

# GRADE



# OUTLINE AND OBJECTIVES

- What is Grade
- Coding Scenarios and Quizzes
- Take home Points





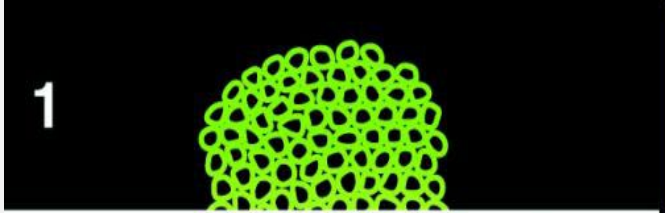




# WHAT IS GRADE?



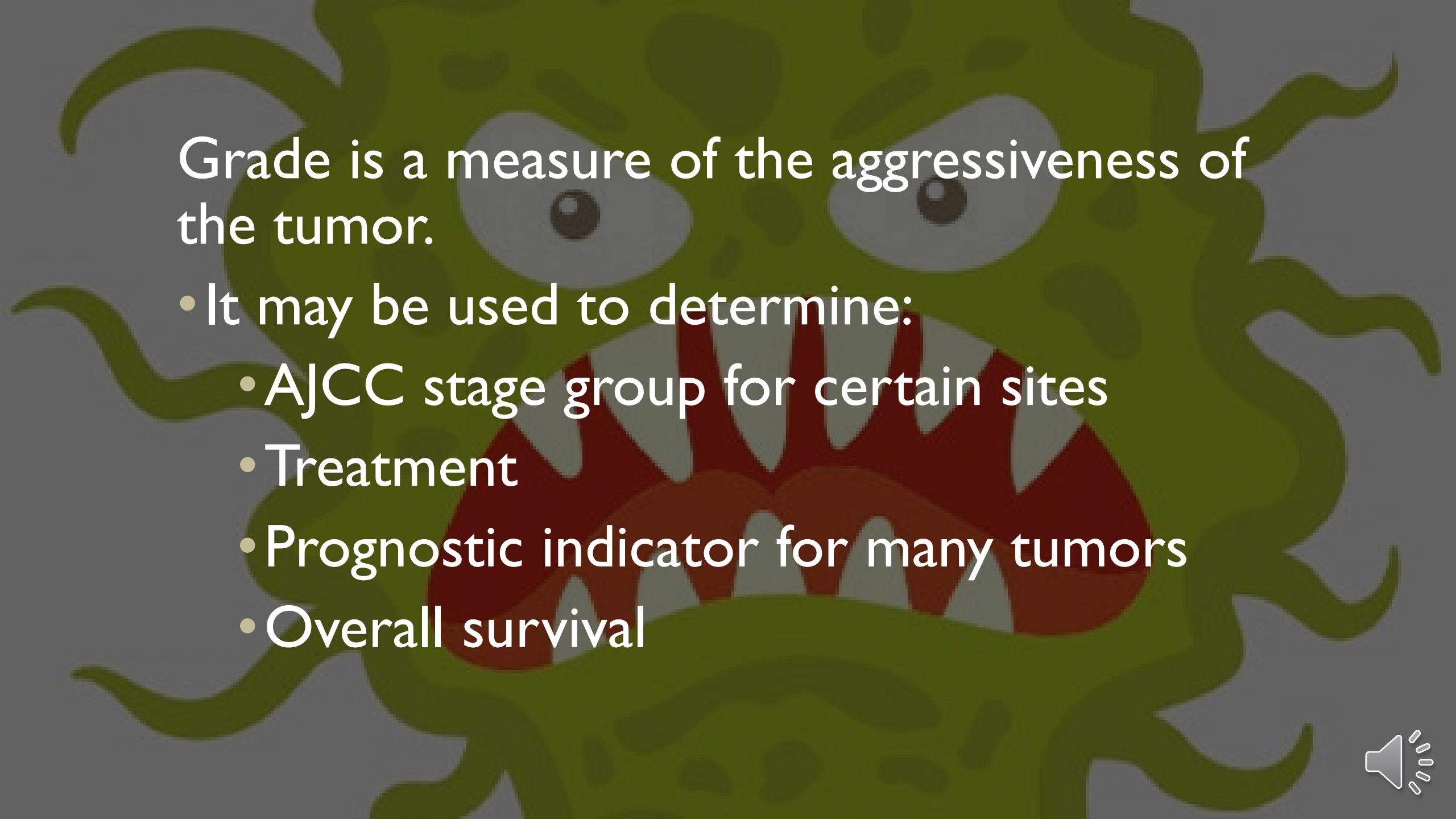
## Grade:

Microscopic examination of tumor tissue determines the grade of the tumor.

- The most common way to define grade is an assessment of how closely the tumor cells resemble the normal cells of the parent tissue (organ of origin), often referred to as “differentiation.”

1		<u>Nearly normal cells</u>
2		Some abnormal cells loosely packed
3		Many abnormal cells
4		<u>Very few normal cells left</u>
5		<u>Completely abnormal cells</u>





Grade is a measure of the aggressiveness of the tumor.

- It may be used to determine:
  - AJCC stage group for certain sites
  - Treatment
  - Prognostic indicator for many tumors
  - Overall survival



Grade is assessed differently for different sites/histologies.

These similarities/differences may be based on pattern (architecture), cytology, nuclear features, or a combination of these elements, depending upon the grading system that is used.

- Some grading systems use only pattern (example: Gleason grading in prostate).
- Others use only a nuclear grade (usually size, amount of chromatin, degree of irregularity, and mitotic activity).
- Most systems use a combination of pattern and cytologic and nuclear features. (example: Nottingham's for breast is based on characteristics of pattern, nuclear size and shape, and mitotic activity).



# THE HISTORY OF GRADE

- Historically, grade in cancer registries has been collected based on a generic 4-grade classification.
- These same categories were collected for all reportable primary tumors, and categories from systems using two or three grades were converted to the four-grade values.

Code	Grade Description
1	Well differentiated
2	Moderately differentiated
3	Poorly differentiated
4	Undifferentiated or anaplastic
5	T-cell; T-precursor cell
6	B-cell; B-precursor cell
7	Null cell; Non-T-non-B
8	NK cell (natural killer cell)
9	Grade unknown, not stated, or not applicable



# THE EVOLUTION OF GRADE

Beginning with cases diagnosed in 2018:

- The definition of grade has been expanded.
- Classification of grade now varies by tumor site and/or histology.
- The grading system for a cancer type may have two, three, or four grades. No longer will all grades be converted to a four-grade system.
- Cell lineage indicator/grade for hematopoietic and lymphoid neoplasms will no longer be collected for cases diagnosed 1/1/2018 and forward. **\*However there is an exception to this rule!**





## GRADE 2018

The Grade Coding Instructions and Tables (Grade Manual) is the primary resource for documentation and coding instructions for Grade for cases diagnosed on or after January 1, 2018.

The key word is **DIAGNOSED**. So, what does this mean?



## **This means:**

- If the cancer was diagnosed in 2018 you will use the Grade Coding and Instructions and Tables for 2018.
- If the cancer was diagnosed on or before December 31, 2017, you use the grade rules that were set in place for the diagnosis year.

## **Examples:**

A patient is seen for the first time at your facility in 2018 but, the cancer was diagnosed in 2017. You would code the grade using the rules that were set in place in 2017.

A patient is seen for the first time at your facility in 2022 but, the cancer was diagnosed in 2021. You would code the grade using the rules that were set in place in 2021.



With the 2018 changes:

- AJCC Chapter specific grading systems incorporated into the 2018 Grade
- Site-specific grades were harmonized with the CAP cancer protocol checklist
- Based on site and/or chapter, the cancer registry grade categories or another definition of grade may be use
- Historical grade definitions still apply when specific grading system not applicable for site, or preferred grade are not available.



# TWO-GRADE SYSTEM

Two levels of differentiation; also called a two-grade system

- a. Low grade
- b. High grade

Two-Grade System	
Code	Description
L	Low grade
H	High grade
9	Grade cannot be assessed (GX); Unknown
Blank	See Note 1



# THREE-GRADE SYSTEM

Three levels of differentiation; also called a three-grade system

- a. Grade I, well differentiated
- b. Grade II, moderately differentiated
- c. Grade III, poorly differentiated OR poorly differentiated and undifferentiated

Three-Grade System	
Code	Description
1	G1: Well differentiated
2	G2: Moderately differentiated
3	G3: Poorly differentiated; or undifferentiated
9	Grade cannot be assessed (GX); Unknown
Blank	See Note 1



## FOUR-GRADE SYSTEM

Four levels of differentiation; also called a four-grade system.

- a. Grade I; also called well-differentiated
- b. Grade II; also called moderately differentiated
- c. Grade III; also called poorly differentiated
- d. Grade IV; also called undifferentiated or anaplastic

Four-Grade System	
Code	Description
1	G1: Well differentiated
2	G2: Moderately differentiated
3	G3: Poorly differentiated
4	G4: Undifferentiated or anaplastic
9	Grade cannot be assessed (GX); Unknown
Blank	See Note 1



# 2018 RESTRUCTURED CODES

## ❖ Grade 2018

- Tables for Grade have been restructured.
- A combination of numeric and alphabetic code can be represented in the same table.
- Codes 1-5 are reserved for the AJCC 8<sup>th</sup> edition site-specific Grade definitions
- May include additional CAP surgical checklist grade definitions.
- May include generic (historical) grade definitions.
- Categories L and H are applicable for the AJCC recommended grading systems of “low grade” and “high grade”.
- It also includes M for intermediate grade to be used with L and H for breast in situ cancers.
- It also includes B for Borderline grade to be used with L and H for Ovary, Fallopian tube and primary peritoneal cancers.
- S is utilized for sarcomatous overgrowth in corpus uteri adenocarcinoma, an AJCC registry data collection variable.
- Codes A-D are the generic grade categories.
- Codes A-D are not available for all cancers since although many AJCC chapters continue to use the traditional grade terms, many of the chapters now use a three-grade system, instead of the four-grade system.
- \*B is used to represent “Borderline” grade but can also represent Moderately Differentiated” for generic grade.

Template for a Cancer-Specific Grade Table

Code	Grade Description
1	Site-specific grade system category
2	Site-specific grade system category
3	Site-specific grade system category
4	Site-specific grade system category
5	Site-specific grade system category
L	Low grade
H	High grade
M	Site-specific grade system category
S	Site-specific grade system category
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated and anaplastic
8	Not applicable (Hematopoietic neoplasms only)
9	Grade cannot be assessed; Unknown
Blank	(Post-therapy only)



# HOW IT BREAKS DOWN

Code	Grade Description	Assignment
I	Site-specific grade system Category	Reserved for the AJCC 8 <sup>th</sup> edition site-specific grade definitions
2	Site-specific grade system Category	
3	Site-specific grade system Category	
4	Site-specific grade system Category	
5	Site-specific grade system Category	
L	Low Grade	Reserved for Urinary cancers And In situ cancer of the Breast
H	High Grade	
M	Site-specific grade system Category	In situ cancer of the Breast
S	Site-specific grade system Category	Cancers of the Uteri
A	Well Differentiated	Generic Codes
B	Moderately Differentiated	
C	Poorly Differentiated	
D	Undifferentiated and Anaplastic	
8	Not applicable (Hematopoietic neoplasms only)	Hematopoietic neoplasms only
9	Grade cannot be assessed; Unknown	Grade cannot be assessed; Unknown
Blank	(Post-therapy Clinical and Pathological <b><u>only</u></b> )	Post-therapy Clinical and Pathological <b><u>only</u></b>





## AJCC SITE-SPECIFIC GRADE

The following AJCC chapters require grade to assign stage group. They are as follows:

- Chapter 16: Esophagus and Esophagogastric Junction (Grade 03)
- Chapter 19: Appendix (Grade 05)
- Chapter 38: Bone (Grade 08)
- Chapter 41: Soft Tissue Sarcoma of the Trunk and Extremities (Grade 10)
- Chapter 43: Gastrointestinal Stromal Tumor (Grade 11)
- Chapter 44: Soft Tissue Sarcoma of the Retroperitoneum (Grade 10)
- Chapter 48: Breast (Grade 12)
- Chapter 58: Prostate (Grade 17)



# GENERIC DEFINITIONS

- These sites have no AJCC preferred or recommended grade.
- These sites will still use the generic historical definitions.

- Cervical Lymph Nodes and Unknown Primary
- Major Salivary Glands
- Nasopharynx
- Oropharynx HPV-Mediated (p16+)
- Mucosal Melanoma of Head & Neck
- Thymus
- Merkel Cell Carcinoma
- Melanoma of Skin
- Placenta
- Testis
- Melanoma Conjunctiva
- Thyroid
- Thyroid-Medullary
- NET Adrenal Gland

Code	Grade Description
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed; Unknown



## SCHEMAS WITH NO AJCC CHAPTER

These sites have no AJCC chapter or preferred grade.

- ♦ Grade is still coded using the generic grade table.

Code	Grade Description
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed; Unknown

Grade ID 99-Clinical Grade Instructions			
Schema ID#	Schema ID Name	AJCC ID	AJCC Chapter
00118	Pharynx Other	XX	No AJCC Chapter
00119	Middle Ear	XX	No AJCC Chapter
00128	Sinus Other	XX	No AJCC Chapter
00278	Biliary Other	XX	No AJCC Chapter
00288	Digestive Other	XX	No AJCC Chapter
00358	Trachea	XX	No AJCC Chapter
00378	Respiratory Other	XX	No AJCC Chapter
00478	Skin Other	XX	No AJCC Chapter
00558	Adnexa Uterine Other	XX	No AJCC Chapter
00559	Genital Female Other	XX	No AJCC Chapter
00598	Genital Male Other	XX	No AJCC Chapter
00638	Urinary Other	XX	No AJCC Chapter
00698	Lacrimal Sac	XX	No AJCC Chapter
00718	Eye Other	XX	No AJCC Chapter
00778	Endocrine Other	XX	No AJCC Chapter
99999	Ill-defined Other	XX	No AJCC Chapter





# GRADE MANUAL



# GRADE MANUAL BREAKDOWN

- ❖ The Grade Manual provides Grade Table Indexes to assist in identifying the correct code tables. These indexes are located at the beginning of the Grade Manual, immediately after the Table of Contents.
  - ♦ The first index is sorted in Schema ID # order, which approximates the order of AJCC Chapters
  - ♦ While the second index is sorted in alphabetical order by schema name



# Grade Table Indexes

❖ Both indexes contain:

- ♦ Schema number and name,
- ♦ AJCC Chapter number and name
- ♦ Summary Stage Chapter name
- ♦ A hyperlink to the appropriate Grade Table. (A hyperlink is also provided to return to the Grade Table (Schema ID order) at the end of the coding instructions for each schema.)



### Grade Tables (in Schema ID order)

The table below lists the Schema ID/Schema Name Description (also the EOD schema name), AJCC 8<sup>th</sup> edition chapter and Summary Stage 2018 chapters with the specified grade table

Schema ID	Schema ID Name (EOD Schema Name)	AJCC Chap.	AJCC Chapter Name	SS Chapter	Grade Table
00060	Cervical Lymph Nodes and Unknown Primary Tumor of the Head and Neck	6	Cervical Lymph Nodes and Unknown Primary Tumors of Head and Neck	Cervical Lymph Nodes and Unknown Primary	<a href="#">Grade 98</a>
00071	Buccal Mucosa	7	Oral Cavity	Buccal Mucosa	<a href="#">Grade 01</a>
00072	Gum	7	Oral Cavity	Gum	<a href="#">Grade 01</a>
00073	Floor of Mouth	7	Oral Cavity	Floor of Mouth	<a href="#">Grade 01</a>
00074	Lip	7	Oral Cavity	Lip	<a href="#">Grade 01</a>
00075	Mouth Other	7	Oral Cavity	Mouth Other	<a href="#">Grade 01</a>
00076	Palate Hard	7	Oral Cavity	Palate Hard	<a href="#">Grade 01</a>
00077	Tongue Anterior	7	Oral Cavity	Tongue Anterior	<a href="#">Grade 01</a>
00080	Major Salivary Glands	8	Major Salivary Glands	Major Salivary Glands	<a href="#">Grade 98</a>
00090	Nasopharynx	9	Nasopharynx	Nasopharynx	<a href="#">Grade 98</a>
00100	Oropharynx HPV-Mediated (p16+)	10	HPV-Mediated (p16+) Oropharyngeal Cancer	Oropharynx	<a href="#">Grade 98</a>
00111	Oropharynx (p16-)	11	Oropharynx (p16-) and Hypopharynx	Oropharynx	<a href="#">Grade 02</a>



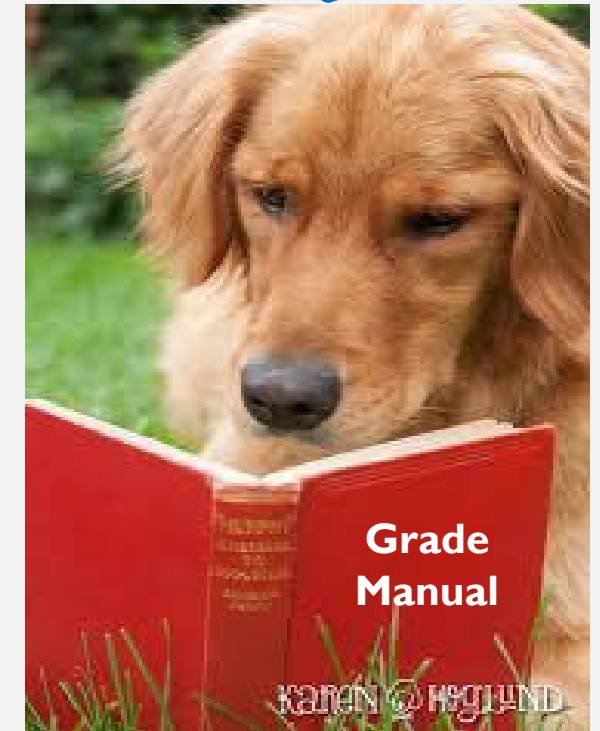
# GRADE MANUAL

This kind  
of looks  
RUFF!

❖ It is important to read the introductory materials and general instructions of the manual carefully. They cover important changes in the collection of Grade data items. These include:

- ♦ The use of AJCC-recommended grade tables where applicable.
- ♦ The introduction of Clinical, Pathological, Post therapy Clinical and Post-Therapy Pathological data items.
- ♦ Coding instructions for generic grade categories.

The comprehension of this material will be necessary in order to code the 4 Grade Data Items accurately.





# GENERAL RULES

## I. 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. (Primary tumor is extending onto its neighbor)
- If primary site is unknown, code grade to 9.
  - If you do not know the site you cannot assign a grade table



## 2. If there is more than one grade available for an individual grade data item (i.e. 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. If the site table allows.
- If there is no recommended AJCC grade, code the highest grade



### 3. 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.



#### 4. Systemic treatment and radiation can alter a tumor's grade.

- 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



## **FOR ALL SITES**

### **Results from Consultation**

**If results from the consultation differ from the original grade**

- Results from the consultation take priority
- Results must be from the same timeframe



## **For all Grade Tables**

### **New Note:**

- If there are multiple tumors with different grades abstracted as one primary, code the highest grade.
- This has been confirmed with the CAP Cancer Committee





# **GRADE DATA ITEMS**



## **For solid tumors diagnosed 2021 and forward:**

- Grade will be collected in four different points of patient care.
  - Grade Clinical
  - Grade Pathological
  - Grade Post Therapy Clinical (yc)
  - Grade Post Therapy Pathological (yp)
- The codes and coding instructions will depend on the type of cancer.
- The revised grade codes are based on the recommended grading systems specified in the relevant chapters of the AJCC 8th edition (9th edition for cervix) staging manuals and/or the CAP cancer protocols (when applicable).





## Grade Clinical:

- Collects grade during clinical time frame – usually from a biopsy or FNA and **BEFORE** any treatment such as surgical resection or neoadjuvant therapy, etc.
- Will be defined most of the time - unless no Dx until surgery
- Can never be blank

## Grade Pathological:

- Collects grade from the primary tumor which **has been resected** (unless microscopic Grade Clinical is higher or surgical resection grade is unknown), and neoadjuvant therapy was **NOT** administered.
- If Grade Pathological is recorded, then Grade Post-Therapy Clinical and Grade Post-Therapy Pathological will **ALWAYS** be **BLANK**.
- If AJCC TNM stage is being assigned, the “surgical resection” must meet AJCC criteria for the cancer site.
- Can never be blank



## Grades Post Therapy

If AJCC TNM stage is being assigned, the neoadjuvant treatment being administered must meet AJCC criteria for the cancer site.



Implemented  
2021

- **Grade Post Therapy Clinical (yc)**

- The highest known grade after neoadjuvant treatment but before surgery of the primary tumor.

- **Grade Post Therapy Pathological (yp)**

- The highest known grade after neoadjuvant treatment and after surgery to the primary tumor (total resection or attempted resection), unless microscopic Grade Clinical is higher or surgical resection grade is unknown.



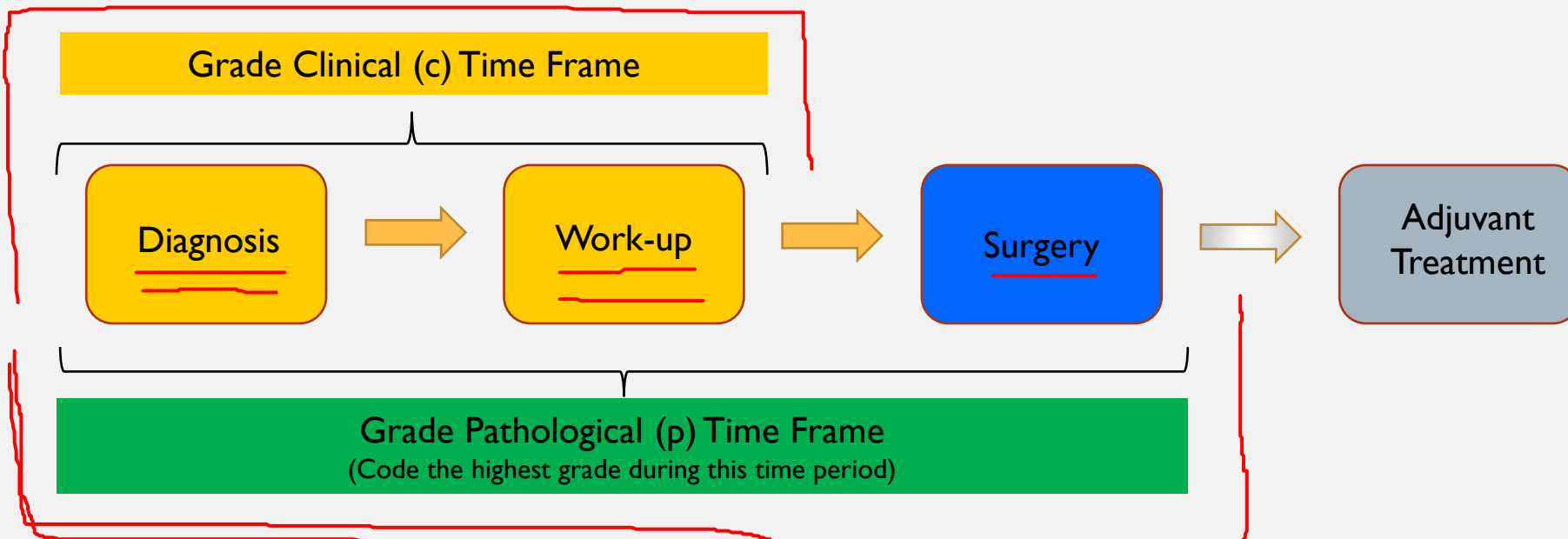
## **How the Grade Data Items Interact:**

The relationship between Grade Post Therapy Clinical (yc) and Post Therapy Pathological (yp) is the same as the relationship between Grade Clinical and Grade Pathological.

**Let's take a closer Look!**



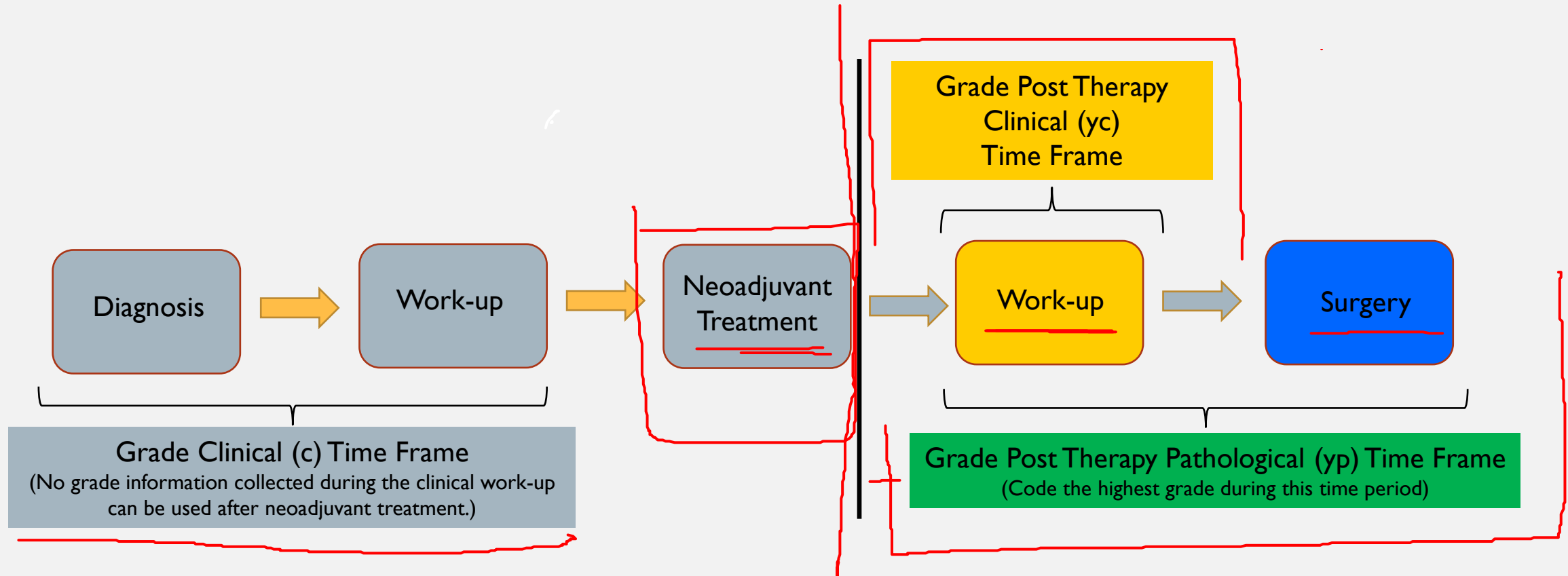
## Grade Clinical vs Grade Pathological



# Grade Post Therapy Clinical (yc)

vs

# Grade Post Therapy Pathological (yp)



## **GRADE POST THERAPY CLINICAL(y<sub>c</sub>)**

**For cases diagnosed January 1, 2021, and later.**

- Record the grade of a solid primary tumor that has been microscopically sampled following neoadjuvant therapy or primary systemic/radiation therapy.
- Follows the same guidelines as the other AJCC (y<sub>c</sub>) data items.

If AJCC TNM stage is being assigned, the neoadjuvant treatment being administered must meet AJCC criteria for the cancer site.



# GRADE POST THERAPY CLINICAL CODING GUIDELINES

**Note 1: Leave grade post therapy clinical (yc) 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.
- No microscopic examination of the primary tumor **after** neoadjuvant therapy.
- After neoadjuvant therapy is completed, no microscopic exam is done before surgery/resection of primary tumor.

**Note 2: Assign the highest grade from the microscopically sampled specimen of the primary site following neoadjuvant therapy or primary systemic/radiation therapy.**



**Note 3: If there are multiple tumors with different grades abstracted as one primary, code the highest grade.**

**Note 4: Code 9 when:**

- Microscopic exam is done after neoadjuvant therapy and grade from the primary site is not documented.
- Microscopic exam is done after neoadjuvant therapy and there is no residual cancer.
- Grade checked “not applicable” on CAP Protocol (if available) and no other grade information is available.

**Also Remember from the General Coding Instructions:**

**Code 9 when:**

- There is a preferred grading system for a schema and the term used to describe grade is not allowable and the Generic Grade Categories does not apply to this grade table

**\*\*See the individual site-specific Grade Post Therapy Clin (yc) tables for additional notes.**





# GRADE POST THERAPY PATHOLOGICAL (yp)

**Note 1: Leave Grade Post Therapy Path (yp) blank when:**

- No neoadjuvant therapy
- Clinical or pathological case only
- Neoadjuvant therapy completed, but surgical resection not done
- There is only one grade available and it cannot be determined if it is clinical, pathological, post therapy clin or post therapy path



**Note 2: There is a preferred grading system for this schema. If the clinical grade post therapy given uses the preferred grading system and the grade post therapy pathological does not use the preferred grading system, do not record the Grade Post Therapy Clin (yc) in the Grade Post Therapy Path (yp) field. Assign Grade Post Therapy Path (yp) 9.**

- *Example:* Biopsy of primary site after neoadjuvant therapy shows a moderately differentiated adenocarcinoma. The surgical resection states a high grade adenocarcinoma.
  - Code Grade Post Therapy Clin (yc) as 2 since Moderately differentiated (G2) is the preferred grading system
  - Code Grade Post Therapy Path (yp) as 9 since the preferred grading system was not used and the Generic Grade Categories do not apply to this grade table



**Note 3: Assign the highest grade from the resected primary tumor assessed after the completion of neoadjuvant therapy.**

- If the post-therapy clinical grade is higher than the post-therapy pathological grade, use the post-therapy clinical grade to code this field. (see note 2 and 5)

**Note 4: If there are multiple tumors with different grades abstracted as one primary, code the highest grade.**



**Note 5: Use the grade from the post therapy clinical work up from the primary tumor in different scenarios based on behavior or surgical resection**

- **Behavior post neoadjuvant therapy**

- Tumor behavior for the clinical post therapy and the pathological post therapy diagnoses are the same AND the clinical grade post therapy is the highest grade.
- Tumor behavior for clinical grade post therapy diagnosis is invasive, and the tumor behavior for the pathological post therapy diagnosis is in situ.
  - You would not use the grade from the post therapy clinical work up for pathological post therapy in cases where the tumor behavior for clinical grade post therapy diagnosis is in situ, and the tumor behavior for the pathological post therapy diagnosis is invasive.

- **Surgical resection post neoadjuvant therapy**

- Surgical resection is done post neoadjuvant therapy of the primary tumor and there is no grade documented from the surgical resection.
- Surgical resection is done of the primary tumor post neoadjuvant therapy and there is no residual cancer.
- Surgical resection of the primary tumor has not been done, but there is positive microscopic confirmation of distant metastases during the Post Therapy Clinical time frame.



## **Note 6: Code 9 (unknown) when**

- Surgical resection is done after neoadjuvant therapy and grade from the primary site is not documented
- Surgical resection is done after neoadjuvant therapy and there is no residual cancer
- Grade checked “not applicable” on CAP Protocol (if available) and no other grade information is available

## **Also Remember from the General Coding Instructions:**

### **Code 9 when:**

- There is a preferred grading system for a schema and the term used to describe grade is not allowable and the Generic Grade Categories does not apply to this grade table



## Blanks vs 9 (Unknown)

Grade Post Therapy Clinical (yc)

Grade Post therapy Pathological (yp)

		Grade yc	Grade yp
No Noadjuvant Therapy		<u>Blank</u>	<u>Blank</u>
Neoadjuvant Therapy Administered			
No bx of primary tumor	No resection of primary tumor	<u>Blank</u>	<u>Blank</u>
Bx of primary tumor, but no grade information	No resection of primary tumor	<u>9</u>	<u>Blank</u>
No bx of primary tumor	Resection of primary tumor, but no grade information	<u>Blank</u>	<u>9</u>
Bx of primary tumor, but no grade information	Resection of primary tumor, but no grade information	<u>9</u>	<u>9</u>



## **GRADE PATHOLOGICAL**

### **NEW NOTE 2**

**Schemas that have both the preferred AJCC grading system and generic grading system available on their grade table.**

**Note 2: There is a preferred grading system for this schema. If the clinical grade given used the preferred grading system and the pathological grade does not use the preferred grading system, do not record the Grade Clinical in the Grade Pathological field. Assign Grade Pathological using the applicable generic grade code (A-D)**



## GRADE PATHOLOGICAL

### NEW NOTE 2

#### Schemas that **AJCC** grading system only (1-4)

**Note 2:** There is a preferred grading system for this schema. If the clinical grade given used the preferred grading system and the pathological grade does not use the preferred grading system, do not record the Grade Clinical in the Grade Pathological field. Assign Grade Pathological to code 9.





# GRADE PATHOLOGICAL

## NEW NOTE

### Note number will vary by schema

Use the grade from the **clinical work up** from the primary tumor in different scenarios based on behavior or surgical resection.

- **Behavior**
  - Tumor behavior for the clinical and the pathological diagnoses are the same **AND** the clinical grade is the highest grade.
  - Tumor behavior for clinical grade diagnosis is invasive, and the tumor behavior for the pathological diagnosis is in situ.
    - You would not use the grade from the clinical work up for pathological in cases where the tumor behavior for clinical grade diagnosis is in situ, and the tumor behavior for the pathological diagnosis is invasive.



## **GRADE PATHOLOGICAL**

### **NEW NOTE**

**Note number will vary by schema**

**New Note: Use the grade from the clinical work up from the primary tumor when:**

- **Surgical Resection**

- Surgical resection is done of the primary tumor and there is no grade documented from the surgical resection.
- Surgical resection is done of the primary tumor and there is no residual cancer.
- Surgical resection of the primary tumor has not been done, but there is positive microscopic confirmation of distant metastases during the clinical time frame.



## **Pathologically Confirmed Distant Mets**

### **Clinical Grade**

- Pathologically confirmed distant mets does not change the clinical grade
- Grade must come from the primary tumor
- Grade must be based on information available before any treatment



# Pathologically Confirmed Distant Mets Continued

## Pathological Grade

- If the patient does not have resection of the primary tumor  
and
- If the patient has grade information from a biopsy of the primary tumor less than full resection  
and
- If the patient has pathologic confirmation of distant mets  
then
- Grade Clinical (bx of the primary tumor) may be used to code the pathological grade data item.

**\*Remember:** Never use the grade from a metastatic site to code grade. So even if the grade of the metastatic site is given, you would still use the clinical grade of the primary tumor to code this data item.





# **SPECIFIC GRADE TABLE CLARIFICATIONS**



## BREAST

- **Note 8:** Grade from nodal tissue may be used **ONLY** when there was ***never any evidence of the primary tumor (T0)***. Grade would be coded using G1, G2 or G3, even if the grading is not strictly Nottingham, which is difficult to perform on nodal tissue. Some of the terminology may include differentiation terms without some of the morphologic features used in Nottingham (e.g., well differentiated (G1), moderately differentiated (G2), or poorly /undifferentiated (G3)).

**Note:** This **does not** apply to a tumor ***when here is evidence*** clinically and found to have no residual tumor on surgical resection.



## CORPUS CARCINOMA

Confirmation received from CAP Cancer Committee that the following is ALWAYS G3:

- Serous, clear cell, undifferentiated/de-differentiated carcinomas, carcinosarcomas and mixed mesodermal tumors
- (Mullerian/MMMT are high risk (high grade)
- At this time, a list of specific histology codes as not been developed
- Added to the notes for the Corpus Carcinoma grade table

<http://cancerbulletin.facs.org/forums/forum/site-specific-data-items-grade2018/101914-coding-pathologic-grade-for-dedifferentiated-endometrioidadenocarcinoma>



## OVARY, FALLOPIAN TUBE, PRIMARY PERITONEAL CARCINOMA

### Note 4, first bullet:

- Immature teratomas and serous carcinomas: Use code L, H or 9. This include the following ICD-03 codes: 8441/2, 8441/3, 8460/3, 8461/3, 8474/3
- Confirmed by the CAP Cancer Committee





## Take Home Points:

- Grade now has 4 data items:
  - Clinical
  - Pathological
  - Post-therapy Clinical and
  - Post-therapy Pathological
- The relationship between Post-therapy Clinical and Post-therapy Pathological behaves the same way as the relationship between clinical and pathological.
- The Clinical timeframe stops when neoadjuvant is initiated, so no information abstained during the clinical time frame can be used to code Post-therapy Clinical or Post-therapy Pathological.



- In coding Grades Pathological or Post-therapy Pathological:
  - If AJCC TNM stage is being assigned, the “surgical resection” must meet AJCC criteria for the cancer site.
- In coding grades Post-therapy Clinical and Post-therapy Pathological:
  - If AJCC TNM stage is being assigned, the neoadjuvant treatment being administered must meet AJCC criteria for the cancer site.

## **IMPORTANT:**

- It is important to read the manual and review the General Coding instructions.
- Not all coding instructions are mentioned on the coding instructions on each of the tables.
- Read the coding notes and guidelines for each table to ensure you are following the correct coding guideline.



## TOOLS

- Grade Manual
  - <https://apps.naaccr.org/ssdi/list/>
- SSDI/Grade Webpages
  - <https://apps.naaccr.org/ssdi/list/>
- Software
  - (CPDMS)



**QUIZ**

## Example

Patient had a routine mammogram revealing a 2cm at the 11:00 o'clock position of the left breast. Biopsy was positive for invasive ductal carcinoma, Nottingham score of 8. Patient underwent neoadjuvant treatment followed by imaging and a partial mastectomy. Imaging revealed a 1.1cm mass and the Pathology report: 1.2cm tumor of invasive ductal carcinoma, Nottingham score of 5. Code the 4 data items.

Grade Clinical: 3 (Nottingham score of 8 = grade 3)

Grade Pathological: 9 (patient received neoadjuvant therapy, Grade Pathological cannot be blank = 9)

Grade Post-Therapy Clinical: blank (Neoadjuvant therapy followed by imaging workup only = blank)

Grade Post-therapy Pathological: 1 (Neoadjuvant therapy, followed by mastectomy, Nottingham score of 5)

## Example

Patient had a routine mammogram revealing a 2cm at the 11:00 o'clock position of the left breast. Biopsy was positive for invasive ductal carcinoma, Nottingham score of 8. Patient underwent neoadjuvant treatment. Post neoadjuvant biopsy revealed invasive ductal carcinoma, Nottingham score of 6 followed by a partial mastectomy. Pathology report: 1.1cm tumor of invasive ductal carcinoma, Nottingham score of 5. Code the 4 data items.

Grade Clinical: 3 (Nottingham score of 8 = grade 3)

Grade Pathological: 9 (patient received neoadjuvant therapy, Grade Pathological cannot be blank = 9)

Grade Post-Therapy Clinical: 2 (Post neoadjuvant biopsy, Nottingham score of 6 = grade 2)

Grade Post-therapy Pathological: 2 (post neoadjuvant clinical grade = 2 and is higher than post pathological grade 1)

## Example

Biopsy performed on a breast mass. Path report: invasive carcinoma, Grade 2 (Scarff-Bloom-Richardson (SBR) score 6). Patient undergoes lumpectomy. With LN dissection. Path results results were moderately differentiated invasive carcinoma, all LN negative for invasive carcinoma.

Grade Clinical: 2

Grade Pathological: B

Grade Post-therapy Clinical: Blank

Grade Post-therapy Pathological: Blank

Code	Grade Definition	
1	G1: Low combined histologic grade (favorable), SBR score of 3-5 points	Priority codes for invasive
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)	Used when tumor is only in situ
M	Nuclear Grade II (interMediate) (in situ only)	
H	Nuclear Grade III (High) (in situ only)	
A	Well differentiated	Used when a more specific grade above was not determined and path report used <i>these terms</i> for grade
<u>B</u>	<u>Moderately differentiated</u>	
C	Poorly differentiated	
D	Undifferentiated, anaplastic	
9	Grade cannot be assessed (GX); Unknown	

**Example:**

Colonoscopy revealed a right colon lesion. Biopsy was taken and the final diagnosis is: Moderately differentiated adenocarcinoma. Patient underwent hemicolectomy. Final Pathological diagnosis: High grade adenocarcinoma. Patient is a candidate for adjuvant chemotherapy. Code the 4 data items:

Grade Clinical: 2 (Biopsy Stated Moderately Differentiated)

Grade Pathological: 9 (High grade is not an allowable term on the site-specific table)

Grade Post-therapy Clinical: Blank (no neoadjuvant treatment)

Grade Post-therapy Pathological: Blank (no neoadjuvant treatment)



## Examples:

Patient with a left, upper outer quadrant mass measuring 1.0cm. Breast biopsy is positive for invasive ductal carcinoma with the Nottingham Grade 1, total score of 5). Patient underwent lumpectomy. Final pathology; residual DCIS 0.3cm, intermediate grade. No remaining invasive tumor. 0/1 sentinel LN positive and margins clear. Code the 4 data items.

Grade Clinical: 1 (Invasive ductal carcinoma; Nottingham Score 5, Grade 1)

Grade Pathological: 1 (Insitu carcinoma, intermediate grade; however clinical was invasive and grade 1)

Grade Post-therapy Clinical: Blank

Grade Post-therapy Pathological: Blank

Patient with a left, upper outer quadrant mass measuring 1.0cm. Breast biopsy is positive for DCIS, intermediate grade. Patient underwent lumpectomy. Final pathology; invasive ductal carcinoma with the Nottingham Grade , total score of 5. 0/1 sentinel LN positive and margins clear. Code the 4 data items.

Grade Clinical: M (Insitu carcinoma, intermediate grade)

Grade Pathological: 1 (invasive carcinoma, Nottingham score 5, grade 1; clinical was insitu and intermediate)

Grade Post-therapy Clinical: Blank

Grade Post-therapy Pathological: Blank

## Example

Patient presents for routine colonoscopy. Biopsy reveals poorly differentiated adenocarcinoma. CT reveals a liver mass. Liver biopsy is positive for moderately differentiated adenocarcinoma, consistent with colon origin. Patient not a surgery candidate . Code the 4 data items.

Grade Clinical: 3 (Colon bx is poorly differentiated)

Grade Pathological: 3 (although liver bx is moderately differentiated, you use the bx from the primary site to code)

Grade Post-Therapy Clinical: Blank (no resection planned)

Grade Post-therapy Pathological: Blank (no resection planned)

# QUESTIONS?

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