Sept 2025

Missouri Cancer Registry and Research Center
Show-Me-Tips

Coding...Abstracting...Education…

Ed 25:03
Breast

Breast Cancer

BREAST PRIMARY SITE CODING

The **breast primary site clock** is used to accurately assign the topographic location of a breast tumor. The "clock" analogy refers to how the breast is divided into segments like the face of a clock. In this system, the **nipple is considered the center of the clock**, and tumor locations are assigned based on their position relative to this central point.

For example, a tumor located at the upper outer quadrant of the right breast at the 10 o'clock position is recorded differently than one located at the same 10 o'clock position on the left breast, due to the mirror-image orientation.
For the **right breast**, 12 o'clock is at the top, 3 o'clock is lateral (outer side), and 9 o'clock is medial (inner side).
For the **left breast**, the orientation is flipped—3 o'clock is medial and 9 o'clock is lateral. This distinction is crucial in determining the correct laterality and topography code.

SEER's Coding Manual Appendix C provides specific **ICD-O-3 topography codes** for breast subsites (C50.0–C50.9), such as:

- C50.1: Central portion of the breast (includes the nipple)
- C50.8: Overlapping lesion of breast (used when the tumor spans more than one subsite)
- C50.9: Breast, NOS (used only when no subsite is mentioned)

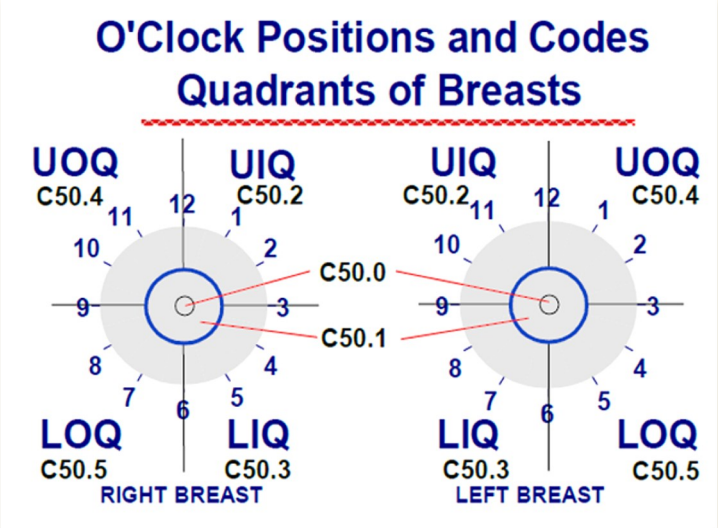
Laterality must be coded for all subsites. Breast primary with positive nodes and no breast mass found: ***Code laterality to the side with the positive nodes.***

When to use Breast NOS C509

- Non-contiguous multiple tumors in different quadrants/subsites of same breast
- Unknown/unable to identify in which quadrant/subsite the tumor is located

(Example: Outpatient biopsy with no quadrant identified. Patient lost to follow-up.)

- Inflammatory carcinoma; diffuse tumor



https://seer.cancer.gov/manuals/2025/AppendixC/Coding_Guidelines_Breast_2025.pdf

Registrars are instructed to use the most specific subsite mentioned in the medical record. *When multiple clock-face positions are provided or when imaging/pathology notes indicate tumor spread across quadrants, SEER recommends using* ***code C50.8 (****overlapping lesion).*
Importantly, if the medical record only lists a clock time but no quadrant, coders are expected to translate that clock time into the appropriate quadrant using the breast clock guidelines.

This project was supported in part by a cooperative agreement between the Centers for Disease Control and Prevention (CDC) and the Missouri Department of Health and Senior Services (DHSS) (NU58DP007130-04) and a Surveillance Contract between DHSS and the University of Missouri.

https://seer.cancer.gov/tools/solidtumor/

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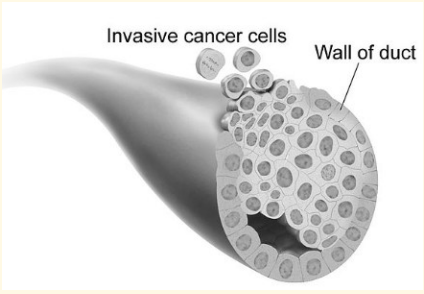
INVASIVE & IN SITU BREAST CANCER

Invasive and in situ cancers differ in how deeply the cancer cells have penetrated the tissues where they originated. These differences are crucial for diagnosis, staging, treatment, and prognosis—especially in breast cancer.

INVASIVE

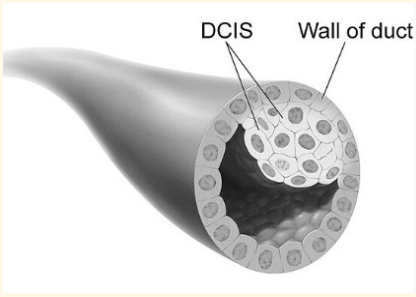
I**nvasive cancer** (also called infiltrating cancer) occurs when abnormal cells **break through the basement membrane** of the ducts or lobules and **invade nearby breast tissue**. This allows the cancer to potentially spread to nearby lymph nodes and distant organs. The most common invasive breast cancer type is **invasive ductal carcinoma (IDC)**, followed by **invasive lobular carcinoma (ILC)**. Invasive cancers are assigned a **stage I–IV** depending on tumor size, lymph node involvement, and presence of metastases. They often require more aggressive treatment, including surgery, radiation, chemotherapy, and/or hormonal therapy.



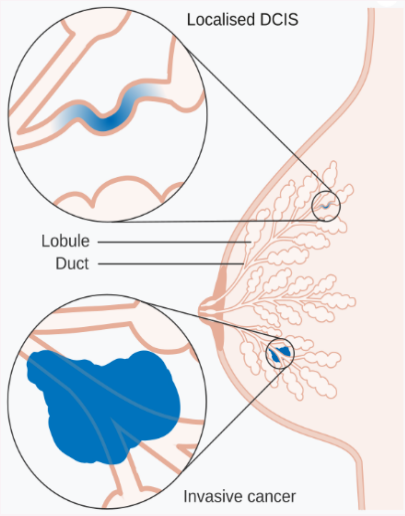
https://commons.wikimedia.org/wiki/File:Invasive_breast_cancer.jpg

IN SITU

In situ cancer refers to a **non-invasive** condition where abnormal cells are confined to the layer of cells where they first developed. In breast cancer, the most common form of in situ disease is **ductal carcinoma in situ (DCIS)**, where abnormal cells are located inside the milk ducts but have not spread beyond the duct walls. Less commonly, **lobular carcinoma in situ (LCIS)** occurs in the milk-producing lobules. Because in situ cancers haven't invaded surrounding tissue, they are generally **stage 0** and considered **highly treatable** with a very low risk of metastasis, though some may progress if left untreated.



https://commons.wikimedia.org/wiki/File:Breast_cancer_ductal_carcinoma_in_situ.jpg



https://commons.wikimedia.org/wiki/File:Diagram_showing_ductal_carcinoma_in_situ_(DCIS)_CRUK_115.svg

CODING GRADE FOR IN SITU CANCER

GRADE ID (12) BREAST, Clinical Instructions, Note 6 In situ tumors:
https://www.naaccr.org/wp-content/uploads/2024/10/Grade-Coding-Instructions-and-Tables-v3.2_printed.pdf?v=1736344473

- The preferred grading system for in situ tumors is based on a 3 grade Nuclear system, and is defined as **Low (L)** (Nuclear Grade 1), **Intermediate (M)** (Nuclear Grade 2), or **High (H)** (Nuclear Grade 3)
- Documentation for these grades may be 1/3, 2/3, 3/3. This notation is documenting the nuclear grade, not the Nottingham grade.
- If a pathologist uses a Nottingham grade (i.e., G2) for an in-situ cancer, they are documenting the nuclear component of the Nottingham score. You would still **assign L, M, or H as appropriate for the in-situ tumor**
- **Do not use grades 1, 2, 3 for in situ tumors**

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DUCTAL CARCINOMA / LOBULAR CARCINOMA

Ductal and lobular breast cancers are the two most common histologic types of breast cancer, distinguished by where they begin in the breast and how they tend to grow and spread.

DUCTAL CARCINOMA

Ductal carcinomas begin in the **milk ducts**, the tubes that carry milk from the lobules (milk-producing glands) to the nipple.

The most common form is:

Invasive Ductal Carcinoma (IDC) ICD-O-3 code **8500/3**

Cancer cells have broken through the duct wall and invaded surrounding breast tissue.

IDC can spread to lymph nodes and beyond if untreated.

Ductal Carcinoma in Situ (DCIS) ICD-O-3 code **8500/2**

A **non-invasive** cancer where abnormal cells remain confined within the ducts.

Considered **stage 0** and highly treatable.

LOBULAR CARCINOMA

Lobular carcinomas start in the **lobules**, which are the glands that produce milk.

The most common type is:

Invasive Lobular Carcinoma (ILC) ICD-O-3 code **8520/3**

Cells tend to grow in a **single-file pattern**, making the tumor harder to detect on imaging or physical exams.

ILC is also more likely to be bilateral (found in both breasts) or multifocal.

Lobular Carcinoma in Situ (LCIS) ICD-O-3 code **8520/2**

Not a true cancer but a **marker of increased risk** for developing invasive cancer in either breast.

Often found incidentally during biopsies.

TERMINOLOGY

Synchronous	Example
Existing or occurring at the same time. Tumors that are diagnosed at or about the same time (equivalent terms: simultaneous, concurrent, existing at the same time.)	Patient diagnosed with two cancers at the same time. PET scan revealed two separate non-contiguous tumors in the right breast.

Metachronous	Example
At a later point in time, occurring or starting at different times. Means there are tumors that are presenting/ diagnosed at a different times.	Initial tumor diagnosed and removed; patient returns years later presenting with a new tumor.

De Novo	Example
From the beginning, new disease. The presence of metastasis at presentation.	Patient presented with a de novo metastatic breast cancer. *(Indicates the patient does not have a previous history of breast cancer and the cancer is not metastasis is not form a previous primary.)*

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CODING HISTOLOGY

Use these guidelines for one or more invasive histology within a single tumor and are in priority order:

Two histologies within a single tumor will be either:
- A NOS and a subtype/variant **OR**
- Different histologies (different rows in Table 3 **OR** different subtypes in Table 3 Column 3 **OR** a combination code from Table 2 and a code from Table 3)

1. NOS and a subtype/variant

A. Code the subtype/variant (specific histology) **ONLY** when documented to be **greater than 90%** of the tumor.
Note: When a histology is listed as "minimal", "focus/foci/focal", "microscopic", you can assume the other histological portion comprises greater than 90% of the tumor.

EXAMPLE: Patient underwent an excisional biopsy with a pathologic diagnosis of invasive cribriform carcinoma 8201/3. There was microscopic involvement of one margin. The patient chose to have a total mastectomy. Pathology from the total mastectomy showed minimal residual invasive carcinoma NST 8500/3. *Because the invasive carcinoma NST was minimal, the subtype/variant invasive cribriform carcinoma 8201/3 is assumed to be greater than 90% of the tumor.*

B. Code the **NOS/NST** when the subtype/variant is documented to be less than or equal to 90% of the tumor OR the percentage of subtype/variant is **unknown/not documented**.

2. Different histologies

A. Code the histology which comprises the majority of tumor.

Note 1: This instruction **does not apply t**o:
Invasive carcinoma NST/ductal and lobular carcinoma (use the combination code 8522/3)
Mucinous carcinoma and a different histology (see Histology Rules)
Metaplastic carcinoma, NOS and subtypes/variants and invasive carcinoma, NST (see Histology Rules)

Note 2: The following terms **do not describe** the majority of tumor.

Architecture	Pattern(s)
Component	Subtype
Differentiation*	Type
Features (of)*	Variant
Foci; focus, focal	

Unless there is an exact ICD-O term that includes "differentiation" or "features"

B. Code a combination code using Table 2 in the Equivalent Terms and Definitions when the majority is unknown/not documented.

Do not code **apocrine carcinom**a when the diagnosis specifies apocrine differentiation or features. **Apocrine** differentiation is frequently present in:
Carcinoma NST/duct carcinoma o Subtypes/variants of carcinoma NST/duct carcinoma
Lobular carcinoma NOS o Pleomorphic lobular carcinoma in situ

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CODING HISTOLOGY

3. Ambiguous Terminology

Code the specific histology described by ambiguous terminology (list follows) **ONLY** when **A** or **B** is true:

A.
The only diagnosis available is one histology term described by ambiguous terminology

- CoC and SEER require reporting of cases diagnosed only by ambiguous terminology
- Case is accessioned (added to your database) based on ambiguous terminology and no other histology information is available/documented

EXAMPLE: Outpatient biopsy says probably apocrine carcinoma. The case is accessioned (entered into the database) as required by both SEER and COC. No further information is available. Code the histology apocrine carcinoma. The case meets the criteria in #3A.

B.
There is a NOS histology and a more specific (subtype/variant) described by ambiguous terminology

- Specific histology is clinically confirmed by a physician (attending, surgeon, oncologist, etc.) OR
- Patient is receiving treatment based on the specific histology described by ambiguous term

EXAMPLE:
Example 1: The pathology diagnosis is carcinoma NST consistent with pleomorphic carcinoma. The oncology consult says the patient has pleomorphic carcinoma of the right breast. This is clinical confirmation of the diagnosis. Code pleomorphic carcinoma. The case meets the criteria in bullet 1.

EXAMPLE:
Example 2: The pathology diagnosis is sarcoma consistent with liposarcoma. The treatment plan says the patient will receive the following treatment for liposarcoma of the breast. Treatment plan confirms liposarcoma. Code liposarcoma. The case meets the criteria in bullet 2.

If the specific histology does not meet the criteria in #3B, then code the NOS histology.

List of Ambiguous Terminology

Apparently	Most likely
Appears	Presumed
Comparable with	Probable
Compatible with	Suspect(ed)
Consistent with	Suspicious (for)
Favor(s)	Typical (of)
Malignant appearing	

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SOLID TUMOR RULES

Question: When does the clinically disease free clock start?

Answer: Each recurrence restarts the breast cancer timing clock.

Rule M5

Abstract multiple primaries when the patient has a subsequent tumor after being clinically disease-free for **greater than five years** after the original diagnosis or last recurrence.

Note 1: ***The rules are hierarchical. This rule only applies when there is a subsequent tumor in the same breast. In other words, a primary in the contralateral breast does not start the "clock" over.***

Note 2: ***Clinically disease-free means that there was no evidence of recurrence on follow-up.***

- ***Mammograms are NED***
- ***Scans are NED***

Note 3: ***When there is a recurrence less than or equal to five years of diagnosis, the "clock" starts over. The time interval is calculated from the date of last recurrence. In other words, the patient must have been disease-free for greater than five years from the date of the last recurrence.***

Note 4: ***When it is unknown/not documented whether the patient had a recurrence, use date of diagnosis to compute the time interval.***

Note 5: ***The physician may state this is a recurrence, meaning the patient had a previous breast tumor and now has another breast tumor. Follow the rules; do not attempt to interpret the physician's statement.***

Note 6: ***When a breast resection was done and a subsequent tumor is identified in the remaining chest wall, muscle, or skin AND there was no residual breast tissue identified in the resected specimen, this is a recurrence and not a new primary.***

If the patient has not had a recurrence or when its unknown whether the patient had a recurrence divert back to the date of diagnosis to compute the time interval.

Example:

Primary Left Breast Cancer Diagnosed on 1/1/24
Treatment of Left Breast Mastectomy on 3/1/24
Follow-up CT = No Evidence Disease on 12/1/24

Initial Disease-free clock starts on 1/1/24

Example: (restarting the "clock")

Primary Left Breast Cancer Diagnosed on 1/1/24
Treatment of Left Breast Mastectomy on 3/1/24
Follow-up CT = No Evidence Disease on 12/1/24

Recurrent Left Breast Cancer Diagnosed 10/1/25

Disease-free clock re-starts on 10/1/25

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SOLID TUMOR RULES

Rule M10

Abstract a single primary when there are multiple tumors of carcinoma NST/duct and lobular.

- Both/all tumors may be a mixture of carcinoma NST/duct and lobular 8522 OR
- One tumor may be duct and another tumor lobular OR
- One tumor may be mixed duct and lobular 8522, the other tumor either duct or lobular

Note 1: **Tumors must be in the same breast.**

Note 2: **Carcinoma NST/duct includes:**

- **DCIS 8500/2**
- **Carcinoma NST 8500/3**
- **Carcinoma with osteoclastic-like stromal giant cells 8035/3 (subtype/variant of carcinoma NST)**
- **Cribriform carcinoma 8201/3**
- **Pleomorphic carcinoma 8022/3**

Note 3: **Lobular carcinoma includes:**

- **In situ lobular carcinoma 8520/2**
- **In situ pleomorphic lobular carcinoma 8519/2**
- **Invasive lobular carcinoma 8520/3**
- **Invasive pleomorphic lobular carcinoma 8520/3**

Note 4: **When a mixture of behaviors is present in carcinoma, NST and lobular carcinoma, follow the H rules to determine the correct histology code.**

Note 5: **For cases initially diagnosed as in situ with subsequent invasive tumor and stated to be a single primary per M10, edit the original abstract as follows:**

- **Do not change date of diagnosis.**
- **For cases which were abstracted as in situ (/2), change the code on the original abstract to 8522/3.**
- **Report all data changes for cases which have been submitted to the central registry.**

UPDATE TO RULE M10 for 2026

Abstract a single primary when there are multiple SYNCHRONOUS, separate/ non-contiguous tumors of carcinoma NST/duct and lobular.

The difference in the rule is they have to be ***synchronous*** (at the same time) prior to first course treatment.

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