Q&A

- Please submit all questions concerning webinar content through the Q&A panel.

Reminder:
- If you have participants watching this webinar at your site, please collect their names and emails.
  - We will be distributing a Q&A document in about one week. This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.
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Key Statistics

• Estimated new cases and deaths from breast cancer in the United States in 2013:
  – New cases: 232,340 (female); 2,240 (male)
  – Deaths: 39,620 (female); 410 (male)
• Rates began decreasing in the year 2000
  – Dropped 7% from 2002-2003
• 2.9 million breast cancer survivors in the United States

Clinically Significant Prognostic Factors

• Bloom Scarff Richardson Grade
• Estrogen receptors
• Progesterone receptors
• HER2 status
• Multigene signature score
Primary Site
1. Chest Wall
   • Ribs
   • Intercostal muscles
   • Serratus anterior muscle
2. Pectoral Muscle

Overlapping lesion of the breast C50.8

Upper Outer Quadrant C50.4

Lower Inner Quadrant C50.3

Breast NOS C50.9
Primary Site
- Code the subsite with the invasive tumor when the pathology report identifies invasive tumor in one subsite and in situ tumor in a different subsite or subsites.
- Code the specific quadrant for multifocal tumors all within one quadrant.
- Do not code C509 (Breast, NOS) in this situation.

Location of Tumor

Ductal Carcinoma In Situ
- A malignant carcinoma arising in the lining of the milk ducts.
- Has not yet invaded nearby tissues.
Ductal Carcinoma In Situ

<table>
<thead>
<tr>
<th>ICD O 3 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>Ductal Carcinoma In Situ (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 carcinoma</td>
</tr>
<tr>
<td>8507</td>
<td>Micropapillary/Clinging</td>
</tr>
</tbody>
</table>

Intraductal mixed with other subtypes

- Intraductal and two or more of the histologies in below or two or more of the histologies below are coded to 8523/2 (intraductal mixed with other types of carcinoma)
  - Cribriform
  - Solid
  - Apocrine
  - Papillary
  - Micropapillary
  - Clinging

Ductal Carcinoma

- 70-80% of all invasive carcinomas are Ductal in origin.
## Ductal Carcinoma

<table>
<thead>
<tr>
<th>ICD O 3 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 cells</td>
</tr>
<tr>
<td>8500</td>
<td>Ductal carcinoma, NOS</td>
</tr>
<tr>
<td>8501</td>
<td>Comedocarcinoma</td>
</tr>
<tr>
<td>8502</td>
<td>Secretory carcinoma</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>

A tumor with infiltrating ductal carcinoma and any of the other histologies listed below should be coded to 8523/3 (infiltrating duct mixed with other types of carcinoma)

- Tubular -Secretory carcinoma
- Apocrine -Intracyctic carcinoma, nos
- Mucinous -Medullary
- Intraductal papillary adenocarcinoma with invasion

## 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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3-5</td>
<td>Low (grade 1)</td>
</tr>
<tr>
<td>2</td>
<td>6 or 7</td>
<td>Intermediate (grade 2)</td>
</tr>
<tr>
<td>3</td>
<td>8 or 9</td>
<td>High (grade 3)</td>
</tr>
</tbody>
</table>
Hormone Receptors

- Estrogen Receptors
- Progesterone Receptors
  - A patient with positive hormone receptors may be treated with antiestrogen drugs or aromatase inhibitors
    - Tamoxifen Citrate (Tamoxifen)
    - Example of aromatase inhibitors include Anastrozole (Arimidex) and Letrozole (Femara)

Human Epidermal Growth Factor Receptor 2

- HER2/neu over expression indicates a tumor may grow aggressively
  - May be identified by ImmunoHistochemical Chemistry (IHC) staining or Fluorescence In Situ Hybridization (FISH)
  - May be treated by Trastuzumab (Herceptin)

SEER RX-Update


SEER® Rx Summary of Changes

January 2013 Release

Important Updates

A comprehensive review of chemotherapy drugs currently found in SEER®Rx has been completed and is pending with the FDA. The following drugs listed in the table below have changed categories from chemotherapy to anti-neoplastic.

This information is required for cases diagnosed prior to January 1, 2013. Reference coding these six drugs as chemotherapy. Coding instructions related to this change have been added to the remits for the applicable drugs.
**Triple Negative Tumors**

- Estrogen receptor negative, progesterone receptor negative, HER2/neu negative
  - May be more aggressive
  - Tend to have a higher recurrence rate for the first 3 years
  - Are not responsive to hormone treatment or Trastuzumab

**Multigene Signature Method**

- Oncotype DX
  - Assesses the risk of local recurrence based on genomic testing of 21 genes
  - May be used for breast cancer patients that are...
    - Are early stage (AJCC TNM stage 0, I, or II)
    - Lymph node negative
    - Estrogen receptor positive
  - May influence treatment decisions

- MammaPrint
  - Assesses the risk of local recurrence based on genomic testing of 21 genes
  - May be used for breast cancer patients that are...
    - Are early stage (AJCC TNM stage 0, I, or II)
    - Lymph node negative
    - Estrogen receptor positive or negative
Regional Lymph Nodes

- Axillary lymph nodes level I
  - Low axillary
  - Intramammary
- Axillary lymph nodes level II
  - Mid axillary
  - Interpectoral
  - Rotter’s nodes
- Axillary lymph nodes level III
  - High axillary
  - Apical
  - Infraclavicular

- Involvement of Level I or II axillary nodes is assigned AJCC N1 or N2
- Involvement of Level III axillary nodes is assigned an AJCC N3a
Sentinel Lymph Node Biopsy (SLNB)

- If the clinical work-up for lymph node metastasis is negative (cN0), an SLNB may be indicated.
- If the clinical work-up for lymph node metastasis is positive (cN1-3), an SLNB would not be indicated.

**Scope of Regional Lymph Node Surgery-Coding Issues**

- The pathology report being used to code the type of surgery rather the operative report
- Distinguishing between a SLNB and an axillary node dissection (ALND)
- Failure to code multiple surgical procedures cumulatively
Scope of Regional Lymph Node Surgery

- Record removal, biopsy, or aspiration of regional lymph nodes
  - Performed at time of surgery of primary site or during separate surgical event
  - Performed in an effort to diagnose or stage disease
  - If 2 or more lymph node procedures are performed, each subsequent procedure must include cumulative effect of all preceding procedures

Scope of Regional Lymph Node Surgery

- Record removal, biopsy, or aspiration of regional lymph nodes
  - Use operative report as primary source to determine if procedure was sentinel lymph node biopsy or more extensive dissection or combination of both
    - Path report may complement information
    - Breast
      - Sentinel lymph node biopsy (SLNB) vs. axillary lymph node dissection (ALND) vs. both SLNB and ALND

Scope of Regional Lymph Node Surgery

- Code 0: No regional lymph node surgery
- Code 1: Biopsy or aspiration of regional lymph nodes
  - If excisional biopsy or aspiration AND additional procedures performed, use appropriate code 2-7
Scope of Regional Lymph Node Surgery

- Code 2: SLNB
  - Op report describes procedure using injection of dye, radio label, or combination to identify lymph node(s) for removal
  - Additional non-sentinel nodes may be removed as part of SLNB
    - Confirm from op report that procedure was SLNB if large number of nodes (5 or more) pathologically examined
    - SLNB fails to map and no sentinel nodes removed and no ALND

Scope of Regional Lymph Node Surgery

- CENTRAL REGISTRIES ONLY
  - If you do not have access to the operative report and the path report does not contain enough information, use code 2 (SLNB) when a small number of lymph nodes was examined and none were positive.
    - This note is not in FORDS and should not be applied by CoC accredited programs.

Scope of Regional Lymph Node Surgery

- Code 3
  - Number of regional nodes removed unknown or not stated; regional nodes NOS removed
- Code 4
  - 1-3 regional lymph nodes removed
- Code 5
  - 4 or more regional lymph nodes removed
Scope of Regional Lymph Node Surgery

- Code 6:
  - Sentinel node biopsy & code 3, 4, or 5 at same time or timing not stated
- Code 7:
  - Sentinel node biopsy and code 3, 4, or 5 at different times
- Code 9:
  - Unknown or not applicable

Distant Metastasis

- The four major sites of metastatic involvement are...
  - Bone
  - Lung
  - Brain
  - Liver
- Disseminated tumor cells (DTCs)
- Circulating tumor cells (CTCs)

TREATMENT
**Treatment Categories**

- Non-invasive carcinoma
- Operable invasive carcinoma confined to the breast and regional lymph nodes
- Inoperable invasive carcinoma confined to the breast, chest wall, skin, and regional lymph nodes
- Metastatic or recurrent carcinoma

**Non-Invasive Carcinoma**

- Ductal Carcinoma In Situ
  - Breast conserving surgery followed by radiation
  - Mastectomy (+/- reconstruction)
  - Breast conserving surgery followed by clinical observation
  - Tamoxifen for ER positive patients
  - 6-12 month physical exams and yearly mammograms
- Lobular Carcinoma In Situ
  - Managed by routine screening
  - Excisional biopsy

**Operable Locally Advanced**

- Mastectomy with axillary lymph node dissection
- Breast conserving therapy (lumpectomy) with sentinel lymph node biopsy followed by whole breast radiation
- Adjuvant chemotherapy
  - May not be required if tumor is less than 5mm and lymph node neg.
- Tamoxifen and/or aromatase inhibitors if patient is ER positive
Neoadjuvant Treatment

- Core Biopsy
- If nodes clinically negative, sentinel node biopsy
- Preoperative systemic therapy
- Lumpectomy
- Radiation and systemic therapy

Inoperable Locally Advanced

- Neoadjuvant Chemotherapy + Trastuzumab (if HER2/neu +)
- Surgery (if tumor responds to neoadjuvant treatment)
  - Total mastectomy and level I&II axillary node dissection
  - Lumpectomy and level I&II axillary node dissection
- Radiation Therapy with concurrent endocrine and Trastuzumab if indicated.

Distant Metastasis

- Goal
  - Prolong survival and enhance quality of life
  - Not curative
- Hormone Therapy (if ER/PR +)
- Immunotherapy (if HER2/neu +)
- Bone metastasis
  - Bisphosphonate bone-reabsorption inhibitor (ancillary agent)
Distant Metastasis

- Chemotherapy
- Neoadjuvant chemotherapy followed by surgery of the primary site
- Treatment of metastatic sites

Things to look for...

- If a patient has breast conserving surgery, they should have radiation.
- If a patient has a tumor that is ER/PR negative, they should have chemotherapy within four months of diagnosis. Applies to women under 70 with stage II or III disease.
- If a patient has stage II or III disease and is under 70, then Tamoxifen or a third generation aromatase inhibitor should be administered.

QUIZ 1
Collaborative Stage Data Collection System (CSv02.04)

**BREAST**

**CS Tumor Size: Breast**

- Record largest tumor diameter in mm
  - Path report (if no neoadjuvant treatment)
  - Largest tumor size prior to neoadjuvant treatment if patient receives neoadjuvant treatment
  - Imaging report
    - Low priority just above physical exam
    - Largest tumor size regardless of imaging technique if discrepancy among imaging/radiographic reports
  - Operative or path report after neoadjuvant treatment
    IF tumor is larger after neoadjuvant treatment

**Pop Quiz: CS Tumor Size**

- 2.8 cm breast tumor on diagnostic imaging; 9 cm breast tumor on physical exam. Patient had neoadjuvant chemotherapy followed by mastectomy. Mastectomy path report documented 8 cm breast tumor.
- What is the code for CS Tumor Size?
  - 028
  - 080
  - 090
CS Extension: Breast

- Code 000: In situ
  - ICD-O-3 behavior code must be /2
- Codes 050-070: Paget Disease
  - ICD-O-3 behavior code may be /2 or /3

CS Extension: Breast

- Codes 100-140, 200, and 300 ONLY
  - AJCC T category based on value of CS Tumor Size
  - Code 200: Subcutaneous tissue invasion; Primary breast skin infiltration
    - Includes adherence, attachment, fixation, induration, and thickening of skin
  - Code 300: Attachment, fixation, invasion of pectoral muscle
    - Includes fixation NOS

CS Extension: Breast

- Codes 400-790
  - Codes 400-410
    - Extension to chest wall
  - Codes 512-585
    - Extensive skin involvement WITHOUT diagnosis of inflammatory carcinoma
  - Codes 600-680
    - Diagnosis of inflammatory carcinoma with specific skin conditions in less than 1/3 of skin of primary breast
  - Codes 725-780
    - Diagnosis of inflammatory carcinoma with specific skin conditions in 1/3 or more of skin of primary breast
Pop Quiz: CS Extension

- Patient has an encapsulated papillary carcinoma with areas of high grade ductal carcinoma in situ (DCIS). Medical oncologist stages the patient as an in-situ carcinoma.
- What is the code for CS Extension?
  - 000: In situ
  - 100: Confined to breast tissue and fat including nipple and/or areola; Localized NOS

CS Lymph Nodes

- Isolated tumor cells (ITC)
  - Small clusters of cells not greater than 0.2 mm OR cluster of fewer than 200 cells in a single histologic cross-section
  - Do not code lymph nodes with ITC as involved
- Micrometastasis
  - Tumor deposits greater than 0.2 mm but not greater than 2.0 mm
- Macrometastasis
  - Tumor deposits greater than 2.0 mm

CS Lymph Nodes

- Codes 000-050: No regional lymph node involvement; ITCs
- Codes 130-155: Micrometastasis in level I or II ipsilateral axillary and intramammary nodes
- Codes 250-600: Macrometastasis in level I & II ipsilateral axillary and intramammary nodes
- Codes 710-748: Ipsilateral internal mammary nodes
- Codes 750-755: Ipsilateral infraclavicular nodes
- Codes 763-768: Ipsilateral internal mammary nodes with axillary nodes or with infraclavicular nodes or with both
- Code 800-805: Ipsilateral supraclavicular nodes
CS Lymph Nodes: Breast

- Lymph nodes evaluated clinically
  - Use code 255, 257, 510, 610, 735, or 810
  - CS Lymph Nodes Eval code = 0, 1, 5, or 9
- Lymph nodes evaluated pathologically
  - Use code 050, 130, 150, 155, 250, 258, 520, 620, 710, 720, 730, or 815
  - CS Lymph Nodes Eval code = 2, 3, 6, or 8

Pop Quiz: Lymph Nodes Data Items

- Intraductal carcinoma of right breast per biopsy. Scans revealed 2.4cm right breast mass touching skin surface and intercostal muscle with overlying skin thickening. No lymphadenopathy. Patient comes to facility to find out status of the axillary lymph nodes for treatment purposes. Axillary sentinel lymph node biopsy performed with 1/3 lymph nodes positive, largest metastasis 5 mm. Axillary lymph node dissection performed revealing ITC in 4/20 lymph nodes per H&E stains. Patient had neoadjuvant chemotherapy followed by lumpectomy without removal of additional lymph nodes. Right lumpectomy path showed residual intraductal carcinoma, involvement of dermis, skeletal muscle present free of cancer, margins negative.

Pop Quiz: Lymph Nodes Data Items

- What is the code for CS Lymph Nodes?
  - 050: Evaluated pathologically; no regional node involvement but ITCs on H&E
  - 250: Evaluated pathologically; moveable ipsilateral axillary nodes with more than micrometastasis
  - 255: Evaluated clinically; moveable ipsilateral axillary nodes
  - 600: Axillary nodes NOS
- What is the code for CS Lymph Nodes Eval?
Pop Quiz: Lymph Nodes Data Items

• What is the code for CS Lymph Nodes Eval?
  – 1: Sentinel node biopsy as part of the diagnostic workup, WITHOUT removal of the primary site adequate for pathologic T classification
  – 3: Meets criteria for pathologic staging
  – 5: Regional nodes examined after neoadjuvant treatment and lymph node evaluation based on clinical evidence
  – 6: Regional nodes examined after neoadjuvant treatment and lymph node evaluation based on pathologic evidence

Pop Quiz: Lymph Nodes Data Items

• What is the code for Regional Nodes Positive?
  – 00
  – 01
  – 04
  – 05
• What is the code for Regional Nodes Examined?
  – 00
  – 03
  – 20
  – 23

CS Mets at DX: Breast

• Circulating tumor cells or disseminated tumor cells, micrometastases 0.2 mm or less, are not distant metastasis
  – Assign code 05
• Contralateral axillary, internal mammary, infraclavicular, or suprACLavicular nodes are distant
  – Assign code 10
• Satellite skin nodule other than primary breast
  – Assign code 44
SSF1: Estrogen Receptor (ER) Assay  
SSF2: Progesterone Receptor (PR) Assay  
- Record highest value if more than 1 test is given  
  - Record as positive if any value is positive  
- Record value from specimen prior to neoadjuvant treatment  
  - Only record post neoadjuvant treatment value if there is no pre-treatment specimen  
- Do not record values from Oncogene test in SSF1 and SSF2

Pop Quiz: SSF1 & SSF2  
- Excisional biopsy of breast tumor showed extensive ductal carcinoma in situ with a small focus of infiltrating ductal carcinoma. ER/PR tested on in situ portion of tumor because there was not enough material to do the tests on the invasive portion of the tumor.  
- Can ER/PR results from in situ portion of tumor be recorded in SSF1 & SSF2?

SSF3: Number of Positive Ipsilateral Level I-II Axillary Lymph Nodes  
- Code the number of positive level I and II and intramammary lymph nodes based on pathologic information  
- Code even if patient had pre-operative systemic or radiation treatment  
- Do not code lymph nodes with ITCs as positive nodes  
- Use code 098 when no axillary nodes were examined or axillary dissection was performed and no nodes were found
SSF4: IHC of Regional Lymph Nodes
SSF5: MOL Studies of Regional Lymph Nodes

- SSF4: Immunohistochemistry (IHC)
  - Additional test done on negative lymph nodes
  - Use codes 000-009 if CS Lymph Nodes = 000
  - Use code 987 if CS Lymph Nodes does not = 000
- SSF5: Molecular (MOL) methods (Reverse Transcription Polymerase Chain Reaction, RT-PCR)
  - More sensitive test to detect ITCs
  - Use codes 000-002 if CS Lymph Nodes = 000
  - Use code 987 if CS Lymph Nodes does not = 000

SSF6: Size of Tumor-Invasiveness Component

- Code the description that explains code in CS Tumor Size
  - Examples
    - 7 cm breast tumor, intraductal & infiltrating ductal carcinoma; invasive component 3.2 cm
      - CS Tumor Size = 032; SSF7 = 020
    - 7 cm breast tumor per ultrasound; core biopsy positive for ductal carcinoma; patient received neoadjuvant chemotherapy followed by lumpectomy and ALND; lumpectomy path 2.3 cm tumor, residual infiltrating ductal carcinoma
      - CS Tumor Size = 070; SSF7 = 987

SSF7: Nottingham or Bloom-Richardson (BR) Score/Grade

- Code tumor grade in following order
  - BR score (3-9)
  - BR grade (low-1, intermediate-2, high-3)
- Code highest score if multiple scores listed
- BR score not routinely reported for in situ cancers
Pop Quiz: SSF7

- Core biopsy: Ductal carcinoma, Bloom Richardson grade 2
- Lumpectomy: Ductal carcinoma, Bloom Richardson score 5/9
- What is the code for SSF7?
  - 050: Score of 5
  - 120: Grade 2

HER2

- HER2-Human Epidermal growth factor Receptor 2
  - Overexpression of HER2 indicates tumor may grow aggressively
- Tests to measure HER2
  - Immunohistochemistry (IHC)
  - Fluorescence In Situ Hybridization (FISH)
  - Chromogenic In Situ Hybridization (CISH)

HER2

- Record HER2 lab value and interpretation using same test
- Record highest lab value if more than 1 lab value is available
- Record positive value if positive and negative values are available
- Do NOT code HER2 results from multigene signature test
- Use code 997 if documented that test was not done
HER2 Data Items

- SSF8: HER2 IHC Lab Value
- SSF9: HER2 IHC Test Interpretation
- SSF10: HER2 FISH Lab Value
- SSF11: HER2 FISH Test Interpretation
- SSF12: HER2 CISH Lab Value
- SSF13: HER2 CISH Test Interpretation
- SSF14: HER2 Results of Other or Unknown Test

Pop Quiz: HER2

- Right breast
  - 9:30 position - MD invasive ductal carcinoma, HER2-3.6 Amp by FISH
  - 1:00 position - WD invasive ductal carcinoma, HER2-1.3 Unamp by FISH
- What is the code for SSF10?
  - 130
  - 360
- What is the code for SSF11?
  - 010: Amplified
  - 020: Not amplified

SSF15: HER2 Summary Result of Testing

- 1 HER2 test done
  - Record results in SSF15
- More than 1 HER2 test done
  - Record results of gene-amplification test if both IHC and gene-amplification are done
  - If gene-amplification done first and IHC done to clarify results, record results of IHC
  - Use code 997 (test done, results not in chart), if results of 1st test available, but 2nd test is done and results are not available
**SSF16: Combinations of ER, PR, and HER2 Results**
- Used to identify triple negative patients
- Based on information coded in SSF1, SSF2, & SSF15
  - Code as negative (0) or positive (1)
  - ER results in 1st digit
  - PR results in 2nd digit
  - HER2 results in 3rd digit

**SSF21: Response to Neoadjuvant Treatment**
- Code clinician’s statement of response to neoadjuvant treatment
- Assign code 987 if neoadjuvant treatment not given
- Do NOT interpret based on medical record

**SSF22: Multigene Signature Method**
**SSF23: Multigene Signature Results**
- Multigene signature tests
  - Assay for specific genes
  - Tailor treatment to cancer characteristics
  - Usually done for node negative patients to predict recurrence and response to specific chemotherapy
  - Most common test types
    - Oncotype DX
    - MammaPrint
  - SSF23
    - Record the score, not the percentage
Coming up!

• 5/2/13  
  – Collecting Cancer Data: Bladder & Renal Pelvis
• 6/6/13  
  – Collecting Cancer Data: Kidney

Certificate phrase:
Axillary LN
http://www.surveygizmo.com/s3/1209794/Breast

Fabulous Prize Winners Are...

Thank You!