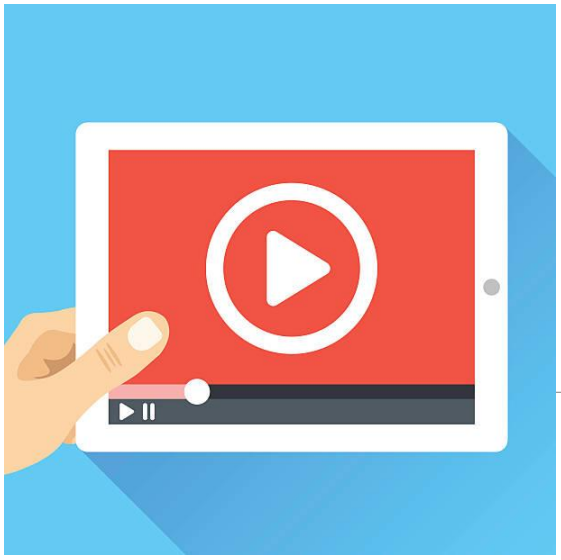


Breast SSDI & Grade

PRESENTED BY MELISSA RIDDLE, ODS-C

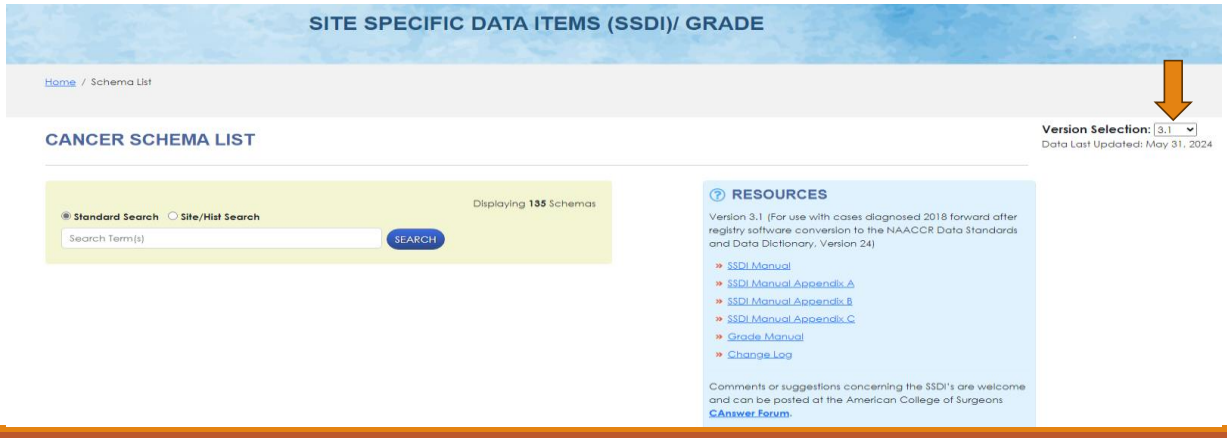
ICR VIDEO TRAINING SERIES | IOWA CANCER REGISTRY

MARCH 2025

1

Site Specific Data Items v3.1

https://apps.naaccr.org/ssdi/list/3.1



2

Breast Schema 00480

Item #	Data Item	Required by and Dates
3882	LN Positive Axilla Level I-II	2018+ (all standard setters)
3827	ER Summary	2018+ (all standard setters)
3826	ER Percent Positive	2018 + CoC and SEER
3915	PR Summary	2018+ (all standard setters)
3914	PR Percent Positive	2018+ CoC and SEER
3855	HER2 Overall Summary	2018+ (all standard setters)
3863	Ki-67 (MIB-1)	2018+ CoC and SEER
3904	Oncotype DX Recur Score – Invasive	2018+ CoC and SEER
3906	Oncotype DX Risk Level – Invasive	2018+ CoC and SEER
3903	Oncotype DX Recu Score – In Situ	2018+ CoC and SEER
3905	Oncotype DX Risk Level – In Situ	2018+ CoC and SEER
3894	Multigene Signature Method	2018+ CoC and SEER
3895	Multigene Signature Result	2018+ CoC and SEER
3922	Response Neoadjuv therapy	2018+ CoC and SEER

3

Breast Schema 00480

Data Item #	Data Item	Required by and dates
3828	ER Allred Score	**2018-2022** CoC and SEER
3916	PR Allred Score	**2018-2022** CoC and SEER
3854	HER2 ISH Summary	**2018-2020** CoC and SEER
3852	HER2 ISH DP Ratio	**2018-2020** CoC and SEER
3851	HER2 ISH DP Copy No	**2018-2020** CoC and SEER
3853	HER2 ISH SP Copy No	**2018-2020** CoC and SEER

4

00480: Breast

- Chapter 48 in AJCC [updated pdf]

- 2022 dx included ER/PR Allred Score
- 2023 dx Allred Score removed

- Don’t panic!

5

LN Positive Axillary Level I-II

6

LN Positive Axillary Level I-II

- When no other information is available use physician's statement on number of positive axillary level I-II
- **ONLY** include positive axillary level I-II nodes and intramammary LN
- Based on microscopic information only (pathology)
- Neoadjuvant Therapy:
  - Clinical nodal involvement more extensive – include those positive during clinical workup
    - FNA, core biopsy, or SLN bx
  - Post-neoadj nodal involvement is more extensive – include only those positive during surgery
    - FNA, core biopsy, SLN bx, or LND

7

LN Positive Axillary Level I-II

- ITCs are NOT counted as positive LN
  - Only LN with mets greater than 0.2mm should be counted
  - If path report states nodes are positive without a size assume they are greater than 0.2mm and count them for this data item
- Ipsilateral axillary LN that are positive are coded in this data item
  - Number of positive axillary level I-II must be less than or equal to those examined

8

LN Positive Axillary Level I-II

Description	Code
All ipsilateral axillar LN examined are negative	**00**
1-99 nodes positive (code exact number)	**01-99**
100 or more positive nodes	**X1**
Positive nodes, number unknown	**X5**
Positive aspiration or needle core bx LN	**X6**
Not documented in medical record; Level I-II axillary LN not assessed or unknown if assessed	**X9**

Positive LN NOS

Positive LN ONLY from aspiration or core biopsy; no excision

9

9

ER & PR SSDIs

10

10

ER & PR SSDIs

Do not use results from multigene tests

ER/PR Summary

ER/PR Percent positive or range

11

ER/PR Summary

- With no other information you can code based on a physician's statement of ER/PR Summary
- Result from primary breast tissue
  - ***Exception***: results from nodal or mets may be used ONLY when there is no evidence of primary tumor (in situ or invasive)
- Invasive and in situ components –
  - ER/PR done on both ignore the in situ results
    - ER/PR positive on in situ component and negative on invasive, code as negative
    - Only ER/PR tested on in situ component, invasive not tested, code as unknown
- Single tumor w/ different results – use the highest (positive vs neg)

12

ER/PR Summary

- Multiple Tumor cases with different ER/PR results
  - Code results from largest tumor size (either clinically or pathologically)
    - Don't use specimen size to determine largest tumor size
- Neoadjuvant therapy given record results prior to therapy
  - If no results from pre-treatment specimens, code from post-treatment findings
- Patient is ER/PR positive and node negative a Multigene test may be performed – do NOT record those results for this data item

13

13

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

14

14

ER/PR Percent Positive or Range

- When there is no other information available this data item can be based on a physician's statement of percent positive or range
- Use the same report as the one used to code ER/PR Summary
- If ER/PR negative or percentage is less than 1% **code 000**
- Actual ER/PR percentage takes priority over the range codes
- If ER/PR is positive but percentage is unknown **code XX7**

ER/PR Percent Positive or Range

- Coding ranges
  - If a range in a report is given in steps other than those in the R codes, code per the following:
    - If range is less than or equal to 10, then **code appropriate R code** based on **LOWER** number
      - *Example*: Report documents 1-5%, **Code R10** (1-10%)
    - If range is greater than 10, then **code to unknown**
      - *Example*: Report documents 1-25%, **Code XX9**

ER/PR Percent Positive or Range

Code	Description
000	ER/PR Negatvie or less than 1%
001-100	1-100% (actual stated percentage)
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
XX9	Not documented; ER/PR Percent Positive or Range not assessed or unknown if assessed; Range greater than 10

Actual percent positive preferred over R codes

17

17

ER & PR Data Items

✓ER Summary
✓ER % Positive

✓PR Summary
✓PR % Positive

18

18

Other References

CAnswer Forum: Good reference for SSDI questions

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

NAACCR Webinars

- Request from Bobbi or Sarah
  - Bobbi-matt@uiowa.edu
  - sarah-k-kelley@uiowa.edu

HER2 SSDI

HER2 data items

Record HER2 results from IHC or ISH tests only.

*END after 2020dx completed

HER2 Overall Summary	9	Yes	NAACCR #3855 her2OverallSummary	All	SSDI
HER2 IHC Summary	8	No	NAACCR #3850 her2IhcSummary	CCCR/Canada 2018–2020 COC 2018–2020 SEER (RC) 2018–2020	SSDI
HER2 ISH Summary	8	No	NAACCR #3854 her2IshSummary	CCCR/Canada 2018–2020 COC 2018–2020 SEER (RC) 2018–2020	SSDI
HER2 ISH DP Ratio	XX.8	No	NAACCR #3852 her2IshDualProbeRatio	COC 2018–2020 SEER (RC) 2018–2020	SSDI
HER2 ISH DP Copy No	XX.8	No	NAACCR #3851 her2IshDualProbeCopyNumber	COC 2018–2020 SEER (RC) 2018–2020	SSDI
HER2 ISH SP Copy No	XX.8	No	NAACCR #3853 her2IshSingleProbeCopyNumber	COC 2018–2020 SEER (RC) 2018–2020	SSDI

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

HER2 Overall Summary

- When there is no information available on HER2 Summary a physician's statement can be used to code data item
- Result of test from primary breast tissue is to be recorded in this data item
  - ***Exception***: results from nodal or mets may be used **ONLY** when there is no primary tumor (in situ or invasive)
- Invasive and in situ components and HER2 is tested on both, **ignore the in situ results**
  - HER2 positive on in situ and HER2 is negative on invasive, **code 0** (negative)
  - HER2 test only on in situ component and invasive is unknown, **code 9** (unknown)

HER2 Overall Summary

- Single tumor with multiple biopsies and/or resections with different HER2 results, **use the highest** (positive vs negative)
- Multiple tumors with different HER2 results, **code result from largest tumor size** (either clinically or pathologically)
- Neoadjuvant therapy given, record **results from tumor prior to treatment**
  - If no pre-treatment specimen, code from post-treatment findings
- Do **NOT** code based on multigene test (Oncotype, Mammaprint, etc)
- HER2 is not routinely done on purely in situ tumors
  - If you have an in situ tumor and there is HER2 results, record the information otherwise code 9 (unknown)

HER2 Overall Summary

Code	Description
0	HER2 negative; equivocal
1	HER2 positive
7	Tests ordered, results not in chart
9	Not documented in medical record; Can't be determined (indeterminate); Borderline; HER2 Overall Summary status not assessed or unknown if assessed Pure in situ tumor and no HER2 results

25

25

Ki-67 SSDI

26

26

Ki-67

- Registry data collection variable in AJCC
- Ki-67 (MIB-1) is a marker of cell proliferation
  - High Ki-67 is an adverse prognostic factor
  - Component of grade
  - NCCN guidelines recommend that path reports include
    - Tumor differentiation
    - Mitotic rate
    - Ki-67

Ki-67

- Physician statement can be used to code data item
- Nodal or metastatic tissue may be used, **ONLY** when there is no primary tumor
- Results are reported as a percentage
  - *Example*: Ki-67 14%, **code 14.0**
- Invasive and in situ components, ignore the in situ results
  - Ki-67 tested on both components **code from invasive portion**
  - If Ki-67 only tested on in situ component, **code unknown** (XXX.9)

Ki-67

Code	Description
0.0-100.0	0.0-100.0 percent positive; enter the percent positive (include decimal)
XXX.7	Test done; actual percentage not stated
XXX.9	Not documented in medical record; Ki-67 (MIB-1) not assessed or unknown if assessed

29

29

Forum Q&A

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

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.

30

30

Oncotype Dx SSDIs

Oncotype Dx Tests

- Oncotype Dx Recurrence Score-Invasive
- Oncotype Dx Risk Level-Invasive

- Oncotype Dx Recurrence Score-DCIS
- Oncotype Dx Risk Level-DCIS

Oncotype DX Recurrence Score - Invasive

- Physician statement can be used to code this data item
- Recurrence score is reported as a whole number between 0-100
  - Actual score takes priority over XX4 and XX5
- If you only have an Oncotype DX based on linear regression model and Magee score, **code unknown (XX9)**
- More than one Oncotype DX reported on more than one breast specimen, **code the highest**
- Results from nodal or met tissue may be used **ONLY** when there is no evidence of primary tumor
- Staging now depends on this score; score less than 11 indicates a pertinent cut off for staging purposes
- If all you have is Invasive Risk Level **assign XX7**

33

33

Code	Description
000-100	Enter actual recurrence score between 0-100
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

Oncotype Dx Recurrence Score- Invasive

34

34

Oncotype DX Risk Level - Invasive

- Physician statement can be used to code this data item
- Stratifies scores into low, intermediate, and high risk
  - Risk of distant recurrence
- Record only the results of Oncotype Dx Risk Level – Invasive in this data item. If another test is used code 9
- Use same report as used to code Oncotype DX Recurrence Score-Invasive

Oncotype 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
9	Not documented in medical record; Oncotype DX Risk level invasive not assessed or unknown if assessed

Code	Description	Note
000-100	Enter actual recurrence score 0-100	MUST be an in situ duct case
XX6	Not applicable: invasive case	
XX7	Test ordered; results not in chart	
XX9	Not documented in medical; Not assessed or unknown if assessed;	LCIS tumor Some other test used for score (not oncotype)

Oncotype DX Recurrence Score - DCIS

37

37

Code	Description	Note
0	Low risk (recurrence score 0-38)	
1	Intermediate risk (recurrence score 39-54)	
2	High risk (recurrence score greater than or equal to 55)	
6	Not applicable: invasive case	
7	Test ordered, results not in chart	
9	Not documented in medical record; Not assessed or unknown if assessed	LCIS tumor Another test performed

Oncotype DX Risk Level - DCIS

38

38

Multigene Test SSDIs

39

39

Multigene Signature Method
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
  - MammaPrint
  - PAM 50
  - Breast Cancer Index
  - EndoPredict

40

40

Multigene Signature Method

Code	Description
1	MammaPrint
2	PAM50 (Prosigna)
3	Breast Cancer Index
4	EndoPrint
5	Test performed, type unknown
6	Multiple tests, any in codes 1-4
7	Test ordered, results not in chart
9	Not documented; Unknown

- Physician statement can be used to code this data item
- Intended to provide a quantitative assessment of the likelihood of response to chemo and evaluate prognosis
  - **NOT** based on hereditary mutations
  - Only use based on gene assays

41

41

Multigene Signature Results

Code	Description
00-99	Enter actual recurrence score; Depending on test range of values may be different
X1	Score 100
X2	Low risk
X3	Moderate (Intermediate) risk
X4	High risk
X7	Test ordered, results not in chart
X9	Not documented in record; Not assessed or unknown if assessed

- Physician statement can be used to code this data item
- Use score from type of test coded in Multigene Signature Method
  - Do not include Oncotype DX score/risk
- Code score or risk

42

42

Response to Neoadjuvant Therapy

43

43

Response to Neoadjuvant Therapy

- Distinctly different from SEER Neoadjuvant Therapy Data Items:
  - Neoadjuvant Therapy
  - Neoadjuvant Therapy – clinical
  - Neoadjuvant Therapy – treatment effect
- Managing Physician's statement of response to neoadjuvant therapy
  - **Do not infer or interpret** a response based on the medical record
  - Registrars should **not** use the definitions:
    - Complete Response
    - Partial Response
    - No Response

44

44

Response to Neoadjuvant Therapy

Description	Note	Code
Neoadjuvant therapy not given; Non-invasive neoplasm	Includes in situ cases (behavior /2)	**0**
Stated as complete response (CR)	When managing physician states “total” or “complete”; Residual Cancer Burden (RCB) = 0 or an RCB class of pCR (path complete response)	**1**
State as partial response (PR)		**2**
Stated as response to treatment; but not noted as complete or partial		**3**
Stated as no response (NR)		**4**
Not documented in the medical record; Response to neoadjuvant therapy not assessed or unknown if assessed; Unknown if neoadjuvant therapy given		**9**

45

45

Forum Says:

Field: Response to Neoadjuvant Therapy #3922

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 2:** 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"

46

46

CLINICAL

PATHOLOGICAL

POST THERAPY CLIN (YC)

POST THERAPY PATH (YP)

Grade v3.1

https://apps.naaccr.org/ssdi/list/3.1

47

Grade Clinical

- All invasive breast cancers should be assigned a histologic grade
  - Nottingham combined (Nottingham mod SBR grading system) is recommended
    - Morphologic features:
      - Tubule formation
      - Nuclear pleomorphism
      - Mitotic count
        - Each scored 1-3 to get an overall score
        - Do **NOT** calculate unless all three components are available

48

Grade Clinical

- Grade should come from the primary tumor
- Grade from nodal tissue may be used **ONLY** when there was **NEVER** any evidence of primary tumor (T0)
  - Grade is coded using G1, G2, or G3
    - Nottingham is difficult to perform on nodal tissue
    - Some terminology may include differentiation terms:
      - Well differentiated: G1
      - Moderately differentiated: G2
      - Poorly/undifferentiated: G3

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.

Grade Pathological

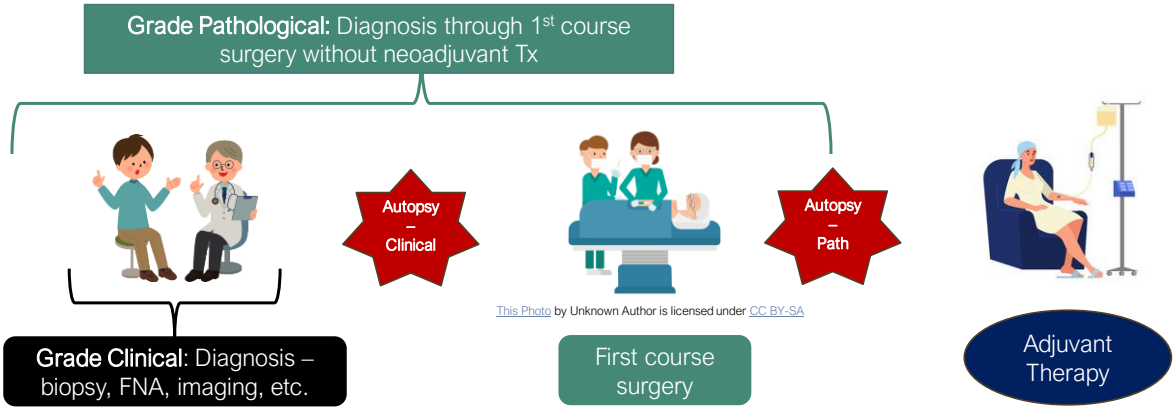
Note 10: Code 9 (unknown) when

- 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

51

51

Clinical & Path Grade Coding Timeframe



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52

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

53

53

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 evidence of primary tumor T0

54

54

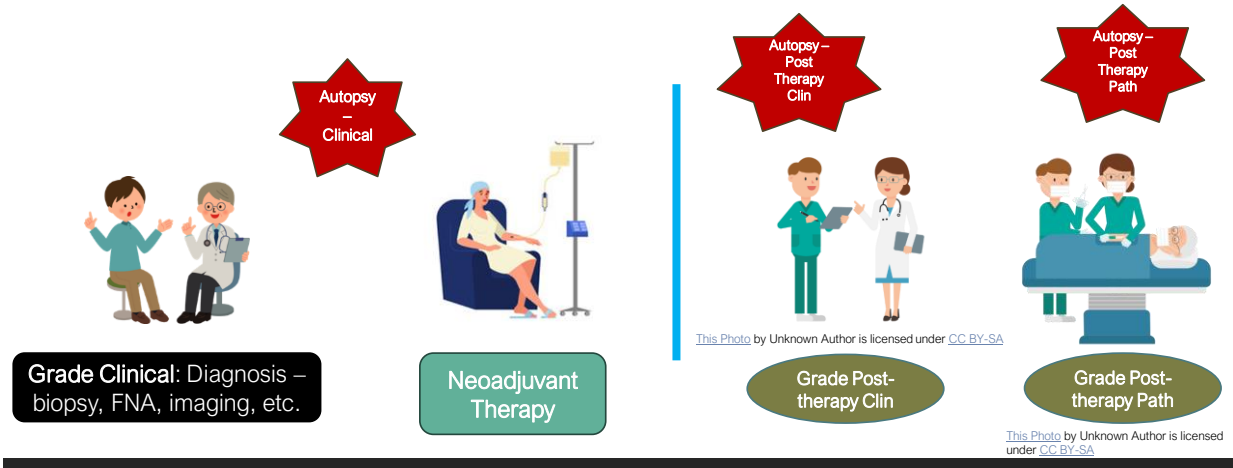
Grade Post Therapy Pathologic (yp)

Note 9: Use grade from the post therapy CLINICAL (yc) 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

55

Post-Therapy Grade Coding Timeframe



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56

Description	Code
G1: Low combine histologic grade (favorable); SBR score 3-5; Nottingham/SBR Grade 1	1
G2: Intermediate combined histologic grade (mod favorable); SBR score 6-7; Nottingham/SBR Grade 2	2
G3: High combined histologic grade (unfavorable); SBR score 8-9; Nottingham/SBR grade 3	3
Nuclear grade I (low)	L
Nuclear grade II (Intermediate)	M
Nuclear grade III (high)	H
Well Diff	A
Mod diff	B
Poorly diff	C
Undifferentiated; Anaplastic	D
Unknown; Grade not assessed	9

Preferred Grade for **Invasive** breast cancer

Preferred Grade for **in situ** breast cancer

Generic Grade Table;
Invasive cancer when Nott/SBR not stated;
May result in an unknown Stage

Breast (00480) – Grade Table 12

Forum: Grade Coding for Breast

Updated 9/2023

- **In Situ Tumors**
  - Preferred grade is based on 3-grade Nuclear system
    - Documentation may be 1/3, 2/3, or 3/3 – this is NOT Nottingham Grade
      - Assign L, M, or H
    - If pathologist documents G1, G2, or G3 for an in situ tumor they are documenting the nuclear component of the Nottingham score
      - Assign L, M, or H
- **Invasive Tumors**
  - Preferred grade is Nottingham Grade/Score
    - If grade is stated as Grade 1, 2, or 3 then code appropriately; assume Nottingham grade is used
    - If terms used in Generic Grade Table (A-D) are the only information available, code as appropriate
    - Do NOT use L, M, or H for invasive tumors

Generic Grade Table

https://www.naaccr.org/wp-content/uploads/2023/10/Grade-Coding-Instructions-and-Tables-v3_printed.pdf?v=1738607298

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	I	A
Well differentiated	I	A
Only stated as 'Grade I'	I	A
Fairly well differentiated	II	B
Intermediate differentiation	II	B
Low grade	I-II	B
Mid differentiated	II	B
Moderately differentiated	II	B
Moderately well differentiated	II	B
Partially differentiated	II	B
Partially well differentiated	I-II	B
Relatively or generally well differentiated	II	B
Only stated as 'Grade II'	II	B

SEER*Ed Homework

Training | Coding CEs

- DX 2021-2024 EOD, SS, Grade, SSDI Mashup
  - Breast Cases 1-10

Questions

Contact Info

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Training & Education

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