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00480: Breast

- Chapter 48 in AJCC [updated pdf]
- •21 Required SSDI's through 2020 dx
- •17 Required starting with 2021 dx
- •Don't panic!

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Update

SSDI & Grade Manual https://apps.naaccr.org/ssdi/list/

Version 2.1 Change Log

https://www.naaccr.org/wpcontent/uploads/2021/08/Version-2.1-Changes-for-SSDIand-Grade-Manuals.pdf?v=1669154723

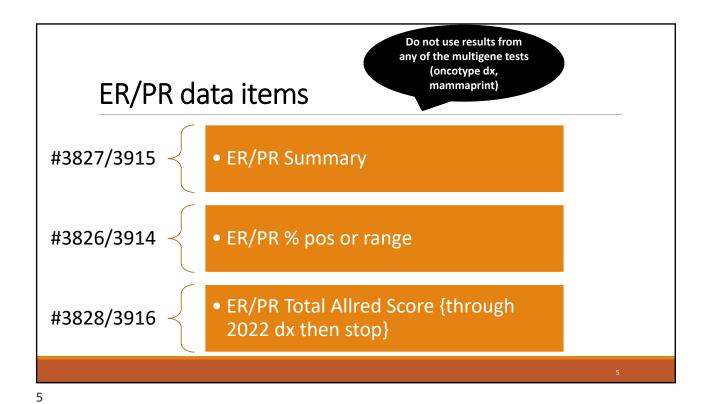
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Changes

SEER*RSA Version 3.0 compatible with NAACCR 2023 and should NOT be used until 2022 dx cases are complete

Changes coming for 2023 dx:

• ER/PR Allred Score No longer collected



3827/3915: ER/PR Summary

Note 1: Physician statement of ER/PR summary can be used if no other info.

Note 2: Result of ER/PR performed on primary breast tissue.

Note 3: Results from nodal or metastatic tissue may be used ONLY when no evid pri tumor.

Note 4: If invasive and insitu results, ignore the insitu results. Code the invasive results.

- IF ER/PR pos on insitu; neg on invasive, code ER/PR as negative (code 0)
- If ER/PR only done on insitu component and not on invasive component, code ER/PR as unknown (code 9)

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3827/3915: ER/PR Summary

Note 5: Single tumor with multiple biopsies and/or resection with different results

Use highest (pos versus neg)

Note 6: Multiple tumors with different results, code from largest tumor size (clin or path) but not specimen size.

Note 7: Neoadjuvant therapy given, record results prior to neoadjuvant therapy. If no results pre-treatment, report findings from post-treatment specimens.

Note 8: Do not record the results of multigene testing (Oncotype Dx or mammaprint)

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3827/3915 ER/PR Summary

Code	Description
0	ER or PR Negative (0.0% or less than 1%)
1	ER or PR Positive
7	Test ordered, results not in chart
9	Not documented in medical record Cannot be determined (indeterminate) ER or PR summary status not assessed or unknown if assessed

3826/3914 ER/PR % Pos or Range

Note 1: Physician statement of ER/PR % pos or range can be used

Note 2: Code using same report as ER/PR Summary [3827/3915]

Note 3: If ER/PR is neg, or percentage <1%, code 000

Note 4: Actual ER/PR (1-100%) takes priority over range codes

Note 5: ER/PR is pos but % unknown, code XX7

Note 6: Ranges for codes defined as steps of 10 corresponding to BREAST CAP. If range reported in steps other than 10, code the range that pertains to lowest number of range in report.

- Example: Report says 1-5%, Code R10 (1-10%)
- Example: Report says 90-95%, Code R90 (81-90%)
- Range in steps >10, code XX9

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3826/3914 ER/PR % Positive or Range

Code	Description
000	ER negative, or stated as less than 1%
001-100	1-100 percent
R10	Stated as 1-10%
R20	Stated as 11-20%
R30	Stated as 21-30%
R40	Stated as 31-40%
R50	Stated as 41-50%
R60	Stated as 51-60%
R70	Stated as 61-70%
R80	Stated as 71-80%
R90	Stated as 81-90%
R99	Stated as 91-100%
XX7	Test done, results not in chart
XX8	Not applicable: Information not collected for this case (If this item is required by your standard setter, use of code XX8 will result in an edit error.)
XX9	Not documented in medical record ER (Estrogen Receptor) Percent Positive or Range not assessed or unknown if assessed

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Clarifications

- If ER/PR is stated as "negative"
 - Percent Positive/Range is assigned 000 [can mean either 0% or <1%]
 - Allred score is X9**.
 - Exception: If Allred score is listed in path report, code the Allred score listed.
- If ER/PR is stated as 0% and intensity is not listed
 - ☐ Percent Positive/Range is assigned 000
 - ☐ Allred score is 0. (Assume intensity score is none.)
- ☐ If ER/PR is stated as 0% and intensity listed
 - Percent Positive/Range is assigned 000
 - ☐ Use intensity to calculate Allred score

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3828/3916 ER/PR Total Allred Score

Note 1: Physician statement of ER/PR Allred score can be used

Note 2: Code this data item using same report as ER/PR Summary [3827/3915]

Note 3: Allred system looks at what % of cells test positive for hormone receptors along with how well the receptors show up after staining (intensity). Combine info to score the sample from 0 to 8.

- Do not calculate Allred score unless both components are available
- See the ALLRED Score for ER/PR eval in SSDI manual [pg 203]

Note 4: If ER/PR test performed, but Allred score is not documented or cannot be calculated, code X9

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^{**}To calculate the Allred score you need both the percent positive and the intensity. As a negative result can have a proportion score of 0 or 1, you would not be able to calculate an Allred score, therefore Allred would be coded to X9.

3828/3916 ER/PR Total Allred Score

Allred score combines % pos cells (proportion score) and intensity score. Added together for final Allred score. Possible values (00-08).

Proportion Score	Positive Cells, %
0	0
1	<1
2	1 to 10
3	11 to 33
4	34 to 66
5	≥67

Intensity	Intensity Score
None	0
Weak	1
Intermediate/Moderate	2
Strong	3

Tables only found in SSDI Manual, pg 203

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3828/3916 ER/PR Allred Score

Code	Description
00	Total ER Allred score of 0
01	Total ER Allred score of 1
02	Total ER Allred score of 2
03	Total ER Allred score of 3
04	Total ER Allred score of 4
05	Total ER Allred score of 5
06	Total ER Allred score of 6
07	Total ER Allred score of 7
08	Total ER Allred score of 8
X8	Not applicable: Information not collected for this case (If this item is required by your standard setter, use of code X8 will result in an edit error.)
X9	Not documented in medical record ER (Estrogen Receptor) Total Allred Score not assessed, or unknown if assessed

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Calculate Allred Score for ER/PR

Quiz 1: Labs: 6-22-21 ERA: Positive 100%. PRA: Positive 100%. Her-2/Neu: Weakly positive. Her-2/Fish: Negative, ratio: 1.2 Number of observers: 1 (single). Her-2 copy number: Less than 4 signals per cell. Ki-67: under 10%.

Field	Code
ER Allred Score {5+?}	X9
PR Allred Score {5+?}	X9

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Calculate Allred Score for ER/PR

Quiz 2: Labs: 6-7-20 ER pos, <95%, strong intensity. PR neg. HER2 IHC 2+/equivocal. FISH pos,avg HER2 signals/nucleus 5.4, avg CEN 17 signals/nucleus 1.7, HER2/CEN 17 ratio 3.2. Ki-67 not done.

Field	Code
ER Summary	1
ER % Pos {less than 95%}	094
ER Allred Score {5+3}	08
PR Summary	0
PR % Positive {see note 3}	000
PR Allred Score {?+?}	X9

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FORUM SAYS:

https://cancerbulletin.facs.org/forums/forum/site-specific-data-items-grade-2018/124736-intensity-score-given-as-a-range

Q: When calculating the Allred score, If the Intensity Score is given as a range (i.e. 2+ to 3+) should the Allred Score be coded as 9?

A: If the intensity score is documented as 2-3, or 1-2, you cannot use this to assign the Allred Score. Your Allred Score would be unknown (code 9).

Previous posts in CAnswer Forum have said to go with the higher intensity score; however, we have been informed that the higher intensity score should not be taken.

**The 2022 SSDI manual was released in August 2021, so this is not in the 2022 SSDI manual. The next SSDI manual will be for 2023 and will be released in August/September of this year. We are still discussing Allred Score (along with ER and PR percent positive) and will be making some additional changes.

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ER & PR

- ✓ ER Summary
- ✓ ER % Positive
- ✓ ER Allred Score



- ✓ PR Summary
- ✓ PR % Positive
- ✓ PR Allred Score

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Other References

CAnswer Forum: Good reference for SSDI questions

http://cancerbulletin.facs.org/forums/ create account

NAACCR Breast 2022 Webinar Oct-Nov 2022, parts 1 and 2

• Request from Bobbi or Lori

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Record HER2 *END after results from 2020dx HER2 data items IHC or ISH completed tests only. 9 All HER2 Overall Summary Yes SSDI NAACCR #3855 her2OverallSummary CCCR/Canada 2018-2020 HER2 IHC Summary No NAACCR #3850 SSDI COC 2018-2020 her2lhcSummary SEER (RC) 2018-2020 HER2 ISH Summary 8 No NAACCR #3854 CCCR/Canada (2018-2020) SSDI COC (2018-2020) her2lshSummary SEER (RC) 2018-2020 HER2 ISH DP Ratio XX.8 No NAACCR #3852 COC 2018-2020 SSDI her2IshDualProbeRatio SEER (RC) 2018-2020 HER2 ISH DP Copy No NAACCR #3851 COC (2018-2020) SSDI her2lshDualProbeCopvNumber SEER (RC) 2018-2020 HER2 ISH SP Copy No 8.XX NAACCR #3853 COC 2018-2020 SSDI her2lshSingleProbeCopyNumber SEER (RC) 2018-2020

Breast: HER2

- •Human Epidermal Growth Factor receptor 2 -> HER2
 - ➤ HER2 protein -> ERBB2
 - ➤ HER2 gene -> ERBB2 gene
- •15-20% Breast cancers have an overexpression of HER2
- •Worse prognosis in **both** node negative/positive patients
- •Determines eligibility for anti-HER2 therapy, Herceptin

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3855 HER2 Overall Summary

Note 1: Physician statement can be used to code HER2 overall summary if no other info.

Note 2: Results of HER2 test performed on primary breast tissue [not from lymph node]

Note 3: Results from nodal or metastatic tissue may **only** be used when no evid of primary tumor.

Note 4: If invasive and insitu: Ignore in situ results.

- ✓ HER2 pos on in situ and HER2 neg on invasive, code HER2 as neg (code 0)
- ✓ HER2 only done on in situ but both in situ and invasive present, code unknown (code 9)

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3855 HER2 Overall Summary

Note 5: Single tumor, multiple biopsies with different HER2 results, code highest (positive vs neg)

Note 6: Multiple tumors, different HER2 results, code from largest tumor (not largest specimen)

Note 7: Neoadjuvant therapy given, code HER2 prior to neoadj therapy ✓ No pre-treatment results, code from post-treatment specimen

Note 8: Do not record multigene test in this field [no Oncotype Dx]

Note 9: HER2 not routinely done on pure insitu tumors

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3855 HER2 Overall Summary

Code	Description
0	HER2 negative; equivocal
1	HER2 positive
7	Test ordered, results not in chart
9	Not documented in medical record
	Cannot be determined (indeterminate)
	HER2 Overall Summary status not assessed or unknown if
	assessed

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3863 Ki-67

Note 1: Physician statement of Ki-67 (MIB-1) can be used.

Note 2: Ki-67 is a marker of cell proliferation. High value indicates tumor proliferating more rapidly.

Note 3: Results from nodal or metastatic tissue may be used, ONLY when there is no evidence of primary tumor.

Note 4: Ki-67 results are reported as % of cells stain positive. As of 2017, no established standards for interpretation results or cutoffs for pos/neg

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3863: Ki-67

Code	Description
0.0-100.0	0.0 to 100.0 percent positive: enter percent positive
XXX.7	Test done, actual percentage not stated
XXX.8	Not applicable: Information not collected for this case (If this item is required by your standard setter, use of code XXX.8 will result in an edit error.)
XXX.9	Not documented in patient record Ki-67 (MIB-1) not assessed or unknown if assessed

Examples: Ki-67 reported as 14%; code as 14.0

Ki-67 reported as 8%; code as 8.0

Forum 8/2022: Ki-67 reported as range, 5-10%. Since Ki-67 does not have a range, code one number above the lowest number, Code to 5.1% since it is a decimal field.

Updated 10/2023

From Forum: Ki-67 stated as <16%. Code as 15.9% per SSDI General Instructions.

https://cancerbulletin.facs.org/forums/node/120872

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3863: Ki-67

Forum 8/2022: Q: If we have two different values for Ki-67 from biopsy and resection, which result do we take?

A: Per general instructions, take the highest. Ki-67 has no specific instructions so use general rules.

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Oncotype Dx Tests

- ➤ Oncotype Dx Recurrence Score-Invasive [NAACCR Data Item # 3904]
- ➤ Oncotype Dx Risk Level-Invasive [NAACCR Data Item # 3906]
- ➤ Oncotype Dx Recurrence Score-DCIS [NAACCR Data Item # 3903]
- ➤ Oncotype Dx Risk Level-DCIS [NAACCR Data Item # 3905]

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3904 Oncotype Dx Recurrence Score-Invasive

- Note 1: Physician statement of Score can be used
- Note 2: Score is reported as whole number 0-100. Actual recurrence score takes preference over codes XX4 and XX5
- Note 3: Record only Oncotype Dx invasive recurrence score in this field. If other test used for scoring, code XX9.
- Note 4: Linear regression models and Magee equations are not reported in this field.
- · Code this info in field 3894/3895 Multigene Signature Method
- Note 5: Oncotype Dx reported on more than one breast tumor specimen, record highest value.
- Note 6: Only use Nodal or Metastatic tissue results when no evidence primary tumor.
- Note 7: Staging for Breast cancer now depends on Oncotype Dx recurrence score. Score <11 cut off value for staging purposes.
- Note 8: Only have Oncotype Dx Invasive Risk level, assign XX7
- Note 9: Code using same report used to record 3906, Risk level-Invasive.

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3904 Oncotype Dx Recurrence Score-Invasive

Code	Description
000-100	Enter actual recurrence score between 0 and 100
XX4	Stated as less than 11
XX5	Stated as equal to or greater than 11
XX6	Not applicable: in situ case
(XX7)	Test ordered, results not in chart
XX9	Not documented in medical record
	Oncotype Dx Recurrence Score-Invasive not assessed or unknown if assessed

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3906: Oncotype Dx Risk Level - Invasive

Code	Description
0	Low risk (recurrence score 0-17)
1	Intermediate risk (recurrence score 18-30)
2	High risk (recurrence score greater than or equal to 31)
6	Not applicable: DCIS case
7	Test ordered, results not in chart
8	Not applicable: Information not collected for this case
	(If this item is required by your standard setter, use of code 8 will result in an edit error.)
9	Not documented in medical record
	Oncotype Dx Risk Level-Invasive not assessed or unknown if assessed

3903: Oncotype Dx Recurrence Score-DCIS

Code	Description
000-100	Enter actual recurrence score between 0 and 100
XX6	Not applicable: invasive case
XX7	Test ordered, results not in chart
XX8	Not applicable: Information not collected for this case
	(If this item is required by your standard setter, use of code XX8 will result in an edit
	error.)
XX9	Not documented in medical record
	Oncotype Dx Recurrence Score-DCIS not assessed or unknown if assessed

3905: Oncotype Dx Risk Level - DCIS

Code	Description
0	Low risk (recurrence score less than 39)
1	Intermediate risk (recurrence score 39-54)
2	High risk (recurrence score greater than 54)
6	Not applicable invasive case
7	Test ordered, results not in chart
8	Not applicable: Information not collected for this case (If this item is required by your standard setter, use of code 8 will result in an edit error.)
9	Not documented in medical record Oncotype Dx risk level not assessed or unknown if assessed

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3894 Multigene Signature Method 3895 Multigene Signature Result

- Normally done on Node-Negative cases to predict risk of recurrence or response to chemo
- May help Node-Positive w/ small tumors plan treatment and predict recurrence
- •For tests other than Oncotype Dx

Note 2: Only record tests done on tumor tissue that help determine if the cancer is likely to recur. Don't include other tests, such as those that evaluate hereditary mutations that influence a patient's risk of developing cancer (e.g. myRisk, BRCA)

3922 Response to Neoadjuvant Therapy

Note 1: Clinician statement of response to neoadjuvant therapy ("treatment effect") must be used. Must include path findings, imaging and clinical findings.

Code	Description			
0	Neoadjuvant therapy not given For in situ tumors /2, code 0.			
1	Stated as complete response (CR) Only if stated total or complete by MD.			
2	Stated as partial response (PR)			
3	Stated as response to treatment, but not noted if complete or partial			
4	Stated as no response (NR)			
8	Not applicable: Information not collected for this case			
	(If this item is required by your standard setter, use of code 8 will result in an edit			
	error.)			
9	Not documented in medical record			
	Response to neoadjuvant therapy not assessed or unknown if assessed			

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Forum Says:

Response to Neoadjuvant Therapy

FORUM 5/2022: https://cancerbulletin.facs.org/forums/node/127923

If all you have is a path report, Code 9 per Jennifer Ruhl per **Note 3:** Review the medical record for a specific statement by a clinician about the response to neoadjuvant therapy. **Response is based on pathology report, imaging and clinical findings.**

Cannot use Examples from Path Reports alone:

Path report only: NEGATIVE FOR RESIDUAL CARCINOMA

Path report only: NO EVIDENCE OF RESIDUAL MALIGNANCY

Path report only: + treatment effect.

Path synopsis stating, "treatment effect in the breast, probable or definite response to presurgical therapy"

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Neoadjuvant Therapy

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NAACCR Item	Field Name	Source of info	Comments
#1632 (pg 229-233)	Neoadjuvant Therapy	Any place in record	Criteria for Neoadjuvant must be met
#1633 (pg 234-237)	Neoadjuvant Therapy – Clinical Response	Managing physician must state outcome	Based on the managing/treating physician's interpretation/statement of the response to neoadjuvant therapy,
#1634 (pg 238-239) along with Appx C for response codes	Neoadjuvant Therapy – Treatment Effect	Path Report	pathologist's statement of neoadjuvant treatment effect from the surgical pathology report

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3882 LN Pos Axillary Level I-II

Note 1: Physician Statement can be used

Note 2: Include only # of pos ipsilateral level I-II axillary LNs.

• Includes intramammary. Excludes Internal Mammary (along sternum.

Note 3: Micro info only. If no axillary nodes examined or no nodes found in specimen, code X9

Note 4: Neoadjuvant therapy given code clinical nodal involvement if more extensive, include only nodes removed during clinical workup. If post-neoadjuvant nodal involvement more extensive, include only nodes removed during surgery.

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3882 LN Pos Axillary Level I-II

Note 5: ITCs not counted as pos LNs. Only LNs with mets >0.2 mm (micromets or larger) should be counted as pos. If size of met not stated, assume >0.2 mm.

Note 6: When pos ipsilateral axillary LNs coded, number pos must be less than or equal to Reg Nodes Pos field.

✓ The number of pos ipsilateral axillary nodes will always be a subset of the number of pos reg nodes.

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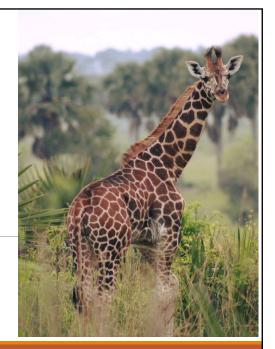
3882 LN Pos Axillary Level I-II

Code	Description	
00	All ipsilateral axillary nodes examined negative	
01-99	1 - 99 nodes positive (Exact number of nodes positive)	
X1	100 or more nodes positive	
X5	Positive nodes, number unspecified	
X6	Positive aspiration or needle core biopsy of lymph node(s)	
X8	Not applicable: Information not collected for this case (If this item is required by your standard setter, use of code X8 will result in an edit error.)	
X9	Not documented in medical record Level I-II axillary nodes not assessed or unknown if assessed	

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Grade

CLINICAL
PATHOLOGICAL
POST THERAPY CLIN (YC)
POST THERAPY PATH (YP)



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Grade Clinical

Note 1: Cannot be blank

Note 2: Assign highest grade from primary tumor during clinical time frame

Note 3: Multiple tumors with different grades, abstracted as one primary, code highest grade

Note 4: Priority order for codes invasive and in situ

Note 5: SBR, Nottingham, NBR score is used for grade

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Grade Clinical

Note 6: All invasive breast carcinoma should be assigned grade. Calculate score if all 3 components available

Note 7: Grade from nodal tissue ONLY used when never any evidence of primary tumor T0.

Note 8: Code 9 when grade from pri site unkn, clinical workup not done, grade checked not applicable on CAP

Note 9: Only one grade, cannot determine clin or path, assume clinical

Note 10: If you assign AJCC 8th Ed stage group, grade is required, codes A-D are treated as unknown, unknown grade may results in unknown stage group

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Grade Pathological

Note 9: Use grade from clinical workup from primary tumor based on:

- Behavior
 - Tumor behavior for clinical and path are same AND clinical grade is highest grade
 - Tumor behavior for clinical is invasive and tumor for path is in situ
- Surgical Resection
 - · Surgical resection done of primary tumor and no grade document from surgical resection
- Surgical resection is done of primary tumor and no residual cancer
- No surgical resection
 - Surgical resection of primary tumor not done, but positive microscopic confirmation of distant mets during clinical time frame.

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Grade Pathological

Note 10: Code 9 (unknown) when

- · Grade from primary site not documented
- No resection of primary site (see note 9 surgical resection)
- Neoadjuvant therapy followed by resection (see grade post therapy path yp)
- · Grade checked "not applicable" on CAP
- Clinical case only (see grade clinical)
- There is only one grade available and it cannot be determined if it is clinical, path, post therapy clinical or post therapy path

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Grade Post Therapy Clinical (yc)

Note 1: Leave blank when:

- No neoadjuvant therapy
- Clinical or path case only
- Neoadjuvant therapy completed, no microscopic exam is done prior to surgery/resection of primary tumor
- Only one grade and cannot be determined if clin, path, yc or yp.
- •Note 2: Assign highest grade from microscopic sample of primary site following neoadjuvant therapy
- •Note 3: Multiple tumors with different grades abstracted as one primary, code highest grade

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Grade Post Therapy Clinical (yc)

Note 7: Code 9 (unknown)

- Microscopic exam done after neoadjuvant therapy and grade from primary site not documented
- Microscopic exam done after neoadjuvant therapy and no residual
- Grade checked "not applicable" on CAP

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Grade Post Therapy Pathologic (yp)

Note 1: Leave blank when:

- No neoadjuvant therapy
- Clin or path case only
- Neoadjuvant therapy completed; surgical resection not done
- Only one grade available, unknown if clin, path, yc or yp

Note 8: Grade from nodal tissue may be used ONLY when no evid of primary tumor T0

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Grade Post Therapy Pathologic (yp)

Note 9: Use grade from the post therapy CLINICAL workup from primary tumor based on:

- Behavior
 - Tumor behavior for post therapy clinical (yc) and post therapy path (yp) are same AND post therapy clin is highest
 - Tumor behavior for yc is invasive and tumor behavior for yp is in situ
- Surgical Resection
 - Resection done of primary tumor after neoadjuvant therapy complete and no grade from surgical resection
 - Resection done of primary tumor after neoadjuvant therapy complete and no residual

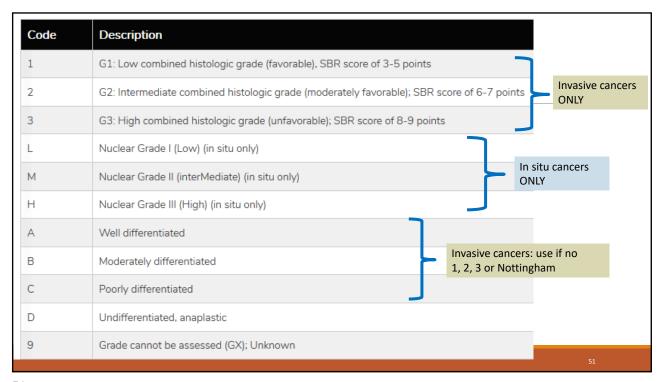
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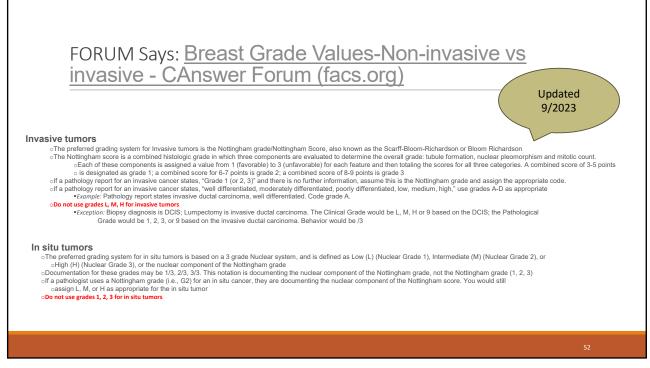
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Grade Table 12

Breast Schema 00480 (includes invasive and DCIS, Paget) Priority order for Codes

- •Invasive cancers: codes 1-3 only. Never used for in situ cancers.
- In situ cancers: Codes L, M, H only. Never used for invasive tumors.





Generic Grade for Breast

Grade Manual, pg 33

https://www.naaccr.org/wp-content/uploads/2021/08/Grade-Manual v-2.1-2022.pdf?v=1669218868

Note 1: Only use the generic grade table when the appropriate grade table for a cancer uses the generic categories with alphabetic codes A-D, OR for a cancer site which includes codes A-D for when the priority grade system was not used/documented.

Example: Mod well diff ductal carcinoma of the breast. Mod well diff is grade II and assign grade code of B.

Description	Grade	Assigned Grade Code	
Differentiated, NOS	1	A	
Well differentiated	1	A	
Only stated as 'Grade I'	1	A	
Fairly well differentiated	- II	В	
Intermediate differentiation	- II	В	
Low grade	1-11	В	
Mid differentiated	- II	В	
Moderately differentiated	- II	В	
Moderately well differentiated	- II	В	
Partially differentiated	- II	В	
Partially well differentiated	1-11	В	
Relatively or generally well differentiated	- II	В	
Only stated as 'Grade II'	- II	В	

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Grade Coding Instructions and Tables

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Breast Exercises for SSDI

SEER*Edu Homework:

- DX 2021-2023 EOD, SS, Grade, SSDI
 - Breast 1-10



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