

Directly Coded Summary Stage Breast Cancer



Directly Coded Summary Staging is Back

- ❑ **Summary Staging (known also as SEER Staging) bases staging of solid tumors solely on how far a cancer has spread from its point of origin.**
- ❑ **It is an efficient tool to categorize how far the cancer has spread from the original site as the staging categories are broad enough to measure the success of cancer control and other epidemiologic efforts**
- ❑ **Summary Stage uses all information available in the medical record as it is a combination of clinical and pathologic information on the extent of disease**
- ❑ **Information within four (4) months of diagnosis**



**To begin the Summary Staging process,
abstractors should always review:**

History and Physical Exam

Radiology Reports

Operative Reports

Pathology Reports

Medical Consults

Pertinent Correspondence



Equivalent or Equal Terms to Consider for Breast Cancers

Duct or Ductal

Mammary or Breast

Mucinous or Colloid

Tumor, Mass, Lesion or Neoplasm

NOS



Determining how the Breast Tumor Should be Staged requires the Registrar to:

- ❑ Read the physical exam and work up documents.**
- ❑ Read operative and pathology reports.**
- ❑ Review imaging reports for documentation of any spread.**
- ❑ Become familiar with the anatomy of the breast and the regional and distant lymph node chains to avoid incorrect staging if nodes are involved.**
- ❑ Refer to the online manuals regularly and periodically to check the site for updates and/or changes.**

Early Screening for Breast Cancer

- ❑ **To find early breast cancer, the mammogram and clinical breast exam are the main tests recommended by the American Cancer Society.**
 - Screening mammograms are used to look for breast disease in women who have no signs or symptoms of breast disease.
- ❑ **In women who are at high risk because of certain risks factors, the American Cancer Society also recommends the MRI.**

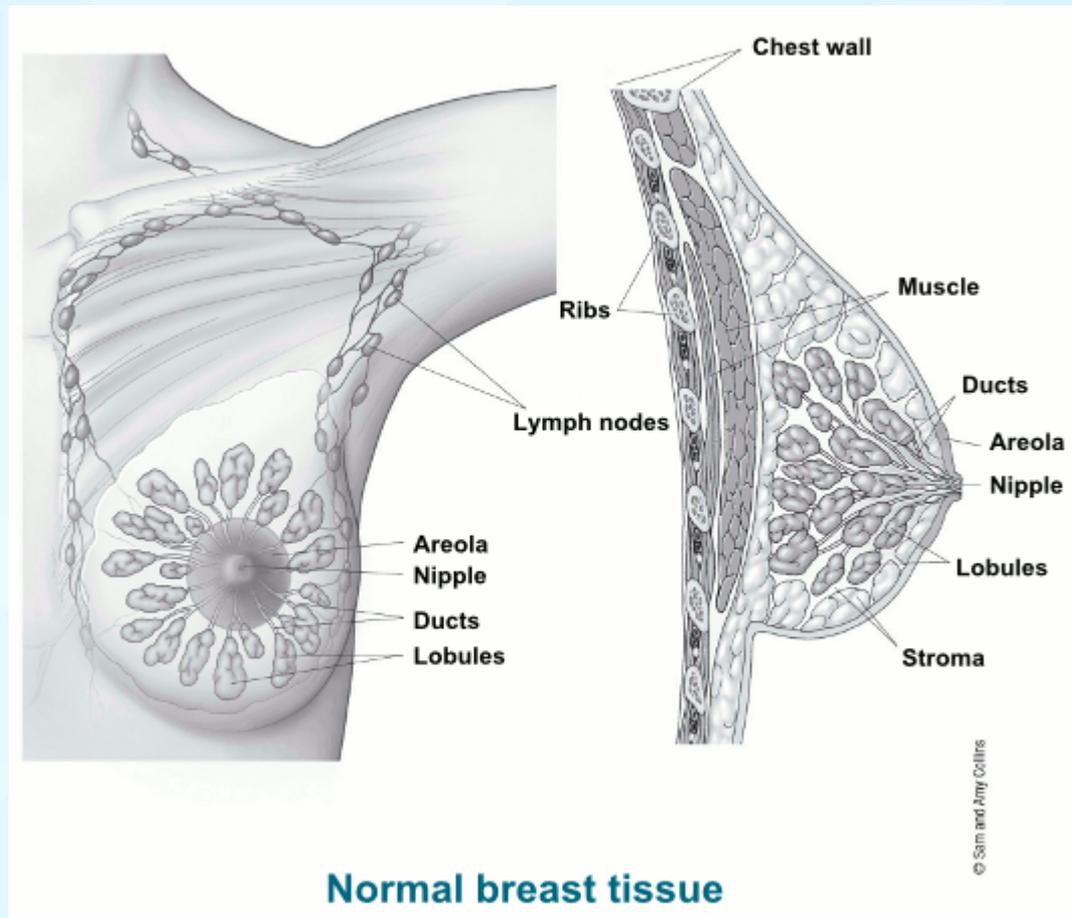


Assigning the Correct Summary Stage Code

Nine possible codes for Summary Stage

- ❑ **0 = In-Situ**
- ❑ **1 = Local**
- ❑ **2 = Regional disease by direct extension only**
- ❑ **3 = Regional disease with only regional lymph nodes involved**
- ❑ **4 = Regional disease by both direct extension and regional lymph node(s)**
- ❑ **5 = Regional disease that is not otherwise specified**
- ❑ **7 = Distant sites or distant lymph node involvement**
- ❑ **8 = Benign and borderline CNS tumors**
- ❑ **9 = Unknown if there is extension or metastatic disease (unstaged, death certificate only cases)**

Know the Anatomy of the Breast



Source: <http://www.cancer.org/cancer/breastcancer/detailedguide/breast-cancer-what-is-breast-cancer>



Know How Breast Cancer May Spread

- ❑ **Lymphatic Spread** often is evident in any of the following: supraclavicular, cervical, contralateral internal mammary, occasionally contralateral axillary lymph node chains.
- ❑ **Hematogenous Spread** is most commonly found in bone, brain, liver or lung.



The Importance of the Lymphatic System

The lymphatic system is important to understand as it is one way that breast cancers can spread.

- ❑ Lymph nodes are small, bean shaped collections of immune system cells that are connected by lymphatic vessels.
- ❑ Lymphatic vessels are like small veins, except that they carry a clear fluid called lymph (instead of blood) away from the breast.
- ❑ Lymph contains tissue fluid and waste products, as well as, immune system cells.
- ❑ Breast cancer cells can enter lymphatic vessels and begin to grow in lymph nodes.

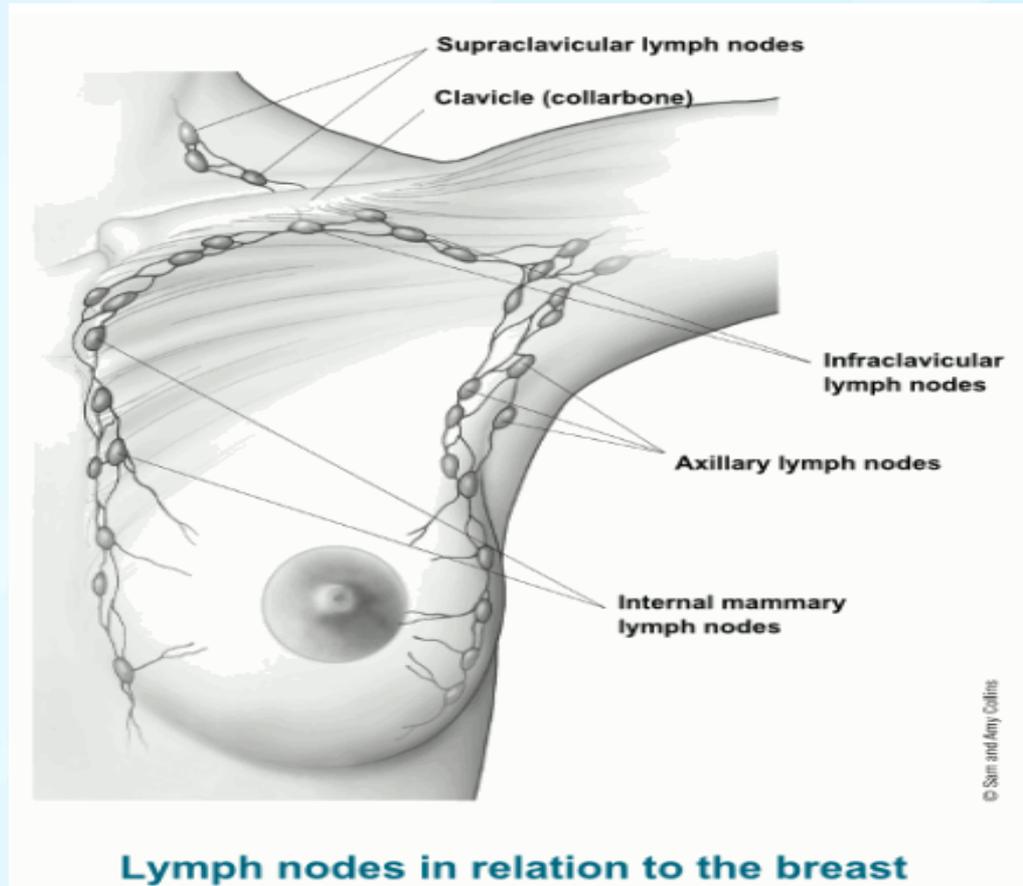
Lymphatic Vessels in the Breast

- ❑ Lymphatic vessels in the breast that connect to the lymph nodes under the arm
 - Axillary nodes

- ❑ Lymphatic vessels that connect to lymph nodes inside the chest
 - Internal mammary nodes

- ❑ Lymphatic vessels that connect either above or below the collarbone
 - Supraclavicular nodes
 - Infraclavicular nodes

Lymph Nodes in Relation to the Breast



Source: <http://www.cancer.org/cancer/breastcancer/detailedguide/breast-cancer-what-is-breast-cancer>

What Does In-Situ Mean?

- ❑ **In-Situ is defined as malignancy without invasion**
 - Only occurs with epithelial or mucosal tissue
 - **Must be microscopically diagnosed** to visualize the basement membrane.

- ❑ **In-Situ cancer of the breast may also be referred to as**
 - non-invasive
 - pre-invasive,
 - non-infiltrating
 - stage 0
 - intraductal **WITHOUT** infiltration
 - lobular neoplasia
 - in situ Paget disease

- ❑ **If pathology states the tumor is microinvasive it is no longer staged as in-situ and is considered to be at least localized disease.**



In-Situ Equivalent Terms

Behavior Code of 2

In situ Paget disease

Intracystic, non-infiltrating– located within a cyst

Intraductal

Intraductal WITHOUT infiltration

Lobular neoplasia

Non-infiltrating

Noninvasive

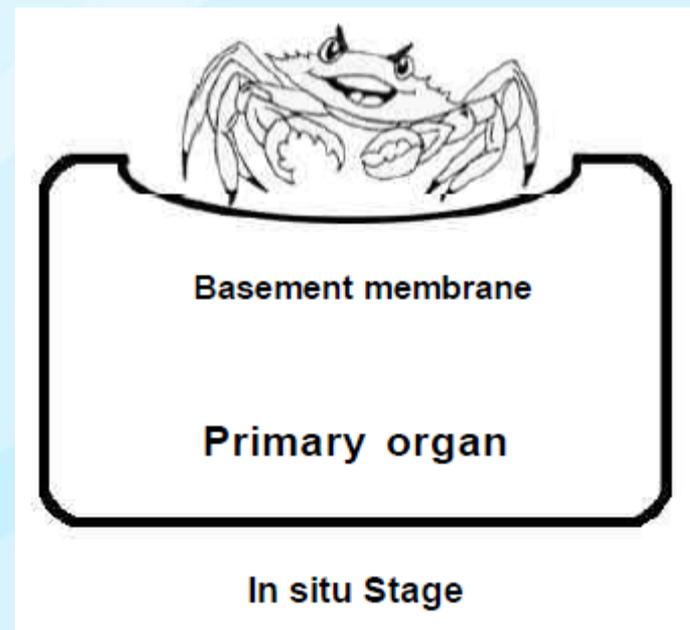
Pre-invasive

Stage 0

Review of the SEER Summary Staging 2000 will help to clarify the definitions/terms for specific malignancies.

In Situ (code 0)

- An in situ cancer:
 - meets the pathologic criteria for a malignancy;
 - has not invaded supporting structure of the organ of origin.



Staging In-Situ Breast Cancer Requires Knowledge of a Specific Exception

**In-Situ is a non-invasive malignancy and is coded as a 0
UNLESS**

- ❑ Primary Tumor was documented in the pathology report as having only an in-situ behavior, but there is an additional statement confirming malignancy has spread and is present in regional node(s) or in a distant site.
 - **Should that occur, the in situ stage is not valid and the stage must be documented to reflect the regional or distant disease.**

- ❑ **If the pathologists describes the in situ tumor as microinvasive, the stage is at least *localized*.**

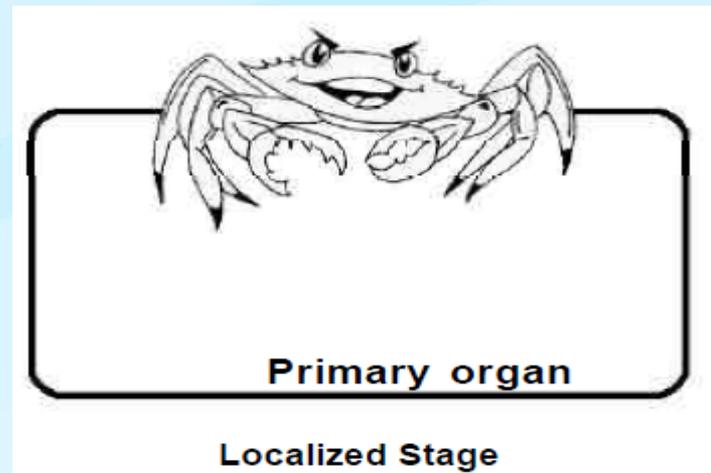
What Does Localized Mean?

Localized breast cancer is a malignancy which has not spread beyond the breast.

- Breast tissue**
- Breast fat**
- Nipple**
- Areola**
- Paget's disease, with or without underlying tumor.**

Localized (code 1)

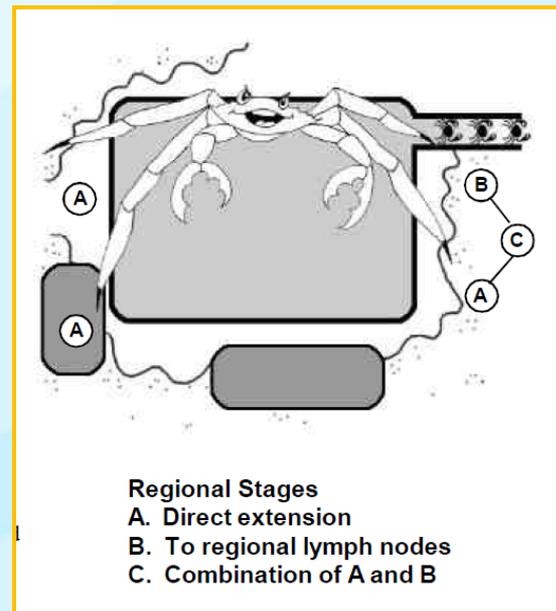
- ❑ Malignancy is limited to organ of origin.
- ❑ No spread beyond the organ of origin.
- ❑ Infiltration past the basement membrane of epithelium into the functional part of the organ; however, there is no spread beyond the boundaries of the organ.



What Does Regional Disease Mean?

Regional Disease indicates that the tumor has gone beyond the organ of origin but is not considered distant.

- **Regional by direct extension (code 2)**
Tumor has invaded surrounding organ(s) or adjacent tissues. May also be referred to as direct extension or contiguous spread.
- **Regional to lymph nodes (code 3)**
Tumor cells may have traveled through the lymphatic system to regional lymph nodes where they remain and begin to “grow.”
- **Regional by direct extension and lymph nodes (code 4)**
Extension into adjacent structures or organs and lymph node involvement are both present.
- **Regional (as stated by the physician but the site[s] of regional spread is/are not clearly documented) (code 5)**



Staging of Regional Disease (codes 2, 3, 4, 5)

- ❑ Review records to confirm that tumor is more than localized.
- ❑ Review all pertinent reports looking for specific regional disease references and exclusions of distant spread.
 - Terms to watch for are seeding, implants and nodules – scrutinize diagnostic reports for regional disease spreading references to eliminate that spread is not distant.

Caution: Breast cancer with lymph node metastases means involvement by tumor – always confirm that the lymph nodes are regional.

Regional by Direct Extension (code 2)

- ❑ Presence of satellite nodule or nodules in the skin or the breast.
- ❑ Skin edema.
- ❑ Extensive skin involvement including Peau d'orange, inflammation of skin, and satellite nodules of the skin of primary breast.
- ❑ Ulceration of skin.
- ❑ Inflammatory carcinoma includes diffuse dermal lymphatic permeation or infiltration (which may be beyond the skin directly overlying the tumor).
- ❑ Invasion of or fixation to the chest wall, intercostal muscle or muscles, pectoral fascia or muscles, adjacent ribs, serratus anterior muscle(s) or subcutaneous tissue.
- ❑ Local infiltration of dermal lymphatics adjacent to primary tumor involving skin by direct extension.

Regional Lymph Nodes (code 3)

Axillary Nodes:

- ❑ **Level 1 – (low, superficial or NOS, adjacent to the tail of the breast)**
 - **Anterior (pectoral)**
 - **Lateral (brachial)**
 - **Posterior (subcapsular)**
- ❑ **Level II – (mid-level, central or NOS)**
 - **Interpectoral (Rotter's)**
- ❑ **Level III – (high, deep or NOS)**
 - **Apical (subclavian)**
 - **Axillary vein**

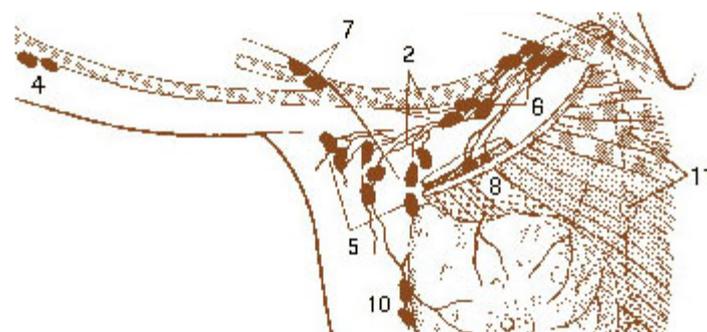
Regional Lymph Nodes (continued)

- ❑ **Infraclavicular (subclavicular)**
 - In Summary Stage 1977 this would have been considered distant.
- ❑ **Internal mammary (parasternal)**
- ❑ **Intramammary (added in 2000)**
- ❑ **Nodules in axillary fat**
- ❑ **Regional Nodes NOS**

Regional Lymph Nodes

REGIONAL LYMPH NODES

Blood and lymph vessels form a network throughout each breast. Breast tissue is drained by lymphatic vessels that lead to axillary nodes (which lie in the axilla) and internal mammary nodes (which lie along each side of the breast bone). When breast cancer spreads, it is frequently to these nodes.



- | | |
|--|--|
| 2. Axillary lymphatic plexus | 8. Interpectoral axillary lymph nodes (Rotter nodes) |
| 4. Cubital lymph nodes * | 10. Paramammary or intramammary lymph nodes |
| 5. Superficial axillary (low axillary) | 11. Parasternal lymph nodes (internal mammary nodes) |
| 6. Deep axillary lymph nodes | |
| 7. Brachial axillary lymph nodes | |

** Note: the cubital lymph nodes are not part of the lymph node drainage of the breast.*

Regional by BOTH Direct Extension AND Lymph Node Involvement (code 4)

- Assign code 4 (combination code) when there is BOTH:**

Direct extension of disease

AND

Involvement of regional lymph nodes

When to Code as Regional, NOS (code 5)

- ❖ **It is unclear if the tissues involved are regional direct extension or lymph nodes**
- ❖ **Physician statement says “Regional disease” with no additional documentation in the medical record.**

**Regional Disease with no further information is coded as
Regional, NOS – Code 5**



Read Carefully

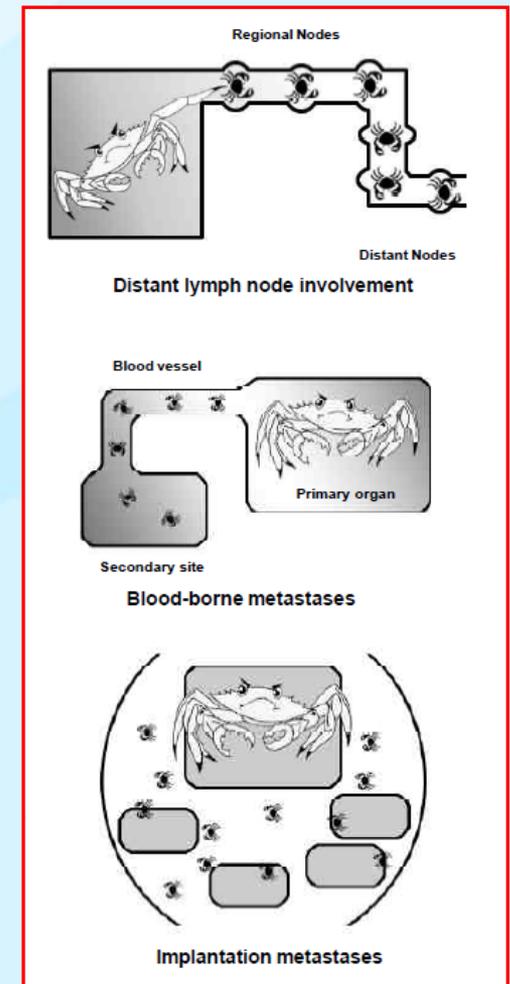
Carcinoma of the breast with regional lymph nodes

- ❑ This indicates that the involved lymph nodes are those that are the first to drain the primary and should be staged as regional to lymph nodes.
- ❑ **Example:** Breast adenocarcinoma with axillary lymph node metastases means the axillary nodes are involved and should be coded as regional to lymph nodes (code 3).
- ❑ **Don't be misled by the term metastases** – It doesn't always mean distant disease.

What is Distant Stage (code 7)?

Distant Stage indicates that the tumor has spread to areas beyond the regional sites.

- ❑ These sites may be called:
 - Remote
 - Metastatic
 - Diffuse
- ❑ Distant lymph nodes are those that are not included in the drainage area of the primary tumor.
- ❑ Hematogenous metastases develop from tumor cells carried by the bloodstream and begin to grow beyond the local or regional areas.



Distant Stage - cont'd

❑ Distant lymph node(s):

- Cervical, NOS
- Contralateral/bilateral axillary
- Contralateral/bilateral internal mammary (parasternal)
- Supraclavicular (transverse cervical)
- Other distant lymph node(s)

❑ Further contiguous extension staged as distant involvement:

- Skin over*
 - * Axilla
 - * Contralateral (opposite) breast
 - * Sternum
- Upper abdomen

❑ Examples of Common Distant Metastasis:

Adrenal (suprarenal) gland

Lung

Bone other than adjacent rib

Ovary

Contralateral (opposite) breast - if stated as metastatic

Satellite nodule(s) in skin other than primary breast

Important Things to Remember

- ❑ Changes such as dimpling of the skin, tethering, and nipple retraction are caused by tension on Cooper's ligament(s), not by actual skin involvement. They do not alter the classification.
- ❑ Consider adherence, attachment, fixation, induration, and thickening as clinical evidence of extension to skin or subcutaneous tissue; code regional by direct extension. (These terms would have been ignored in the 1977 Summary Staging Guide and cases would have been considered localized in the absence of further disease.)
- ❑ Consider "fixation, NOS" as involvement of pectoral muscle; code regional by direct extension.
- ❑ Since "inflammatory carcinoma" was not specifically categorized in either the Historic Stage or the 1977 Staging Guide, previous cases of inflammatory carcinoma may have been coded to either regional or distant.

Tips for the Abstractor

- ❑ If review of the patient's records documents distant metastases, the Registrar can avoid reviewing records to identify local or regional disease.
- ❑ Pathology reports that contain a statement of invasion, nodal involvement or metastatic spread cannot be staged as in-situ even if the pathology of the tumor states it.
- ❑ If there are nodes involved, the stage must be at least regional.
- ❑ If there are nodes involved but the chain is not named in the pathology report, assume the nodes are regional.

Tips for the Abstractor – cont'd

- ❑ A way to remember the difference between regional direct extension and distant metastases is whether the secondary site has tumor on the surface (most likely direct extension) or in the organ (blood-borne metastases).**
- ❑ If the record does not contain enough information to assign a stage, it must be recorded as unstageable.**

Exercise 1 – How would you stage this case?

- ❑ Patient presented after noting a mass in her left breast. Physical exam stated there was no discharge or retraction of the nipple.**
- ❑ Enlarged axillary nodes were noted in the record. Patient underwent a needle biopsy of the breast lesion which identified infiltrating ductal carcinoma, moderately differentiated.**
- ❑ A modified radical mastectomy identified tumor had infiltrated the dermis. Ten axillary nodes were examined and three were found to be involved.**

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Answer - Code 4 – Direct extension to dermis (code 2) and regional nodal involvement (code 3).

Exercise 2 – How would you stage this case?

- ❑ Patient presented with a fixed mass in her left breast. It was 4 cm in size with no lymphadenopathy.
- ❑ Mammogram confirmed mass to be deep in the breast and was highly suspicious for malignancy.
- ❑ Pt underwent a radical mastectomy with findings of pectoralis muscle involvement with poorly differentiated ductal carcinoma.
- ❑ There were 6 of 14 axillary nodes (code 2) and 2 of 3 supraclavicular nodes involved with tumor (code 7).

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Answer - Code 7 – Distant disease to distant supraclavicular nodes.

Exercise 3 – How would you stage this case?

- ❑ Patient presented for breast exam which identified a 2 cm lesion in the right breast. No adenopathy. Mammogram noted some changes in the right breast.
- ❑ Patient had a biopsy which showed ductal carcinoma, well differentiated. She subsequently had a modified radical mastectomy with axillary dissection.
- ❑ Margins were clear. No metastatic disease was found in the 11 lymph nodes dissected.
- ❑ Other work-up studies were negative.

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Answer - Code 1 – Localized Disease

Exercise 4 – How would you stage this case?

- ❑ 81 year old patient presented with a hard nodule in her right breast.**
- ❑ She subsequently had work up and opted for a modified radical mastectomy.**
- ❑ Following the surgery she elected not to undergo any further workup or treatment for her apparent regional disease.**

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Answer - Code 5 - Regional Disease not otherwise specified.

Excellent Resources for Summary Staging

- ❑ SEER Summary Stage 2000, SEER Training modules:
<http://training.seer.cancer.gov>
- ❑ SEER Coding Manuals – Historic – 1977.
- ❑ http://training.seer.cancer.gov/modules_site_spec.html
- ❑ <http://training.seer.cancer.gov/breast/abstract-code-stage/extent/>
- ❑ American Cancer Society – <http://www.canger.org>

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For questions, please contact your designated CDC/NPCR Education Training Coordinator:

**Donna M. Hansen, CTR
Auditor/Trainer**

UC Davis Institute of Population Health
California Cancer Registry
1631 Alhambra Blvd, Suite #200
Sacramento, CA 95816
(916) 731-2543

Email: dhansen@ccr.ca.gov

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333

Telephone, 1-800-CDC-INFO (232-4636)/TTY:1-888-232-6348

E-mail: cdcinfo@cdc.gov Web: www.cdc.gov





**Centers for Disease Control and Prevention
Chamblee Campus, Atlanta GA**