2018 Breast Grade

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Objectives

- To make you feel more comfortable using the following:
  - General Grade Instructions (page 24)
  - Grade Time Frames & Instructions (pages 25-31)
  - Guidelines for coding Generic Grade Categories (pages 32-33)
  - Breast Grade Clinical (pages 71-72)
  - Breast Grade Pathological (pages 73-74)
  - Breast Grade Post Therapy (pages 75-76)
  - Breast Grade Case Studies

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

General Grade Instructions

page 24

- Code the grade from the primary tumor only
  - Do Not code grade based on metastatic tumor or recurrence. In the rare instance that tumor tissue extends contiguously to an adjacent site and tissue from the primary site is not available, code grade from the contiguous site
  - If primary site is unknown, code grade to 9

General Grade Instructions
(different)
page 24

- If there is more than one grade available for an individual grade data item (Within the same time frame)
  - Priority goes to the recommended AJCC grade listed in the applicable AJCC chapter
    - If none of the specified grades are from the recommended AJCC grade system, record the highest grade per applicable alternate grade categories for that site.
  - If there is no recommended AJCC grade for a site, code the highest grade per the applicable grade categories for that site.

General Grade Instructions
(same)
page 24

- In situ and/or combined in situ/invasive components
  - If a grade is given for an in situ tumor, code it. Do NOT code grade for dysplasia such as high grade dysplasia
  - If there are both in situ and invasive components, code only the grade for the invasive portion even if its grade is unknown

General Grade Instructions

page 24

- Systemic treatment and radiation can alter a tumor's grade. Therefore, it is important to code clinical grade based on information prior to neoadjuvant therapy even if grade is unknown during the clinical timeframe. Grade can now be collected in grade post-therapy cases when grade is available from post-neoadjuvant surgery.

Grade Clinical Time Frame & Instructions for Clinical Grade

pages 25-31

- Grade Clinical
  - Record the grade of a solid primary tumor before any treatment.
    - Clinical Grade could be from FNA, biopsy, needle core biopsy, etc.
  - Assign the highest grade from the primary tumor during the clinical time frame.
  - Clinical Grade must not be blank

Grade Pathological Time Frame & Instructions for Pathological Grade

pages 25-31

- Grade Pathological
  - Record the grade of a solid primary tumor that has been surgically resected and for which no neoadjuvant therapy was administered.
  - Record the highest grade documented from any microscopic specimen of the primary site whether from the clinical workup or the surgical resection.
  - Pathological grade must not be blank
  - If a resection is done of a primary tumor and there is no grade documented from the surgical resection, use the grade from the clinical workup.

Grade Post Therapy Time Frame & Instructions for Post Therapy Grade

pages 25-31

- Grade Post Therapy
  - Record the grade of a solid primary tumor that has been resected following neoadjuvant therapy.
  - Record the highest grade documented from the surgical treatment resection specimen of the primary site following neoadjuvant therapy.
  - Leave Post Therapy Grade blank when there is no neoadjuvant therapy.

Generic Grade Categories

pages 32-33

Used for AJCC chapters where the preferred grading system is not available and the generic grade categories are available

Used for AJCC chapters that do not have a recommended grade table

Used for primary sites that do not have an AJCC chapter

Prior to 2018	Description	2018 and forward
1	well differentiated	A
2	Moderately differentiated	B
3	Poorly differentiated	C
4	Undifferentiated, anaplastic	D
9	Unknown	9

Cross Over Table

pages 32-33

Only use this table when the appropriate grade table for a cancer uses the **generic categories** with alphabetic codes A-D.

Do not use this table for a cancer that uses the generic categories but assigns numeric codes. The latter condition means that the site uses nuclear grading for which the alphabetic codes are not appropriate.

Do not use this table to code terms from a 2 or 3 grade system

Cross Over Table - 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
Medium grade, intermediate grade	II-III	C
Moderately poorly differentiated	III	C
Moderately undifferentiated	III	C
Poorly differentiated	III	C
Relatively poorly differentiated	III	C
Relatively undifferentiated	III	C
Slightly differentiated	III	C
Dedifferentiated	III	C
Only states ad Grade III	III	C
High Grade	III-IV	D
Undifferentiated, anaplastic, not differentiated	IV	D
Only stated as Grade IV	IV	D
Non-high grade		9

2018 Breast Grade Table

pages 71-72

Code	Grade Description
1	G1: Low combined histologic grade (favorable), SBR score of 3-5 points
2	G2: Intermediate combined histologic grade (moderately favorable); SBR score of 6-7 points
3	G3: High combined histologic grade (unfavorable); SBR score of 8-9 points
L	Nuclear Grade I (Low) (in situ only)
M	Nuclear Grade II (Intermediate) (in situ only)
H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown

Grade Clinical, Pathological, Post-Therapy Invasive Breast Cancers

- Scarff-Bloom-Richardson (SBR) score is used for grade. Also known as Bloom-Richardson, Nottingham, Nottingham modification of Bloom – Richardson score, Nottingham modification, Nottingham-Tenovus grade, or Nottingham score.
- All invasive cancers should be assigned a histologic grade. The Nottingham combined histologic grade is recommended.

Code	Grade Description
1	G1: Low combined histologic grade (favorable), SBR score 3-5 points
2	G2: Intermediate combined histologic grade (Moderately favorable); SBR score of 6-7 points
3	G3: High combined histologic grade (unfavorable); SBR score of 8-9 points

2018 Breast Grade – Clinical

pages 71-72

- Clinical grade must not be blank.
- Assign the highest grade from the primary tumor assessed during the clinical time frame.

2018 Breast Grade – Clinical (cont.)

pages 71-72

- Code 9 when
  - Grade from primary site is not documented
  - Clinical workup is not done
  - Grade checked “not applicable” on CAP Protocol and no other grade information is available.
- If there is only one grade available and it cannot be determined if it is clinical, pathological or after neo-adjuvant therapy, assign as a clinical grade and code unknown (9) for pathological grade, and blank for post-therapy grade.

2018 Breast Grade – Pathological

pages 73-74

- Pathological grade must not be left blank
- Assign the highest grade from the primary tumor. If the clinical grade is the highest grade identified, use the grade identified during the clinical time frame for both the clinical grade and the pathological grade.

2018 Breast Grade – Pathological (cont.)

pages 73-74

- Code 9 when
  - Grade from primary site is not documented
  - No resection of primary site
  - Neo-adjuvant therapy is followed by a resection (See post-therapy grade)
  - Clinical case only (See clinical grade)
  - There is only one grade available and it cannot be determined if it is clinical, pathological, or after neo-adjuvant therapy
  - Grade checked “not applicable” on CAP Protocol and no other grade information is available.

2018 Breast Grade – Post Therapy

pages 75-76

- Leave post therapy grade blank when
  - No neoadjuvant therapy
  - Clinical or pathological case only
  - There is only one grade available and it cannot be determined if it is clinical, pathological or post therapy
- Assign the highest grade from the resected primary tumor assessed after completion of neoadjuvant therapy.

2018 Breast Grade – Post Therapy (cont.)

pages 75-76

- Code 9 when
  - Surgical resection is done after neoadjuvant therapy and grade from the primary site is not documented
  - Grade checked “not applicable” on CAP protocol and no other grade information is available
  - Surgical Resection is done after neoadjuvent therapy and there is no residual cancer.

AJCC 8th Edition Stage Group

pages 75-76

- If you are assigning AJCC 8th edition stage group
  - Grade is required to assign stage group
  - Codes A-D are treated as unknown grade when assigning AJCC stage group
  - An unknown grade may result in an unknown stage group


Q
&
A

Case Study 1

6-1-18 Left core needle biopsy-invasive lobular carcinoma

6-15-18 Left Simple Mastectomy with sentinel node biopsy-lobular carcinoma, SBR score 7. No L/V invasion. Margins negative. 00/03 sentinel nodes positive.

Code	**2018 Breast Grade Table** **Grade Description**
1	G1: Low combined histologic grade (favorable), SBR score 3-5 points
2	G2: Intermediate combined histologic grade (Moderately favorable); SBR score of 6-7 points
3	G3: High combined histologic grade (unfavorable); SBR score of 8-9 points
L	Nuclear Grade I (Low) (in situ only)
M	Nuclear Grade II (intermediate) (in situ only)
H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown

Case Study 1 Answer

Grade Clinical – 9 Core needle biopsy during the clinical time frame (before treatment) did not state grade. Grade clinical cannot be left blank.

Grade Pathological – 2 Surgery during the pathological time frame showed SBR score of 7.

Grade Post-Therapy – Blank because no neoadjuvant therapy was given.

Case Study 2

5-10-18 Left breast biopsy-WD Infiltrating ductal carcinoma.

6-1-18 Left Partial Mastectomy with sentinel node biopsy-MD infiltrating ductal carcinoma, Nottingham 6/9. Grade 2. Margins negative. 00/02 sentinel nodes positive.

Code	2018 Breast Grade Table Grade Description
1	G1: Low combined histologic grade (favorable), SBR score 3-5 points
2	G2: Intermediate combined histologic grade (Moderately favorable); SBR score of 6-7 points
3	G3: High combined histologic grade (unfavorable); SBR score of 8-9 points
L	Nuclear Grade I (Low) (in situ only)
M	Nuclear Grade II (intermediate) (in situ only)
H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown

Case Study 2 Answer

Grade Clinical – A the biopsy during the clinical time frame (before treatment) showed well differentiated tumor.

Grade Pathological – 2 the partial mastectomy performed during the pathological time frame showed a SBR score of 6.

Grade Post-Therapy – Blank because no neoadjuvant therapy was given.

Case Study 3

1-12-18 Right breast biopsy-PD infiltrating ductal carcinoma. Right axillary lymph node biopsy-metastatic ductal carcinoma

2-1-18 Patient began neo adjuvant treatment with Carboplatin and Taxol.

6-10-18 Bilateral Total Mastectomies with right axillary dissection-1.3cm MD infiltrating ductal ca in right breast. 00/08 right axillary nodes positive.

Code	2018 Breast Grade Table Grade Description
1	G1: Low combined histologic grade (favorable), SBR score 3-5 points
2	G2: Intermediate combined histologic grade (Moderately favorable); SBR score of 6-7 points
3	G3: High combined histologic grade (unfavorable); SBR score of 8-9 points
L	Nuclear Grade I (Low) (in situ only)
M	Nuclear Grade II (intermediate) (in situ only)
H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown

Case Study 3 Answer

Grade Clinical – C the biopsy during the clinical time frame (before treatment) showed poorly differentiated tumor.

Grade Pathological – 9 patient had neoadjuvent treatment and grade instructions state to assign code 9 when you have neoadjuvent therapy followed by resection.

Grade Post-Therapy – B patient had resection after neoadjuvent treatment. This grade is from the post therapy time frame.

Case Study 4

2-5-18 Right breast biopsy-PD lobular carcinoma.

2-20-18 Right breast lumpectomy with sentinel node biopsy-1.6cm MD lobular carcinoma. Margins negative. 00/03 Sentinel nodes positive.

Note - For pathological grade assign the highest grade from any microscopic specimen of the primary site.

Code	2018 Breast Grade Table Grade Description
1	G1: Low combined histologic grade (favorable), SBR score 3-5 points
2	G2: Intermediate combined histologic grade (Moderately favorable); SBR score of 6-7 points
3	G3: High combined histologic grade (unfavorable); SBR score of 8-9 points
L	Nuclear Grade I (Low) (in situ only)
M	Nuclear Grade II (intermediate) (in situ only)
H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown

Case Study 4 Answer

Grade Clinical – C the biopsy during the clinical time frame (before treatment) showed poorly differentiated tumor.

Grade Pathological – C Poorly differentiated because you use all the clinical information and the pathological information to assign pathological stage.

Note: for pathological grade assign the highest grade from any microscopic specimen of the primary site. The highest grade in this example is from the biopsy.

Grade Post-Therapy – Blank No neoadjuvent treatment was given.

Case Study 5

4-16-18 Stereotactic Left breast biopsy-DCIS Low nuclear grade.

5-1-18 Left Lumpectomy with Sentinel lymph node biopsy-High grade DCIS. Margins negative. 1 Sentinel node negative.

Code	2018 Breast Grade Table Grade Description
1	G1: Low combined histologic grade (favorable), SBR score 3-5 points
2	G2: Intermediate combined histologic grade (Moderately favorable); SBR score of 6-7 points
3	G3: High combined histologic grade (unfavorable); SBR score of 8-9 points
L	Nuclear Grade I (Low) (in situ only)
M	Nuclear Grade II (intermediate) (in situ only)
H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown

Case Study 5 Answer

Grade Clinical – L the biopsy during the clinical time frame (before treatment) showed **low nuclear grade**.

Grade Pathological – H the surgery during the pathological time frame showed **high grade**.

Grade Post-Therapy – Blank because no neoadjuvent treatment was given.

Case Study 6

3-20-18 Stereotactic Left breast biopsy-DCIS Nuclear grade 2.

4-25-18 Left Lumpectomy with Sentinel node biopsy-1.5cm Invasive Ductal carcinoma. Grade unfavorable. Margins negative. 1 sentinel node negative.

Code	2018 Breast Grade Table Grade Description
1	G1: Low combined histologic grade (favorable), SBR score 3-5 points
2	G2: Intermediate combined histologic grade (Moderately favorable); SBR score of 6-7 points
3	G3: High combined histologic grade (unfavorable); SBR score of 8-9 points
L	Nuclear Grade I (Low) (in situ only)
M	Nuclear Grade II (intermediate) (in situ only)
H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown

Case Study 6 Answer

Grade Clinical – M the biopsy during the clinical time frame (before treatment) showed **nuclear grade 2**.

Grade Pathological – 3 the grade was **unfavorable** on lumpectomy specimen during the pathological time frame.

Grade Post-Therapy – Blank because no neoadjuvent treatment was given.

Case Study 7

1-20-18 Left Breast biopsy-Lobular carcinoma. Left FNA axillary node-Well Differentiated metastatic lobular carcinoma.

2-1-18 L. Modified Radical Mastectomy-3cm Fairly well differentiated lobular carcinoma. Margins negative. 06/10 axillary nodes positive.

Code	2018 Breast Grade Table Grade Description
1	G1: Low combined histologic grade (favorable), SBR score 3-5 points
2	G2: Intermediate combined histologic grade (Moderately favorable); SBR score of 6-7 points
3	G3: High combined histologic grade (unfavorable); SBR score of 8-9 points
L	Nuclear Grade I (Low) (in situ only)
M	Nuclear Grade II (intermediate) (in situ only)
H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown

Case Study 7 Answer

Grade Clinical – 9 the biopsy during the clinical time frame (before treatment) does not give a grade.

Grade Pathological – B Since fairly well differentiated is not on the breast grade table we go to the crossover table to see if it's listed there. Per the crossover table you would code fairly well differentiated as B.

Grade Post-Therapy – Blank because no neoadjuvent treatment was given.

Cross Over Table - 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
Medium grade, intermediate grade	II-III	C
Moderately poorly differentiated	III	C
Moderately undifferentiated	III	C
Poorly differentiated	III	C
Relatively poorly differentiated	III	C
Relatively undifferentiated	III	C
Slightly differentiated	III	C
Dedifferentiated	III	C
Only states ad Grade III	III	C
High Grade	III-IV	D
Undifferentiated, anaplastic, not differentiated	IV	D
Only stated as Grade IV	IV	D
Non-high grade		9

Case Study 8

4-5-18 Left breast biopsy-Ductal carcinoma, medium grade.

4-15-18 Lumpectomy with sentinel node biopsy-1.5cm Ductal carcinoma, SBR score 8. Margins negative.
2 sentinel nodes negative.

Code	2018 Breast Grade Table Grade Description
1	G1: Low combined histologic grade (favorable), SBR score 3-5 points
2	G2: Intermediate combined histologic grade (Moderately favorable); SBR score of 6-7 points
3	G3: High combined histologic grade (unfavorable); SBR score of 8-9 points
L	Nuclear Grade I (Low) (in situ only)
M	Nuclear Grade II (intermediate) (in situ only)
H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown

Case Study 8 Answer

Grade Clinical – C the biopsy during the clinical time frame (before treatment) showed medium grade. Medium grade is not on the breast grade table so you go to the crossover table to see if you can find it there. The crossover table tells you to assign medium grade to code C.

Grade Pathological – 3 SBR score 8 from the surgery during the pathological time frame.

Grade Post-Therapy – Blank because no neoadjuvent treatment was given.

Cross Over Table - 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
Medium grade, intermediate grade	II-III	C
Moderately poorly differentiated	III	C
Moderately undifferentiated	III	C
Poorly differentiated	III	C
Relatively poorly differentiated	III	C
Relatively undifferentiated	III	C
Slightly differentiated	III	C
Dedifferentiated	III	C
Only states ad Grade III	III	C
High Grade	III-IV	D
Undifferentiated, anaplastic, not differentiated	IV	D
Only stated as Grade IV	IV	D
Non-high grade		9

Sources

- Grade Coding Instructions and Tables Manual: https://www.naaccr.org/SSDI/Grade-Manual.pdf?v=1531167732
- Canswer Forum: http://cancerbulletin.facs.org/forums/help

Contact Information

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Case Study 1

Grade Clinical – 9
Grade Pathological – 2
Grade Post-Therapy – Blank

Case Study 2

Grade Clinical – A
Grade Pathological – 2
Grade Post-Therapy – Blank

Case Study 3

Grade Clinical – C
Grade Pathological – 9
Grade Post-Therapy – B

Case Study 4

Grade Clinical – C
Grade Pathological – C
Grade Post-Therapy – Blank

Case Study 5

Grade Clinical – L
Grade Pathological – H
Grade Post-Therapy – Blank

Case Study 6

Grade Clinical – M
Grade Pathological – 3
Grade Post-Therapy – Blank

Case Study 7

Grade Clinical – 9
Grade Pathological – B
Grade Post-Therapy – Blank

Case Study 8

Grade Clinical – C
Grade Pathological – 3
Grade Post-Therapy – Blank