

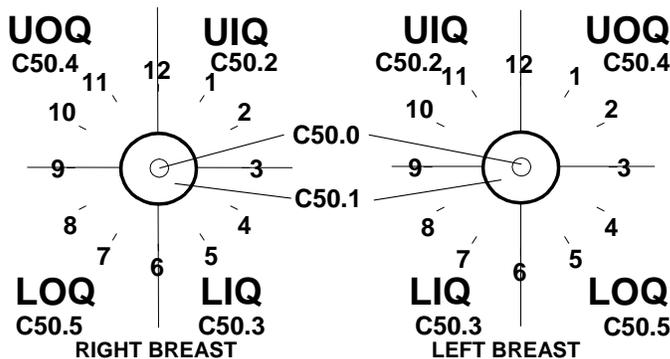
SEER Site-Specific Coding Guidelines**BREAST****C500–C509**

- C500 **Nipple** (areolar)
Paget disease without underlying tumor
- C501 **Central** portion of **breast (subareolar)** area extending 1 cm around areolar complex
Retroareolar
Infraareolar
Next to areola, NOS
Behind, beneath, under, underneath, next to, above, cephalad to, or below nipple
Paget disease with underlying tumor
- C502 **Upper inner quadrant (UIQ)** of breast
Superior medial
Upper medial
Superior inner
- C503 **Lower inner quadrant (LIQ)** of breast
Inferior medial
Lower medial
Inferior inner
- C504 **Upper outer quadrant (UOQ)** of breast
Superior lateral
Superior outer
Upper lateral
- C505 **Lower outer quadrant (LOQ)** of breast
Inferior lateral
Inferior outer
Lower lateral
- C506 **Axillary tail** of breast
Tail of breast, NOS
Tail of Spence
- C508 **Overlapping** lesion of breast
Inferior breast, NOS
Inner breast, NOS
Lateral breast, NOS
Lower breast, NOS
Medial breast, NOS
Midline breast NOS
Outer breast NOS
Superior breast, NOS
Upper breast, NOS
3:00, 6:00, 9:00, 12:00 o'clock
- C509 Breast, NOS
Entire breast
Multiple tumors in different subsites within breast

Inflammatory without palpable mass
 ¾ or more of breast involved with tumor
 Diffuse (tumor size 998)

The position of the tumor in the breast may be described as the positions on a clock

O'Clock Positions and Codes Quadrants of Breasts



Priority Order for Coding Subsites

Use the information from reports in the following priority order to code a subsite when the medical record contains conflicting information:

- 1 Pathology report
- 2 Operative report
- 3 Physical examination
- 4 Mammogram, ultrasound

If the pathology proves invasive tumor in one subsite and in situ tumor in all other involved subsites, code to the subsite involved with invasive tumor

When to Use Subsites 8 and 9

- A. Code the primary site to C508 when there is a single tumor that overlaps two or more subsites, and the subsite in which the tumor originated cannot be determined.
- B. Code the primary site to C508 when there is a **single tumor** located at the **12, 3, 6, or 9 o'clock** position on the breast
- C. Code the primary site to C509 when there are multiple tumors (two or more) in at least two quadrants of the breast.

Priority Rules for Grading Breast Cancer

Code the tumor grade using the following priority order:

1. **Bloom-Richardson (Nottingham) scores** 3-9 converted to grade (see conversion table on page 372)
2. **Bloom Richardson grade** (low, intermediate, high)
3. Nuclear grade only
4. Terminology
5. Differentiation (well differentiated, moderately differentiated, etc)

6. Histologic grade

7. Grade i, grade ii, grade iii, grade iv

Bloom-Richardson (BR)

BR may also be called: modified Bloom-Richardson, Scarff-Bloom-Richardson, SBR grading, BR grading, Elston-Ellis modification of Bloom Richardson score, the Nottingham modification of Bloom Richardson score, Nottingham-Tenovus, or Nottingham grade.

BR may be expressed in scores (range 3-9)

The score is based on three morphologic features of “invasive no-special-type” breast cancers (degree of tubule formation/histologic grade, mitotic activity, nuclear pleomorphism of tumor cells).

BR may be expressed as a **grade** (low, intermediate, high). BR grade is derived from the BR score.

Use the table below to convert Bloom-Richardson (Nottingham) Scores; Bloom-Richardson Grade; Nuclear Grade; Terminology; and Histologic Grade to the appropriate code. (Note that the conversion of low, intermediate, and high is different from the conversion used for all other tumors)

Bloom-Richardson (Nottingham) Combined Scores	Bloom-Richardson Grade	Nuclear Grade	Terminology	Histologic Grade	Code
3 - 5 points	Low grade	1/3, 1/2	Well differentiated	I/III or 1/3	1
6, 7 points	Intermediate grade	2/3	Moderately differentiated	II/III or 2/3	2
8, 9 points	High grade	2/2, 3/3	Poorly differentiated	III/III or 3/3	3

Laterality

Laterality must be coded for all subsites.

Size of Primary Tumor Coding Guidelines

Purely Invasive or Purely Insitu: Priority in which to use Reports to Code Tumor Size

1. Pathology report
2. Operative report
3. Physical examination
4. Imaging (mammography)
5. Imaging (ultrasound)

Both Invasive and Insitu Components

Single Tumor: Record the size of the invasive component

Multiple Tumors: Record the size of the largest invasive tumor

Additional rules for coding breast primaries size:

If the size of the invasive component is *not* given, record the size of the entire tumor from the surgical report, pathology report, radiology report or clinical examination.

The descriptions in code 998 take precedence over any mention of size.

Breast (C50.0–C50.6, C50.8–C50.9): Diffuse, Code 998

Site-Specific Factor 1 – Estrogen Receptor Assay

Other names: ER, Estrogen Receptor Assay, Estrogen Receptor Status, Estradiol Receptor, Estrogen Binding Protein, hormone receptor status (with PRA).

Site-Specific Factor 2 – Progesterone Receptor Assay

Other names PR, PgR, Progesterone Receptor Assay, Progesterone Receptor Status, hormone receptor status (with ERA).

The following information applies to both Estrogen Receptor Assay and Progesterone Receptor Assay.

Source documents: pathology report (usually as an addendum), separate clinical laboratory report

Estrogen receptor (ER) positivity and progesterone receptor (PR) positivity are favorable prognostic factors in breast cancer, as well as endometrial carcinoma and meningioma. Positive results indicate a favorable response to endocrine (hormonal) therapy. Combined ER and progesterone receptor (PR) positivity is associated with increased response to antiestrogen therapies.

There are a variety of ways to report information on ER and PR results, but there is almost always a summary statement that the result is positive or negative.

<i>Example 1</i>	Test Name	Staining	Percent	Result
	Assay Type	Intensity	Positive	
		Average	(%)	
	Estrogen Receptor	3+	72	Positive
	Progesterone Receptor	3+	57	Positive

Example 2 The neoplastic cells show mild (1+/4+) cytoplasmic staining with the estrogen receptor marker. The neoplastic cells exhibit abundant (3+/4+) nuclear staining with progesterone receptor marker.

Example 3 ER positive (72%); PR positive (68%)

Record the pathologist's interpretation of the assay value from the tumor specimen. If assays are performed on more than one specimen and any result is interpreted as positive, code as 010 Positive/elevated.

010 Positive/elevated

020 Negative/normal

030 Borderline; undetermined whether positive or negative

See schema for additional code choices.

Note: New guidelines for interpreting test results do not provide for a borderline result. Therefore, the code for borderline will rarely, if ever, be used for diagnoses 2010 forward. The new guidelines state that any test which results in 1% of the cells staining positive is a positive test. If <1% of cells stain, the test is considered negative.

The two most common ways to report ER and PR results are the proportion score (PS) (Table I-2-9)

and the intensity score (IS) (Table I-2-10). Both the PS and IS are based on immunohistochemical staining of tumor cells. The PS reports the percentage of tumor cells with positive nuclear staining. The IS is the degree of nuclear positivity; in other words, the average intensity of all positive tumor cells on a scale from pale to dark. In some reports, these two scores are combined for a total score (TS, the sum of the PS and the IS). The Allred score, “H” score, or Quick score may be reported. Each of these is a total score for proportion and intensity. For each of these, results of 0 (None+None) or 2 (<1% + 1 Weak) are considered negative and any sum from 3 to 8 is considered positive.

Table I-2-9
Proportion Score (PS)
0 None
1 > 0 to < 1%
2 1% to 10%
3 10% to 33%
4 33% to 66%
5 > 66%

Table I-2-10
Intensity Score (IS)
0 None
1 Weak
2 Intermediate
3 Strong

Another less frequently used assay is the amount of cytosol protein in the tumor sample. This is reported in femtomoles per milligram.

Femtomoles (fmol/mg) of cytosol protein per milligram

< 6 negative

6-10 borderline

> 10 positive

> 100 highly positive

For further information on estrogen and progesterone receptor quantification, refer to the invasive breast cancer protocol published by the College of American Pathologists for AJCC seventh edition, published October 2009 available at

www.cap.org/apps/docs/committees/cancer/cancer_protocols/2009/InvasiveBreast_09protocol.pdf.

RECORDING HER2 INFORMATION

Seven of the site-specific factors for breast collected by TCR involve information about HER2.

Site-Specific Factor 8 – HER2: IHC Test Lab Value

Site-Specific Factor 9 – HER2: IHC Test Interpretation

Site-Specific Factor 10 – HER2: FISH Test Lab Value

Site-Specific Factor 11 – HER2: FISH Test Interpretation

Site-Specific Factor 12 – HER2: CISH Test Lab Value

Site-Specific Factor 13 – HER2: CISH Test Interpretation

Site-Specific Factor 14 – HER2: Result of Other or Unknown Test

Source documents: pathology report (usually in an addendum to the report), specialized lab tests, reference laboratory report

Other names: HER2, HER2neu, erbB2, c-neu

HER2 is **H**uman **E**pidermal growth factor **R**eceptor 2, a protein on the surface of cancer cells that accepts growth signals. There are actually four HER categories; only HER2 is of interest for breast cancer. The presence of too many HER2 receptors (“overexpression”) indicates that the tumor may grow more aggressively. About 20% of breast cancers overexpress Her2. Overexpression is both a prognostic and predictive factor for breast cancer. A lack of overexpression indicates patient may not respond to certain therapies such as Herceptin, which is designed to “turn off” or deregulate the overexpression of HER2.

There are several ways to measure HER2: immunohistochemistry (IHC), Fluorescence In Situ Hybridization (FISH), and Chromogenic In Situ Hybridization (CISH, pronounced ‘kish’). The information obtained from these tests plays a critical role in treatment planning, because HER2-positive patients tend to respond favorably to the expensive drug Herceptin (trastuzumab) or Tykerb (lapatinib), which work by blocking these receptors and preventing growth signals from getting through to the cancer cell. HER2-positive patients also may have a greater benefit from anthracycline-based adjuvant therapy, such as idarubicin. Usually only one test is performed, but if result of that single test is equivocal, American Society of Clinical Oncology (ASCO) guidelines recommend that a second test be performed.

Immunohistochemistry (IHC) Test and Interpretation

Site-specific factor 8 codes the IHC score in a range of 000 to 003, with additional codes for test not done and other explanations for missing information. Site-specific factor 9 codes the interpretation of the IHC score.

Immunohistochemistry or IHC is the most commonly used test for HER2 and is usually the initial HER2 test done. IHC is a special staining process performed on fresh or frozen breast cancer tissue removed during biopsy. IHC is used to show whether or not the cancer cells have HER2 receptors and/or hormone receptors on their surface. The IHC test gives a score of 0 to 3+ that indicates the amount of HER2 receptor protein on the cells in a sample of breast cancer tissue. If the tissue scores 0 to 1+, it is called “HER2 negative,” and Herceptin is not considered effective for tumors with IHC scores of 0 or 1+. When the result is 2+, the HER2 status of the tumor is not clear. This often leads to testing the tumor with FISH (see below). If the tissue score is 3+, it is called “HER2 positive,” and the patient is likely to receive Herceptin as part of first course therapy. (The symbols 1+, 2+, and so forth should be read as “1 plus” or “2 plus” rather than “1 positive” or “2 positive.”) It is important to note that results on the IHC test may vary from lab to lab and that some labs are more experienced with testing for HER2 than others. The IHC test results are most reliable for fresh or frozen tissue samples. IHC tends to be an unreliable way to test tissue that's preserved in wax or other chemicals. Definitions of “positive” and “negative” interpretations for the test vary from one lab to another. Each may have a different range for normal values. Look for the interpretation of the test by patient’s clinician or the facility pathologist as first priority. In the absence of the local doctor’s interpretation, look on the actual lab report for that particular lab’s reference values and use that information to assign the appropriate interpretation code. The codes for interpretation are similar to other site-specific factors that are evaluated as positive/elevated, negative/normal, borderline, and so forth. If neither a physician interpretation nor a lab reference range can be found, do not attempt to interpret the results; code as 999 unknown.

Fluorescence In Situ Hybridization (FISH) and Interpretation

FISH results are reported in SSFs 10 (ratio) and 11 (interpretation). The FISH test is another method of testing for overexpression of the HER2 gene that uses fluorescent pieces of DNA that attach only to the HER2 gene copies in cells, which can then be counted under a special microscope. The FISH technique is more expensive than IHC and takes longer to get the results, but it is also thought to be more accurate. The result is expressed as a ratio of the number of copies of the HER2 receptors to the control rather than as a score.

In SSF 10, code the exact ratio to two decimal places in the range 100 (1.00) to 986 (9.86), as stated in the report. For example, a FISH result of 5.5 would be reported as 550; a result of 11.85 would be reported as 987 (ratio of 9.87 or greater).

In SSF11, code the local doctor's interpretation of the FISH test, if available; otherwise, look at the results on the lab report. For FISH, the definition of positive, negative or borderline varies from lab to lab. The code structure for this field is similar to other lab tests requiring an interpretation. If a FISH test was performed and the results are interpreted in the chart, record as positive, negative or borderline. If the test results are in the chart but there is no interpretation and no laboratory guideline given, use the guidelines in the following slide. If a FISH test was not done, code as 998.

Chromogenic In Situ Hybridization (CISH) and Interpretation

CISH results are reported in SSFs 12 (mean number) and 13 (interpretation). CISH is the most recent technique for determining HER2 status. It has only been approved in the United States since the spring of 2009. CISH works in a manner similar to FISH, by using small DNA probes to count the number of HER2 genes in breast cancer cells. But this test looks for color changes (not fluorescence) and doesn't require a special microscope, which makes it less expensive. In addition, unlike other tests, it can be used on tissue samples that have been stored in the lab. CISH is already in widespread use in Canada, and because of its advantages, CISH is likely to replace FISH testing in the US.

CISH results are expressed as the mean (average) number of HER-2/neu gene copies per cell. In other words, CISH is the ratio of the number of gene copies detected, divided by the number of tumor cell nuclei counted, for example, 253 gene copies divided by 60 nuclei counted = 4.22. In SSF 12, record the exact mean to two decimal places in the range 100 (1.00) to 986 (9.86), as stated in the report. A CISH result of 4.22 would be reported as 422; a result of 11.85 would be reported as 987.

Record the interpretation of the CISH test in SSF13, which has a similar code structure to the HER2 IHC and HER2 FISH interpretation fields. For CISH, the definition of positive, negative or borderline varies from lab to lab. If a CISH test was performed and the results are interpreted in the chart, code as positive, negative or borderline. Usually, the results will be either positive or negative, because if the result of counting the mean number of gene copies per cell from 30 cells is between 4.0 and 6.0, another 30 cells are counted and the mean from those 60 cells is interpreted according to the following scoring guideline:

Non-amplification: 1–5 signals/nucleus in tumor cells. Result: negative.

Amplification: >5 signals/nucleus, or cluster of amplified signals/nucleus in >50% of tumor cells. Result: positive.

Result of Other or Unknown Test

Site-specific factor 14 documents other types of HER2 testing, in other words, not IHC, FISH, or CISH. The most likely scenario will be a statement in the CAP Protocol or elsewhere in the chart that the patient is HER2 positive or HER2 negative, with no indication of how this information was determined and no test results in the chart. This may be particularly true for class of case 2 or cases being reported by freestanding radiation therapy or ambulatory surgery centers. Another possibility is the SISH (silver insitu hybridization) test, which is still experimental. The code structure is the same as the IHC, FISH and CISH test interpretation fields. Code a statement of HER2 status (positive, negative, borderline) by the clinician/pathologist in this field when there is no information about the specific HER2 test is given in the chart.

Breast**C50.0-C50.6, C50.8-C50.9**

C50.0 Nipple

C50.1 Central portion of breast

C50.2 Upper-inner quadrant of breast

C50.3 Lower-inner quadrant of breast

C50.4 Upper-outer quadrant of breast

C50.5 Lower-outer quadrant of breast

C50.6 Axillary Tail of breast

C50.8 Overlapping lesion of breast

C50.9 Breast, NOS

Note: Laterality must be coded for this site.**Breast****CS Tumor Size****Note 1:** See part I for information on timing and rules for coding this field.**Note 2:** Code the specific tumor size as documented in the medical record. If the ONLY information regarding tumor size is the physician's statement of the "T" category, assign code 990 (T1mi), 991 (T1b), 992 (T1 or T1c), or 995 (T2). If the physician's statement of the "T" category is T1a, NOS with no documentation of tumor size, code tumor size as 005. If the physician's statement of the "T" category is T3, NOS with no documentation of tumor size OR a statement only specifying that the tumor size is greater than 5 cm, code tumor size as 051.**Note 3:** For tumor size, some breast cancers cannot be sized pathologically.**Note 4:** When coding pathologic size, code the measurement of the invasive component. For example, if there is a large in situ component (e.g., 4 cm) and a small invasive component see Site-Specific Factor 6 to code more information about the reported tumor size. If the size of invasive component is not given, code the size of the entire tumor and record what it represents in Site-Specific Factor 6.**Note 5:** Microinvasion is the extension of cancer cells beyond the basement membrane into the adjacent tissues with no focus more than 0.1 cm in greatest dimension. When there are multiple foci of microinvasion, the size of only the largest focus is used to classify the microinvasion. (Do not use the sum of all the individual foci.)

Code	Description
000	No mass/tumor found
001-988	001 - 988 millimeters (code exact size in millimeters)
989	989 millimeters or larger
990	Microinvasion; microscopic focus or foci only, no size given; described as less than 1 mm Stated as T1mi, NOS with no other information on size

Code	Description
991	Described as "less than 1 cm" Stated as T1b, NOS with no other information on size
992	Described as "less than 2 cm," or "greater than 1 cm," or "between 1 cm and 2 cm" Stated as T1, NOS or T1c, NOS with no other information on size
993	Described as "less than 3 cm," or "greater than 2 cm," or "between 2 cm and 3 cm"
994	Described as "less than 4 cm," or "greater than 3 cm," or "between 3 cm and 4 cm"
995	Described as "less than 5 cm," or "greater than 4 cm," or "between 4 cm and 5 cm" Stated as T2 with no other information on size
996	Mammographic/xerographic diagnosis only, no size given; clinically not palpable
997	Paget Disease of nipple with no demonstrable tumor
998	Diffuse
999	Unknown; size not stated Not documented in patient record

Breast

CS Extension

Note 1: See Part 1 for what information this field is based on including timing rules.

Note 2: 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.

Note 3: Consider adherence, attachment, fixation, induration, and thickening as clinical evidence of extension to skin or subcutaneous tissue, code '200'.

Note 4: Consider "fixation, NOS" as involvement of pectoralis muscle, code '300'.

Note 5: If extension code is 000, then Behavior code must be 2; if extension code is 050 or 070, then behavior code may be 2 or 3; and, if extension code is 100, then behavior code must be 3.

Note 6: Inflammatory Carcinoma. AJCC includes the following text in the 7th edition Staging Manual, "Inflammatory carcinoma is a clinicopathologic entity characterized by diffuse erythema and edema (peau d'orange) of the breast, often without an underlying palpable mass. These clinical findings should involve the majority of the skin of the breast. Classically, the skin changes arise

quickly in the affected breast. Thus the term of inflammatory carcinoma should not be applied to a patient with neglected locally advanced cancer of the breast presenting late in the course of her disease. On imaging, there may be a detectable mass and characteristic thickening of the skin over the breast. This clinical presentation is due to tumor emboli within dermal lymphatics, which may or may not be apparent on skin biopsy. The tumor of inflammatory carcinoma is classified T4d. It is important to remember that inflammatory carcinoma is primarily a clinical diagnosis. Involvement of the dermal lymphatics alone does not indicate inflammatory carcinoma in the absence of clinical findings. In addition to the clinical picture, however, a biopsy is still necessary to demonstrate cancer either within the dermal lymphatics or in the breast parenchyma itself."

Note 7: For Collaborative Staging, the abstractor should record a stated diagnosis of inflammatory carcinoma, and also record any clinical statement of the character and extent of skin involvement in the text area. Code 600 should be used if there is a stated diagnosis of inflammatory carcinoma and a clinical description of the skin involvement is less than one-third (33%) of the skin of the breast. Code 725 should be used if there is a stated diagnosis of inflammatory carcinoma and a clinical description of the skin involvement is greater than or equal to one-third (33%) and less than or equal to one half (50%) of the skin of the breast. Code 730 should be used if there is a stated diagnosis of inflammatory carcinoma and a clinical description of the skin involvement in more than 50% (majority or diffuse) of the skin of the breast. Cases with a stated diagnosis of inflammatory carcinoma but no such clinical description should be coded 750. A clinical description of inflammation, erythema, edema, peau d'orange, etc. without a stated diagnosis of inflammatory carcinoma should be coded 510, 514, 610, or 620, depending on described extent of the condition.

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
000	In situ: noninfiltrating; intraepithelial Intraductal WITHOUT infiltration Lobular neoplasia	Tis	Tis	IS	IS
050	Paget Disease of nipple (WITHOUT underlying tumor)	Tis	Tis	**	**
070	Paget Disease of nipple (WITHOUT underlying invasive carcinoma pathologically)	Tis	Tis	**	**
100	Confined to breast tissue and fat including nipple and/or areola Localized, NOS	^	*	L	L
170	Stated as T1 [NOS] with no other information on extension or size	T1NOS	T1NOS	RE	RE
180	Stated as T2 [NOS] with no other information on extension or size	T2	T2	RE	RE

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
190	Stated as T3 [NOS] with no other information on extension or size	T3	T3	RE	RE
200	Invasion of subcutaneous tissue Local infiltration of dermal lymphatics adjacent to primary tumor involving skin by direct extension Skin infiltration of primary breast including skin of nipple and/or areola	^	*	RE	RE
300	Attached or fixation to pectoral muscle(s) or underlying tissue Deep fixation Invasion of (or fixation to) pectoral fascia or muscle	^	*	RE	RE
380	Stated as T4 [NOS] with no other information on extension	T4NOS	T4NOS	RE	RE
390	Stated as T4a with no other information on extension	T4a	T4a	RE	RE
400	Invasion of (or fixation to): Chest wall Intercostal or serratus anterior muscle(s) Rib(s)	T4a	T4a	RE	RE
510	OBSOLETE DATA RETAINED V0200 Extensive skin involvement, including: Satellite nodule(s) in skin of primary breast Ulceration of skin of breast Any of the following conditions described as involving not more than 50% of the breast, or amount or percent of involvement not stated: Edema of skin En cuirasse Erythema	ERROR	T4b	RE	RE

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
510 cont'd	Inflammation of skin Peau d'orange ("pigskin")	ERROR	T4b	RE	RE
512	Extensive skin involvement, including: Satellite nodule(s) in skin of primary breast Ulceration of skin of breast	T4b	T4b	RE	RE
514	Any of the following conditions described as involving less than one-third (33%) of the breast WITHOUT a stated diagnosis of inflammatory carcinoma WITH or WITHOUT dermal lymphatic infiltration Edema of skin En cuirasse Erythema Inflammation of skin Peau d'orange ("pigskin")	T4b	T4b	RE	RE
516	(514) + (512)	T4b	T4b	RE	RE
518	Any of the following conditions described as involving one third (33%) or more but less than or equal to half (50%) of the breast WITHOUT a stated diagnosis of inflammatory carcinoma WITH or WITHOUT dermal lymphatic infiltration: Edema of skin En cuirasse Erythema Inflammation of skin Peau d'orange ("pigskin")	T4b	T4b	RE	RE
519	(518) + (512)	T4b	T4b	RE	RE
520	Any of the following conditions described as involving more than 50% of the breast WITHOUT a stated diagnosis of	T4b	T4b	RE	RE

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
520 cont'd	inflammatory carcinoma WITH or WITHOUT dermal lymphatic infiltration: Edema of skin En cuirasse Erythema Inflammation of skin Peau d'orange ("pigskin")	T4b	T4b	RE	RE
575	(520) + (512)	T4b	T4b	RE	RE
580	Any of the following conditions with amount or percent of breast involvement not stated and WITHOUT a stated diagnosis of inflammatory carcinoma WITH or WITHOUT dermal lymphatic infiltration: Edema of skin En cuirasse Erythema Inflammation of skin Peau d'orange ("pigskin")	T4b	T4b	RE	RE
585	(580) + (512)	T4b	T4b	RE	RE
590	Stated as T4b with no other information on extension	T4b	T4b	RE	RE
600	Diagnosis of inflammatory carcinoma WITH a clinical description of inflammation, erythema, edema, peau d'orange, etc., involving less than one-third (33%) of the skin of the breast, WITH or WITHOUT dermal lymphatic infiltration	T4b	T4d	RE	RE
610	OBSOLETE DATA RETAINED V0200 (400) + (510)	ERROR	T4c	RE	RE

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
612	Any of (512-514) + (400)	T4c	T4b	RE	RE
615	Any of (520-585) + (400)	T4c	T4b	RE	RE
620	OBSOLETE DATA RETAINED V0200 (400) + (520)	ERROR	T4c	RE	RE
680	Stated as T4c with no other information on extension	T4c	T4c	RE	RE
710	OBSOLETE DATA RETAINED V0200 Diagnosis of inflammatory carcinoma WITH a clinical description of inflammation, erythema, edema, peau d'orange, etc., involving not more than 50% of the skin of the breast, WITH or WITHOUT dermal lymphatic infiltration Inflammatory carcinoma, NOS	ERROR	T4d	RE	RE
715	OBSOLETE DATA RETAINED V0200 Diagnosis of inflammatory carcinoma WITH a clinical description of inflammation, erythema, edema, peau d'orange, etc., involving not more than one-third (33%) of the skin of the breast, WITH or WITHOUT dermal lymphatic infiltration	T4b	T4d	RE	RE
720	OBSOLETE DATA CONVERTED V0102 Diagnosis of inflammatory WITH a clinical diagnosis of inflammation, erythema, edema, peau d'orange, etc., of not more than 50% of the breast, WITH or WITHOUT dermal lymphatic	ERROR	ERROR	ERROR	ERROR

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
720 cont'd	infiltration Inflammatory carcinoma, NOS NOTE: Code 720 has been combined with code 710. Any cases coded to 720 should be re-coded to code 710.	ERROR	ERROR	ERROR	ERROR
725	Diagnosis of inflammatory carcinoma WITH a clinical description of inflammation, erythema, edema, peau d'orange, etc., involving one-third (33%) or more but less than or equal to half (50%) of the skin of the breast, WITH or WITHOUT dermal lymphatic infiltration	T4d	T4d	RE	RE
730	Diagnosis of inflammatory carcinoma WITH a clinical description of inflammation, erythema, edema, peau d'orange, etc., involving more than 50% of the skin of the breast, WITH or WITHOUT dermal lymphatic infiltration	T4d	T4d	RE	RE
750	Diagnosis of inflammatory carcinoma WITH a clinical description of inflammation, erythema, edema, peau d'orange, etc., but percent of involvement not stated, WITH or WITHOUT dermal lymphatic infiltration. If percentage is known, code to 600, 725, or 730. Diagnosis of inflammatory carcinoma WITHOUT a clinical description of inflammation, erythema, edema, peau d'orange, etc., WITH or WITHOUT dermal lymphatic infiltration Inflammatory carcinoma, NOS	T4d	T4d	RE	RE

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
780	Stated as T4d with no other information on extension	T4d	T4d	RE	RE
950	No evidence of primary tumor	T0	T0	U	U
999	Unknown extension Primary tumor cannot be assessed Not documented in patient record	TX	TX	U	U

* For Extension codes 100, 200, and 300 ONLY, the T category is assigned based on value of CS Tumor Size as shown in the Extension Size Table for this site.

^ For Extension codes 100, 200, and 300 ONLY, the T category is assigned based on value of CS Tumor Size as shown in the Extension Size Table for this site.

** For codes 050 and 070 ONLY, summary stage is assigned based on the value of Behavior Code ICD-O-3 as shown in the Extension Behavior Table for this site.

Breast

CS Tumor Size/Ext Eval

See Standard Table

Breast

CS Lymph Nodes

Note 1: Code only regional nodes and nodes, NOS, in this field. Distant nodes such as cervical (excluding supraclavicular) or contralateral axillary are coded in the field Mets at DX.

Note 2: If the pathology report indicates that nodes are positive but size of the metastases is not stated, assume the metastases are greater than 0.2 mm and code the lymph nodes as positive in this field. Use code 600 in the absence of other information about regional nodes.

Note 3: In a physical exam if palpable nodes are not described as fixed, assume that nodes are movable.

Note 4: Codes 130-600 are used for positive axillary nodes. Axillary lymph nodes refer to level I and level II ipsilateral axillary lymph nodes and ipsilateral intramammary nodes only. It does not include ipsilateral level III axillary lymph nodes which are also known as infraclavicular or apical nodes and are coded in 750 or higher. Axillary does not include internal mammary or ipsilateral supraclavicular lymph nodes.

Note 5: If no lymph nodes were removed for evaluation (Reg Nodes Eval code 0 or 1) or if it is unknown if lymph nodes were removed (Reg Nodes Eval code 9), or if neoadjuvant therapy was given and clinical lymph node involvement is AS extensive or MORE extensive than pathologic lymph node involvement (Reg Nodes Eval code 5), then use only the following codes for clinical evaluation of regional nodes: 000, 255, 260, 290, 510, 600, 740, 745, 750, 760, 780, 790, 800, and 999. Do not use codes 290 and 510 when Reg Nodes Eval 2, 3, 6, or 8.

Note 6: Isolated tumor cells (ITC) are defined as single tumor cells or small clusters not greater than 0.2 mm, usually detected only by immunohistochemical (IHC) or molecular methods but which may be verified on H and E stains. ITCs do not usually show evidence of malignant activity (e.g.,

proliferation or stromal reaction). Lymph nodes with ITCs only are not considered positive lymph nodes. If the record only states N0(i+), code to 000 and see CS SSF-4.

Note 7: Unless nodes are stated to be fixed or matted, assume that they are moveable

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
000	None; no regional lymph node involvement, or ITCs detected by immunohistochemistry or molecular methods ONLY. (See Note 6 and Site-specific Factors 4 and 5.)	^	*	NONE	NONE
050	None; no regional lymph node(s) but with (ITCs) detected on routine H and E stains. (See Note 6)	N0(i+)	N0(i+)	NONE	NONE
130	Axillary lymph node(s), ipsilateral, micrometastasis ONLY detected by immunohistochemical (IHC) means ONLY (at least one micrometastasis greater than 0.2 mm or more than 200 cells and all micrometastases less than or equal to 2 mm)	N1mi	N1mi	RN	RN
150	Axillary lymph node(s), ipsilateral, micrometastasis ONLY detected or verified on H&E (at least one micrometastasis greater than 0.2 mm (or more than 200 cells) and all micrometastases less than or equal to 2 mm) Micrometastasis, NOS	N1mi	N1mi	RN	RN
250	Movable axillary lymph node(s), ipsilateral, positive with more than micrometastasis (i.e., at least one mets greater than 2 mm)(See Note 7.)	^^	**	RN	RN
255	Clinically movable axillary lymph node(s), ipsilateral, positive (clinical assessment because of neoadjuvant therapy or no pathology)(See Note 7.)	N1	N1	RN	RN
260	Stated as N1, NOS	N1	**	RN	RN

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
280	OBSOLETE DATA RETAINED V0200- Stated as N2, NOS	ERROR	**	RN	RN
290	Clinically stated only as N2, NOS (clinical assessment because of neoadjuvant therapy or no pathology)	N2NOS	**	RN	RN
300	Pathologically stated only as N2 NOS; no information on which nodes were involved	^^	**	RN	RN
500	OBSOLETE DATA RETAINED V0200- Fixed/matted ipsilateral axillary nodes, positive with more than micrometastasis (i.e., at least one metastasis greater than 2 mm) Fixed/matted ipsilateral axillary nodes, NOS	ERROR	**	RN	RN
510	Fixed/matted ipsilateral axillary nodes clinically (clinical assessment because of neoadjuvant therapy or no pathology) Stated clinically as N2a, NOS (clinical assessment because of neoadjuvant therapy or no pathology)	^	**	RN	RN
520	Fixed/matted ipsilateral axillary nodes clinically with pathologic involvement of lymph nodes at least one metastasis greater than 2mm	^^	**	RN	RN
600	Axillary/regional lymph node(s), NOS Lymph nodes NOS	^^	**	RN	RN
710	Internal mammary node(s), ipsilateral, positive on sentinel nodes but not clinically apparent (no positive imaging or clinical exam)	N1b	N1b	RN	RN

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
710 cont'd	WITHOUT axillary lymph node(s), ipsilateral	N1b	N1b	RN	RN
720	Internal mammary node(s), ipsilateral, positive on sentinel nodes but not clinically apparent (no positive imaging or clinical exam) WITH axillary lymph node(s), ipsilateral	^^	**	RN	RN
730	Internal mammary node(s), ipsilateral, positive on sentinel nodes but not clinically apparent (no positive imaging or clinical exam) UNKNOWN if positive axillary lymph node(s), ipsilateral	N1b	N1b	RN	RN
740	Internal mammary node(s), ipsilateral, clinically apparent (on imaging or clinical exam) WITHOUT axillary lymph node(s), ipsilateral	N2b	N2b	RN	RN
745	Internal mammary node(s), ipsilateral, clinically apparent (on imaging or clinical exam) and UNKNOWN if positive axillary lymph node(s), ipsilateral	N2b	N2b	RN	RN
750	Infraclavicular lymph node(s)(subclavicular) (level III axillary nodes) (apical), ipsilateral	N3a	N3a	D	RN
760	Internal mammary node(s), ipsilateral, clinically apparent (on imaging or clinical exam) WITH axillary lymph node(s), ipsilateral, codes 150 to 600 WITH or WITHOUT infraclavicular (level III axillary nodes) (apical) lymph nodes	N3b	N3b	RN	RN

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
770	OBSOLETE DATA RETAINED V0200 Internal mammary node(s), ipsilateral, clinically apparent (on imaging or clinical exam) UNKNOWN if positive axillary lymph node(s), ipsilateral	ERROR	N2b	RN	RN
780	OBSOLETE DATA RETAINED V0200 (750) + (770)	ERROR	N3a	D	RN
790	Stated as N3, NOS	N3NOS	N3NOS	RN	RN
800	Supraclavicular node(s), ipsilateral	N3c	N3c	D	D
999	Unknown; not stated Regional lymph node(s) cannot be assessed Not documented in patient record	NX	NX	U	U

- * For code 000 ONLY, the N category is assigned based on the coding of Site-Specific Factors 4 and 5 using the IHC MOL Table for this site.
- ^ For code 000 ONLY, the N category is assigned based on the coding of Site-Specific Factors 4 and 5 using the IHC MOL Table for this site.
- ** For codes 250, 260, 280, 290, 300, 500, 510, 520, 600, and 720 ONLY, the N category is assigned based on the values of Site-Specific Factor 3 (Number of Positive Ipsilateral Axillary Lymph Nodes) and CS Reg Nodes Eval. If the Eval code is 2 (p), 3 (p), 6 (y), or 8 (a), the N category is determined by reference to the Lymph Nodes Pathologic Evaluation Table. If the Eval code is 0 (c), 1(c), 5(c), or 9 (c), the N category is determined by reference to the Lymph Nodes Clinical Evaluation Table. If the Eval field is not coded, the N category is determined by reference to the Lymph Nodes Positive Axillary Node Table.
- ^^ For codes 250, 260, 280, 290, 300, 500, 510, 520, 600, and 720 ONLY, the N category is assigned based on the values of Site-Specific Factor 3 (Number of Positive Ipsilateral Axillary Lymph Nodes) and CS Reg Nodes Eval. If the Eval code is 2 (p), 3 (p), 6 (y), or 8 (a), the N category is determined by reference to the Lymph Nodes Pathologic Evaluation Table. If the Eval code is 0 (c), 1(c), 5(c), or 9 (c), the N category is determined by reference to the Lymph Nodes Clinical Evaluation Table. If the Eval field is not coded, the N category is determined by reference to the Lymph Nodes Positive Axillary Node Table.

Breast

Reg LN Pos

Note 1: Record this field even if there has been preoperative treatment.

Note 2: Lymph nodes with only isolated tumor cells (ITCs) are NOT counted as positive lymph nodes. Only lymph nodes with metastases greater than 0.2mm (micrometastases or larger) should be counted as positive. If the pathology report indicates that nodes are positive but size of the metastases is not stated, assume the metastases are > 0.2mm and code the lymph nodes as positive in this field.

Note 3: Record all positive regional lymph nodes in this field. Record the number of positive ipsilateral regional level I-II axillary nodes separately in the appropriate Site-Specific Factor field.
See Standard Table

Breast

Reg LN Exam

See Standard Table

Breast

CS Mets at DX

Note 1: Do not code involvement of supraclavicular (transverse cervical) lymph nodes in CS Mets at DX (see CS Lymph Nodes).

Note 2: Cases in which there are no distant metastasis as determined by clinical and/or radiographic methods are designated cM0 (use code 00), and cases in which one or more distant metastases are identified by clinical and/or radiographic methods are designated cM1. A case is classified as clinically free of metastases (cM0) unless there is documented evidence of metastases by clinical means or by biopsy of a metastatic site (pathologic).

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
00	No; none	M0	M0	NONE	NONE
05	No clinical or radiographic evidence of distant metastasis, but deposits of molecularly or microscopically detected tumor cells in circulating blood, bone marrow or other non-regional nodal tissue that are 0.2mm or less in a patient without symptoms or signs of metastases.	M0(i+)	M0	NONE	NONE
10	Distant lymph node(s) Cervical, NOS Contralateral/bilateral axillary and/or internal mammary Other than above Distant lymph node(s), NOS	M1	M1	D	D
40	Distant metastases except distant lymph node(s) (code 10); Carcinomatosis	M1	M1	D	D

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
42	Further contiguous extension: Skin over: Axilla Contralateral (opposite) breast Sternum Upper abdomen	M1	M1	D	D
44	Metastasis: Adrenal (suprarenal) gland Bone, other than adjacent rib Contralateral (opposite) breast - if stated as metastatic Lung Ovary Satellite nodule(s) in skin other than primary breast	M1	M1	D	D
50	(10) + any of [(40 to 44)] Distant lymph node(s) plus other distant metastases	M1	M1	D	D
60	Distant metastasis, NOS Stated as M1, NOS	M1	M1	D	D
99	Unknown if distant metastasis Distant metastasis cannot be assessed	M0	MX	U	U

Breast**CS Site-Specific Factor 1****Estrogen Receptor Assay (ERA)****Note 1:**

- A. In cases where ER and PR are reported on more than one tumor specimen, record the highest value (if any sample is positive, record as positive).
- B. If neoadjuvant therapy is given, record the assay from tumor specimens prior to neoadjuvant therapy.
- C. If neoadjuvant therapy is given and there are no ER or PR results from pre-treatment specimens, report the findings from post-treatment specimens.

Note 2: In general, ER/PR is only done on one sample. In cases where it is done on more than one sample, there is not necessarily any reason to think that the most accurate is the test done on the "largest" tumor specimen. Clinically, treatment will be based on any positive test - in other words,

given the benefit and minimal toxicity of hormonal therapy, most patients will be given the "benefit of the doubt" and given hormonal therapy if any ER test is positive.

Note 3: The most recent interpretation guidelines for ER/PR do not allow for a borderline result. Therefore, code 030 will rarely be used. If 1% or greater cells stain positive, the test results are considered positive. If less than 1% stain positive, the results are considered negative.

Note 4: If the patient is ER positive and node negative a multigene test such as OncotypeDX may be performed in which case another ER/PR test will be done. Do not record the results of that test in this field. Record only the results of the test which made the patient eligible to be given the multigene test.

Code	Description
000	Test not done (test was not ordered and was not performed)
010	Positive/elevated
020	Negative/normal; within normal limits
030	Borderline; undetermined whether positive or negative
080	Ordered, but results not in chart
996	Ordered, results not interpretable
999	Unknown or no information Not documented in patient record

Breast

CS Site-Specific Factor 2

Progesterone Receptor Assay (PRA)

Note 1:

A. In cases where ER and PR are reported on more than one tumor specimen, record the highest value (if any sample is positive, record as positive).

B. If neoadjuvant therapy is given, record the assay from tumor specimens prior to neoadjuvant therapy.

C. If neoadjuvant therapy is given and there are no ER or PR results from pre-treatment specimens, report the findings from post-treatment specimens.

Note 2: In general, ER/PR is only done on one sample. In cases where it is done on more than one sample, there is not necessarily any reason to think that the most accurate is the test done on the "largest" tumor specimen.

Note 3: The most recent interpretation guidelines for ER/PR do not allow for a borderline result. Therefore, code 030 will rarely be used. If 1% or greater cells stain positive, the test results are considered positive. If less than 1% stain positive, the results are considered negative.

Note 4: If the patient is ER positive and node negative a multigene test such as OncotypeDX may be performed in which case another ER/PR test will be done. Do not record the results of that test in this

field. Record only the results of the test which made the patient eligible to be given the multigene test.

Code	Description
000	Test not done (test was not ordered and was not performed)
010	Positive/elevated
020	Negative/normal; within normal limits
030	Borderline; undetermined whether positive or negative
080	Ordered, but results not in chart
996	Ordered, results not interpretable
999	Unknown or no information Not documented in patient record

Breast

CS Site-Specific Factor 8

HER2: IHC Test Lab Value

Note 1: Record the results of only the ImmunoHistoChemical (IHC) test for Human Epidermal growth factor Receptor 2 (HER2) in this field. The test determines whether there are additional copies of the HER2/neugene in the tumor cells compared to the normal number.

Note 2: If the test was done but the actual score is not stated, code 998.

Code	Description
000	Score 0
001	Score 1+
002	Score 2+
003	Score 3+
988	Not applicable: Information not collected for this case
997	Test ordered, results not in chart

Code	Description
998	Test not done (test was not ordered and was not performed)
999	Unknown or no information Not documented in patient record

Breast**CS Site-Specific Factor 9****HER2: IHC Test Interpretation**

Note 1: Record the results of only the ImmunoHistoChemical (IHC) test for Human Epidermal growth factor Receptor 2 (HER2) in this field.

Code	Description
010	Positive/elevated
020	Negative/normal; within normal limits
030	Borderline; undetermined whether positive or negative
988	Not applicable: Information not collected for this case
997	Test ordered, results not in chart
998	Test not done (test was not ordered and was not performed)
999	Unknown or no information Not documented in patient record

Breast**CS Site-Specific Factor 10****HER2: Fish Test Lab Value**

Note 1: Record the results of only the Fluorescence In Situ Hybridization (FISH) test for Human Epidermal growth factor Receptor 2 (HER2) in this field. The test determines whether there are additional copies of the HER2/neugene in the tumor cells compared to the normal number. The results are reported as a ratio between the number of copies of the HER2/neugene and the control.

Note 2: Record the actual ratio if given. Enter the stated ratio to two decimal places. Use a trailing zero if needed. Example: a ratio of 1.8 is entered as 180. Ratio of 5.64 is entered as 564.

Note 3: If the test was done but the actual ratio is not stated, code 998.

Code	Description
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100-986	Ratio of 1.00 to 9.86 (enter exact ratio to two decimal places)
987	Ratio of 9.87 or greater
988	Not applicable: Information not collected for this case
997	Test ordered, results not in chart
998	Test not done (test was not ordered and was not performed)
999	Unknown or no information Not documented in patient record

Breast**CS Site-Specific Factor 11****HER2: FISH Test Interpretation**

Note: Record the interpretation of only the Fluorescence In Situ Hybridization (FISH) test for Human Epidermal growth factor Receptor 2 (HER2) in this field.

Code	Description
010	Positive/elevated; amplified
020	Negative/normal; within normal limits; not amplified
030	Borderline; equivocal; undetermined whether positive or negative
988	Not applicable: Information not collected for this case
997	Test ordered, results not in chart
998	Test not done (test was not ordered and was not performed)
999	Unknown or no information Not documented in patient record

Breast**CS Site-Specific Factor 12****HER2: CISH Test Lab Value**

Note 1: Record the results of only the Chromogenic In Situ Hybridization (CISH) test for Human Epidermal growth factor Receptor 2 (HER2) in this field. The test determines whether there are

additional copies of the HER2/neugene in the tumor cells. The results are reported as the mean number of copies of the HER2/neugene on either 30 or 60 tumor cells.

Note 2: Record the actual mean if given. Enter the stated mean to two decimal places. Use a trailing zero if needed. Example: a mean of 1.8 is entered as 180. A mean of 5.64 is entered as 564.

Note 3: If the test was done but the actual mean is not stated, code 998.

Code	Description
100-986	Mean of 1.00 to 9.86 (enter exact mean to two decimal places)
987	Mean of 9.87 or greater
988	Not applicable: Information not collected for this case
997	Test ordered, results not in chart
998	Test not done (test was not ordered and was not performed)
999	Unknown or no information Not documented in patient record

Breast

CS Site-Specific Factor 13

HER2: CISH Test Interpretation

Note: Record the interpretation of only the Chromogenic In Situ Hybridization (CISH) test for Human Epidermal growth factor Receptor 2 (HER2) in this field.

Code	Description
010	Positive/elevated; amplified
020	Negative/normal; within normal limits; not amplified
030	Borderline; undetermined whether positive or negative
988	Not applicable: Information not collected for this case
997	Test ordered, results not in chart
998	Test not done (test was not ordered and was not performed)

Code	Description
999	Unknown or no information

Breast**CS Site-Specific Factor 14****HER2: Result of other or unknown test**

Note: If the Human Epidermal growth factor Receptor 2 (HER2) test wasn't a FISH test or IHC test OR it is unknown which HER2 test was performed, record the results here.

Code	Description
010	Positive/elevated; amplified
020	Negative/normal; within normal limits; not amplified
030	Borderline; equivocal; undetermined whether positive or negative
988	Not applicable: Information not collected for this case
997	Test ordered, results not in chart
998	Test not done (test was not ordered and was not performed)
999	Unknown or no information Not documented in patient record