatment
  – Example: 1 cm malignant tumor confined to breast per mammogram; patient received pre-op chemotherapy; tumor size per post chemotherapy modified radical mastectomy was 2.2 cm
    • CS Tumor Size = 022
    • CS Extension = 10
    • CS TS/Ext Eval = 6
## CS Lymph Nodes: Breast

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>TNM</th>
<th>SS77</th>
<th>SS2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>None</td>
<td>N0</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>SITE/HISTOLOGY-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPECIFIC CODES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>Unknown</td>
<td>NX</td>
<td>U</td>
<td>U</td>
</tr>
</tbody>
</table>

### CS Lymph Nodes: Breast

- **Isolated tumor cells (ITC)**
  - Single tumor cells or small clusters in lymph node(s) not greater than 0.2 mm in size
- **Micrometastasis**
  - Tumor cells in lymph node(s) greater than 0.2 mm but less than or equal to 2 mm in size
- **Metastasis**
  - Tumor cells in lymph node(s) greater than 2 mm in size

### CS Lymph Nodes: Breast

- Assign code 00 if CS Extension code is 00 (in situ) and there is no other information
  - Example: Patient diagnosed with ductal carcinoma in situ by needle biopsy; no other information available
    - CS Lymph Nodes = 00

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Collecting Cancer Data: Breast

8/4/2009

2008-2009 NAACCR Webinar Series
CS Lymph Nodes: Breast

• Assign code 00 if there is no regional lymph node involvement OR if ITCs are detected by IHC or molecular methods ONLY
  — Example: Axillary lymph node dissection path documents 0/12 nodes positive. IHC report documents a 0.1 mm tumor cluster positive for ITCs
    • CS Lymph Nodes = 00
    • CS SSF4 = 002

CS Lymph Nodes: Breast

• Assign code 05 if there is no regional lymph node involvement but ITCs detected on routine H & E stains
  — Example: Axillary lymph node dissection path documents 0/12 nodes positive and a single tumor cluster positive for ITCs
    • CS Lymph Nodes = 05
    • CS SSF4 = 002

CS Lymph Nodes Breast

• Assign code 13 if there is micrometastasis ONLY in ipsilateral axillary lymph nodes detected by IHC ONLY
  — Example: Axillary lymph node dissection path documents 13 nodes removed; IHC test identifies 1 axillary node with 1 mm metastasis
    • CS Lymph Nodes = 13
    • CS SSF4 = 888
**CS Lymph Nodes Breast**

- Assign code 15 if there is micrometastasis ONLY in ipsilateral axillary lymph nodes detected or verified by H & E OR micrometastasis, NOS
  - Example: Axillary lymph node dissection path documents 1/13 nodes positive with 1 mm metastasis
    - CS Lymph Nodes = 15
    - CS SSF4 = 888

**CS Lymph Nodes Breast**

- Assign code 25 if there are ipsilateral movable axillary lymph nodes with more than micrometastasis
  - Example: Axillary lymph node dissection path documents 1/13 nodes positive with 2.5 mm metastasis
    - CS Lymph Nodes = 25
    - CS SSF4 = 888

**CS Lymph Nodes Breast**

- Assign code 75 for involvement of infraclavicular lymph nodes
  - Infraclavicular nodes are level III axillary nodes medial to the pectoralis minor muscle
    - Code to infraclavicular based on the anatomic location
<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>Pathology</td>
<td>p</td>
</tr>
<tr>
<td>5</td>
<td>Pre-operative treatment; clinical evidence</td>
<td>c/clinical</td>
</tr>
<tr>
<td>6</td>
<td>Pre-operative treatment; pathological evidence</td>
<td>y/pathological</td>
</tr>
<tr>
<td>8</td>
<td>Autopsy (tumor unsuspected)</td>
<td>a</td>
</tr>
<tr>
<td>9</td>
<td>Unknown</td>
<td>c</td>
</tr>
</tbody>
</table>

**CS Reg Nodes Eval: Breast**

- Assign code 1 if fine needle aspiration of lymph node documents the furthest involvement of regional lymph nodes
  - Example: Fine needle aspiration of right supraclavicular node in patient with ductal carcinoma of right breast is positive for carcinoma
    - CS Lymph Nodes = 80
    - CS Reg Nodes Eval = 1

- Assign code 5 if patient had pre-operative neoadjuvant therapy and clinical lymph node information was coded in CS Lymph nodes
  - Example: Mammogram documented 5 cm malignant breast tumor with involvement of axillary lymph nodes; patient received pre-operative chemotherapy; axillary node dissection after chemo documented 0/13 nodes positive
    - CS Lymph Nodes = 60
    - CS Reg Nodes Eval = 5
CS Reg Nodes Eval: Breast

- Assign code 6 if patient had pre-operative neoadjuvant therapy and lymph node involvement was more extensive after neoadjuvant therapy
  - Example: Breast cancer patient was clinical N0; received pre-operative neoadjuvant therapy; axillary lymph node dissection after neoadjuvant therapy documented 1/7 nodes positive, metastasis greater than 2 mm
  - CS Lymph Nodes = 25
  - CS Reg Nodes Eval = 6

Regional LN Pos: Breast

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>All nodes examined are negative</td>
</tr>
<tr>
<td>01-89</td>
<td>1-89 nodes are positive; code exact number of nodes positive</td>
</tr>
<tr>
<td>90</td>
<td>90 or more nodes are positive</td>
</tr>
<tr>
<td>95</td>
<td>Positive aspiration or core biopsy of lymph node(s) was performed</td>
</tr>
<tr>
<td>97</td>
<td>Positive nodes are documented, but the number is unspecified</td>
</tr>
<tr>
<td>98</td>
<td>No nodes were examined</td>
</tr>
<tr>
<td>99</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Regional LN Exam: Breast

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>No nodes were examined</td>
</tr>
<tr>
<td>01-89</td>
<td>1-89 nodes were examined; code number of regional nodes examined</td>
</tr>
<tr>
<td>90</td>
<td>90 or more nodes were examined</td>
</tr>
<tr>
<td>95</td>
<td>No regional nodes removed; aspiration or core biopsy of regional nodes performed</td>
</tr>
<tr>
<td>96</td>
<td>Regional lymph node removal documented as a sampling; the number of nodes is unknown</td>
</tr>
<tr>
<td>97</td>
<td>Regional node removal was documented as dissection; the number of nodes is unknown</td>
</tr>
<tr>
<td>98</td>
<td>Regional lymph nodes were surgically removed; number of lymph nodes is unknown &amp; not documented as sampling or dissection; nodes were examined but the number is unknown</td>
</tr>
<tr>
<td>99</td>
<td>Unknown</td>
</tr>
</tbody>
</table>
**Regional LN Pos: Breast**

**Regional LN Exam: Breast**

*Example*

- Primary breast cancer; FNA of axillary lymph node positive for malignancy; modified radical mastectomy with axillary node dissection, 2/10 nodes positive for malignancy
  - Regional Nodes Positive = 97
  - Regional Nodes Examined = 98

---

**Regional LN Pos: Breast**

**Regional LN Exam: Breast**

*Example*

- Primary breast cancer; FNA of axillary lymph node positive for malignancy; patient had pre-operative neoadjuvant chemotherapy followed by modified radical mastectomy with axillary node dissection, 0/16 nodes positive
  - Regional Nodes Positive = 95
  - Regional Nodes Examined = 98

---

**CS Mets at DX: Breast**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>No; none</td>
</tr>
<tr>
<td>10</td>
<td>Distant lymph node(s)</td>
</tr>
<tr>
<td>40</td>
<td>Distant metastases except code 10 Distant metastasis, NOS Carcinomatosis</td>
</tr>
</tbody>
</table>

**SITE/HISTOLOGY SPECIFIC CODES**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>(40) + (10)</td>
</tr>
<tr>
<td>99</td>
<td>Unknown</td>
</tr>
</tbody>
</table>
CS Mets at DX: Breast

- Example: Breast cancer patient has bone metastasis (code 44) and pleural metastasis (code 40)
  - CS Mets at DX = 44

CS Mets Eval: Breast

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Staging Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Clinical only</td>
<td>c</td>
</tr>
<tr>
<td>1</td>
<td>Invasive techniques</td>
<td>c</td>
</tr>
<tr>
<td>2</td>
<td>Autopsy (known or suspected diagnosis)</td>
<td>p</td>
</tr>
<tr>
<td>3</td>
<td>Pathology</td>
<td>p</td>
</tr>
<tr>
<td>5</td>
<td>Pre-operative treatment; clinical evidence</td>
<td>c</td>
</tr>
<tr>
<td>6</td>
<td>Pre-operative treatment; pathological evidence</td>
<td>y</td>
</tr>
<tr>
<td>8</td>
<td>Autopsy (tumor unsuspected)</td>
<td>a</td>
</tr>
<tr>
<td>9</td>
<td>Unknown</td>
<td>c</td>
</tr>
</tbody>
</table>

CS Mets Eval: Breast

- Example: Patient diagnosed with ductal carcinoma of breast; suspicious liver lesion biopsied; lesion negative for metastasis
  - CS Mets at DX = 00
  - CS Mets Eval = 1
  - Derives clinical M0
CS SSF1 ERA
CS SSF2 PRA

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Test not done</td>
</tr>
<tr>
<td>010</td>
<td>Positive/elevated</td>
</tr>
<tr>
<td>020</td>
<td>Negative/normal</td>
</tr>
<tr>
<td>030</td>
<td>Borderline</td>
</tr>
<tr>
<td>080</td>
<td>Ordered but results not in chart</td>
</tr>
<tr>
<td>999</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Example:
Breast biopsy diagnosed infiltrating duct carcinoma with positive ER & PR; patient had lumpectomy and sentinel lymph node biopsy; sentinel lymph node biopsy positive for metastasis with negative ER & PR

- CS SSF1 = 010
- CS SSF2 = 010

CS SSF3 Number of Positive Ipsilateral Axillary Lymph Nodes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>All ipsilateral axillary nodes examined negative</td>
</tr>
<tr>
<td>001-089</td>
<td>1-89 nodes positive; code exact number of nodes positive</td>
</tr>
<tr>
<td>090</td>
<td>90 or more nodes are positive</td>
</tr>
<tr>
<td>095</td>
<td>Positive aspiration of lymph node(s)</td>
</tr>
<tr>
<td>097</td>
<td>Positive nodes - number unspecified</td>
</tr>
<tr>
<td>98</td>
<td>No axillary nodes examined</td>
</tr>
<tr>
<td>99</td>
<td>Unknown</td>
</tr>
</tbody>
</table>
**CS SSF3 Number of Positive Ipsilateral Axillary Lymph Nodes**

- Example: Breast cancer patient had modified radical mastectomy; path documented ductal carcinoma with 0/7 axillary nodes positive and 1/1 supraclavicular node positive
  - Reg LN Pos = 01
  - Reg LN Exam = 08
  - CS SSF3 = 000

---

**CS SSF4 Immunohistochemistry (IHC) of Regional Lymph Nodes**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Regional nodes negative on H &amp; E, no IHC done or unknown if IHC done</td>
</tr>
<tr>
<td>001</td>
<td>Regional nodes negative on H &amp; E, IHC done, negative</td>
</tr>
<tr>
<td>002</td>
<td>Regional nodes negative on H &amp; E, IHC done, positive for ITCs</td>
</tr>
<tr>
<td>009</td>
<td>Regional nodes negative on H &amp; E, positive for tumor by IHC, size not stated</td>
</tr>
<tr>
<td>888</td>
<td>Not applicable CS Lymph Nodes not coded 00</td>
</tr>
</tbody>
</table>

---

**CS SSF5 Molecular Studies of Regional Lymph Nodes**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Regional nodes negative on H &amp; E, no RT-PCR molecular studies done or unknown if done</td>
</tr>
<tr>
<td>001</td>
<td>Regional nodes negative on H &amp; E, RT-PCR molecular studies done, negative</td>
</tr>
<tr>
<td>002</td>
<td>Regional nodes negative on H &amp; E, RT-PCR molecular studies done, positive for ITCs</td>
</tr>
<tr>
<td>888</td>
<td>Not applicable CS Lymph Nodes not coded 00</td>
</tr>
</tbody>
</table>
### CS SSF6 Size of Tumor-Invasive Component

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Entire tumor invasive</td>
</tr>
<tr>
<td>010</td>
<td>Entire tumor in situ</td>
</tr>
<tr>
<td>020</td>
<td>Invasive &amp; in situ present (see CSM 01.04.00)</td>
</tr>
<tr>
<td>030</td>
<td>Invasive &amp; in situ present (see CSM 01.04.00)</td>
</tr>
<tr>
<td>040</td>
<td>Invasive &amp; in situ present (see CSM 01.04.00)</td>
</tr>
<tr>
<td>050</td>
<td>Invasive &amp; in situ present (see CSM 01.04.00)</td>
</tr>
<tr>
<td>060</td>
<td>Invasive &amp; in situ present (see CSM 01.04.00)</td>
</tr>
<tr>
<td>888</td>
<td>Unknown if invasive and in situ components present Clinical tumor size coded</td>
</tr>
</tbody>
</table>

- **Example:** Breast ultrasound documents 2 cm malignant breast tumor; core biopsy path report documents ductal carcinoma in situ
  - CS Tumor Size = 020
  - CS SSF6 = 888

- **Example:** Path report from lumpectomy documents invasive ductal carcinoma 2 cm, DCIS present.
  - CS Tumor Size = 020
  - CS SSF6 = 050
Breast 2010

Collaborative Stage Data Collection System

Objective

• Sneak peak at what will be required in 2010
  – Codes subject to change
  – Some Site Specific Factors may not be required

CS V2

• Tumor size
  – Priority rules for size (see Part I)
    • Pathology
    • Surgery
    • Imaging
    • Physical exam
  – Take largest size found from multiple imaging reports
CS V2

• CS Extension
  – Expanded to 3 digits
  – Notes have been renumbered
  – New Codes
    • T NOS categories
      – 170 Stated as T1 [NOS] with no other information on extension or size
    • Inflammatory carcinoma
• CS Tumor Size/ Ext Eval
  – No changes

CS V2

• CS Regional Lymph Nodes
  – All lymph node codes now 3-digit
  – New code added for clinical assessment
  – Some descriptions expanded/clarified
• CS Lymph Node Evaluation
  – No new codes added at this time
  – Explanations of codes 3, 5, 6 modified

CS V2

• CS Metastasis
  – CS Mets code 99, will be mapped to M0
    • MX has been eliminated from the entire 7th edition
    • Infer a cM0 unless known to be cM1
  – New code added
    • Collect information on Circulating Tumor Cells (in blood) and Disseminated Tumor Cells (bone marrow or non regional nodal tissue)
    • Will still map to M0 but will be labeled as M0(i+).
CS V2

• 4 new fields
  – Bone excluding marrow
  – Lung excluding pleura and pleural fluid
  – Brain excluding spinal cord and other CNS
  – Liver

CS V2

• Site Specific Factors 1 (ERA) and 2 (PRA)
• Four “types” of test
  – Immunohistochemical (IHC)
    • IPX = immunoperoxidase (commonly used IHC)
  – Reverse Transcriptase – Polymerase Chain Reaction (RT-PCR)
  – Other
  – Unknown test

CS V2

• Site Specific Factor 3
  – Codes unchanged
  – Some clarifications
• Site Specific Factor 4 & 5
  – Some Clarification
  – Code for N0
• Site Specific Factors 3, 4 & 5 REQUIRED for AJCC 7th Edition Staging
CS V2

- New CS Factors
  - Bloom-Richardson score
  - Her2 (consists of 8 Site Specific Factors)
    - HER2 IHC Test (type of test and score)
    - HER2 FISH Test (type of test and score)
    - HER2 CISH Test (type of test and score)
    - Other HER2 Test (type of test and score)
    - Her2 Summary Results (type of test and score)

CS V2

- Site Specific Factors
  - Response to neo-adjuvant therapy
    - Complete, Partial, No Response
  - Circulating tumor cells (CTC)
    - Blood
  - Disseminated tumor cells (DTC)
    - Bone Marrow or tissue other than regional lymph nodes

CS V2

- Assessment of Axillary Lymph Nodes
  - Incisional biopsy, excisional biopsy, sentinel node biopsy, dissection, etc
- Genetic testing
  - Collect information on the score and type of genetic testing
  - Oncotype DX
- Paget’s Disease
  - Absence or presence
Homework

- Complete CS V2 handout

Thank you for participating in today’s webinar!

- The next webinar is scheduled for 9/3/2009 assessing and using cancer data
- Forward questions from today’s webinar to us. Per request of CoC, we will forward questions to them.
- Contact us at
  - Shannon Vann – svann@naaccr.org; 217-698-0800 X9
  - Jim Hofferkamp – jhofferkamp@naaccr.org; 217-698-0800 X5

Registration is Open for the 2009-2010 Season!!!

www.NAACCR.org