Bladder 01 Scenario

Primary Site: C67.9
Histology: 8130
Behavior: 2

Abstracted Text

Physical Exam
02/21/2018 - HPI: Pt s/p TURBT for papillary urothelial ca. F/U cystoscopy identified no areas of abnormality. Pt elects surveillance only.

01/02/2018 - Path Report #1
FINAL DIAGNOSIS
1) Right bladder tumor, transurethral resection (TURBT): Non-invasive papillary urothelial carcinoma, low grade.
No evidence of lamina propria invasion.
No muscularis propria present in specimen.
2) Right bladder tumor base, transurethral resection (TURBT): Non-invasive papillary urothelial carcinoma, low grade.
No evidence of lamina propria invasion.
No muscularis propria present in specimen.

CLINICAL DATA
Bladder mass.

Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Bladder 01 Scenario

Answer Key:

Grade Clinical

Correct Answer: L

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 01/02/2018 transurethral resection of the bladder tumor (or TURBT) (the diagnostic procedure obtained during the clinical timeframe) was positive for, "Non-invasive papillary urothelial carcinoma, low grade," in both submitted specimens from the "right bladder tumor."
The bladder has two priority grade coding systems that depend on the histology of the primary tumor. For urothelial cancers (e.g., papillary urothelial carcinoma), the priority codes include L (low grade), H (high grade), or 9 (unknown); grade codes 1-3 (G1-G3, well differentiated to poorly differentiated) do not apply.
This papillary urothelial carcinoma of the bladder was graded using the preferred urothelial cancer grade system (low or high) recorded in the Bladder Grade fields.
A low grade urothelial bladder tumor is recorded as grade L. Code the Clinical Grade as L (LG: Low-grade).
Note: A TURBT is a clinical staging procedure only. This is not considered a surgical resection that meets pathological staging (or pathological timeframe) requirements.

Grade Pathological

Correct Answer: 9

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy.
This patient did not undergo a resection of the primary tumor that qualifies as a pathological assessment (pathological timeframe). The patient underwent a diagnostic

procedure of the primary site (transurethral resection or TURBT). A TURBT is included in the clinical timeframe only.
The TURBT grade is only included in the Clinical Grade because the patient does not meet the pathological timeframe requirements (a cystectomy (partial or total)). Although a TURBT may be recorded in a registry's surgical procedure data items, it is only considered a clinical staging procedure per the AJCC. No valid Pathological Grade can be coded if no qualifying surgical resection was performed (i.e., there is no pathological timeframe).
Although there is no applicable Pathological Grade, the Pathological Grade field cannot be blank. The general instructions for Grade Pathological in the 2018 Grade Manual instruct one to use code 9 (Unknown) in several situations, including when no resection of the primary site is performed.
Code the Pathological Grade as 9 (Grade cannot be assessed (GX); Unknown).
Note: Although the 2018 Grade Manual indicates the Pathological Grade may include any grade information from the Clinical Grade field because all information from clinical staging through the surgical staging is considered "Pathological," this only applies when the patient also meets the pathological staging criteria. In this case, the patient does not meet the pathological staging criteria, so the Clinical Grade is not also included in this data item.

Grade Post Therapy

Correct Answer: blank

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient undergoes neoadjuvant therapy prior to the surgical resection (i.e., the patient meets the requirements for post-therapy staging as defined in the AJCC manual). There can be no post-therapy timeframe if the patient did not undergo neoadjuvant therapy, followed by a surgical resection.
This patient did not undergo neoadjuvant therapy prior to a resection of the primary site. This patient did not even undergo a resection of the primary site (i.e., cystectomy) that qualifies as a pathological assessment per the AJCC. This patient only underwent a diagnostic or clinical staging procedure (TURBT), followed by surveillance. The general instructions for Grade Post-Therapy in the 2018 Grade Manual instruct one to leave the Post-Therapy Grade blank when there is no neoadjuvant therapy (a clinical and/or pathological case only).
Code the Post-Therapy Grade as Blank (No neoadjuvant therapy).

Bladder 02 Scenario

Primary Site: C67.8
Histology: 8130
Behavior: 3

Abstracted Text

Physical Exam
01/14/2018 - cc: Bladder cancer. Pt presented w/ gross hematuria and TURBT proved invasive bladder ca. TURBT was incomplete due to very large tumor covering much of the Lt posterior wall and dome of bladder. Plan: Neoadjuvant chemotherapy, followed by cystectomy.

Chemo Text
01/21/2018 - Neoadjuvant MVAC (Doxorubicin, Cisplatin, Methotrexate, Vinblastine).

01/09/2018 - Path Report #1
FINAL DIAGNOSIS
A) Superficial tumor transurethral resection (TURBT):
Papillary urothelial carcinoma, high grade.
Invasion of lamina propria (pT1)
Extent of LP invasion: Extensive
Angiolymphatic invasion: Absent
Muscularis propria: Absent
B) Bladder tumor base transurethral resection (TURBT):
Papillary urothelial carcinoma, high grade
Invasive of muscularis propria (pT2)
Angiolymphatic invasion: Absent
Muscularis propria: Present

05/22/2018 - Path Report #2
FINAL DIAGNOSIS
A) Left ureteral margin, excision:
- Ureter, negative for neoplasm.
B) Right ureteral margin, excision:
- Ureter, negative for neoplasm.
C) Right external iliac lymph nodes, excision:
- 3 lymph nodes, negative for neoplasm.
D) Right obturator lymph nodes, excision:
- 5 lymph nodes, negative for neoplasm.
E) Right common iliac lymph nodes, excision:
- 3 lymph nodes, negative for neoplasm.

F) Right hypogastric lymph nodes, excision:
- 4 lymph nodes, negative for neoplasm.
G) Left external iliac lymph nodes, excision:
- 2 lymph nodes, negative for neoplasm.
H) Left obturator lymph nodes, excision:
- 1 of 4 lymph nodes positive for metastatic carcinoma.
I) Left hypogastric lymph nodes, excision:
- 1 lymph node, negative for neoplasm.
J) Left external iliac lymph nodes #2, excision:
- 1 lymph node, negative for neoplasm.
K) Left hypogastric lymph nodes #2, excision:
- 2 lymph nodes, negative for neoplasm.
L) Common iliac lymph nodes, excision:
- 1 lymph node, negative for neoplasm.
M) Right obturator lymph nodes #2, excision:
- Fibroadipose tissue, negative for neoplasm.
N) Bladder, cystectomy:
- Invasive urothelial carcinoma, high grade; see summary cancer data.
- 2 of 2 lymph nodes, positive for carcinoma, with extranodal extension.

SUMMARY CANCER DATA
Specimen type: Total cystectomy
Tumor site: Left posterior wall and dome
Tumor size: Greatest diameter 2.5cm
Characteristics and Extent of Neoplasm
Histologic Type: Urothelial carcinoma
Histologic grade: Urothelial carcinoma, High-grade
Associated epithelial lesions: None identified
Extent of direct invasion: Perivesical fat - microscopic
Angiolymphatic invasion: Present
Final Surgical Resection Margins: Negative for invasive carcinoma
Distance to closest radial/lateral margin: 0.3cm
Lymph Node Status
Node summary: Nodes with carcinoma: 3 / Total nodes examined: 28
Common iliac nodes: Nodes with carcinoma: 0 / Total nodes examined: 4
Comment about lymph node(s):
Size of largest focus of metastatic cancer in a lymph node: 0.4 cm
Extranodal extension: Present
Minimum Pathologic Stage (AJCC, 8th Ed.): ypT3a ypN2

Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Bladder 02 Scenario

Answer Key:

Clinical Grade:

Correct Answer: H

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 01/09/2018 transurethral resection of the bladder tumor (or TURBT) (the diagnostic procedure obtained during the clinical timeframe) was positive for, "Papillary urothelial carcinoma, high grade," in both submitted specimens from the bladder tumor.
The bladder has two priority grade coding systems that depend on the histology of the primary tumor. For urothelial cancers (e.g., papillary urothelial carcinoma), the priority codes include L (low grade), H (high grade), or 9 (unknown); grade codes 1-3 (G1-G3, well differentiated to poorly differentiated) do not apply.
This papillary urothelial carcinoma of the bladder was graded using the preferred urothelial cancer grade system (low or high) recorded in the Bladder Grade fields.
A high grade urothelial bladder tumor is recorded as grade H. Code the Clinical Grade as H (HG: High-grade).
Note: A TURBT is a clinical staging procedure only. This is not considered a surgical resection that meets pathological staging (or pathological timeframe) requirements.

Grade Pathological:

Correct Answer: 9

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy.
In this case, the patient underwent neoadjuvant therapy (neoadjuvant chemotherapy). Therefore, no valid Pathological Grade can be coded. Any grade provided by a post-neoadjuvant resection pathology report would only be recorded in the Post-Therapy Grade field.
Although there is no applicable Pathological Grade, the Pathological Grade field cannot be blank. The general instructions for Grade Pathological in the 2018 Grade Manual

instruct one to use code 9 (Unknown) in several situations, including when neoadjuvant therapy is followed by a resection.
Code the Pathological Grade as 9 (Grade cannot be assessed (GX); Unknown).

Grade Post Therapy:

Correct Answer: H

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient underwent neoadjuvant therapy prior to the surgical resection. In this case, the patient did undergo neoadjuvant therapy (neoadjuvant chemotherapy), followed by a surgical resection (total cystectomy). There is a post-therapy timeframe, so the Post-Therapy Grade cannot be left blank.
The 05/22/2018 total cystectomy (the surgical resection obtained during the post-therapy timeframe) was positive for, "Invasive urothelial carcinoma, high grade," per the Final Diagnosis.
The bladder has two priority grade coding systems that depend on the histology of the primary tumor. For urothelial cancers (e.g., urothelial carcinoma), the priority codes include L (low grade), H (high grade), or 9 (unknown); grade codes 1-3 (G1-G3, well differentiated to poorly differentiated) do not apply.
This urothelial carcinoma of the bladder was graded using the preferred urothelial cancer grade system (low or high) recorded in the Bladder Grade fields.
A high grade urothelial bladder tumor is recorded as grade H. Code the Post-Therapy Grade as H (HG: High-grade).
Note: The Clinical Grade cannot be used to complete the Post- Therapy Grade field. Although the Pathological Grade may include the grade from the clinical staging timeframe (the clinical work-up), the Post-Therapy Grade does not. The Post-Therapy Grade only includes the surgical resection from the yp staging timeframe as defined by the AJCC. For coding grade, the yp staging timeframe only includes the surgical resection findings following neoadjuvant therapy. Any grade identified during the clinical staging timeframe is excluded.

Bone 01 Scenario

Primary Site: C40.2
Histology: 9180
Behavior: 3

Abstracted Text

Physical Exam
04/01/2018 - HPI: Rt fibula osteosarcoma. Pt s/p PTA neoadjuvant chemo and presents here for surgery. Plan: Excision bone tumor, arthroplasty of the knee.

01/17/2018 - Path Report #1
FINAL DIAGNOSIS
A) Bone, right proximal tibia, biopsy: Trabecular bone with no diagnostic alteration.
B, C) Bone, right proximal fibula, biopsies: Osteosarcoma, conventional type, see Summary.

BIOPSY SUMMARY
Biopsy Tumor Site: Proximal fibula
Tumor Location and Extent: Proximal fibula possibly extending into adjacent tibia (imaging)
Histologic Type: Osteosarcoma, conventional type
Mitotic Rate: High
Necrosis: Focally
Histologic Grade: High
Lymph-Vascular Invasion: No

04/05/2018 - Path Report #2
FINAL DIAGNOSIS
A) Right tibia distal marrow margin, biopsy: Negative for osteosarcoma
B) Right proximal tibia and fibula, resection: Treated osteosarcoma of the proximal fibula (~ 50% necrosis). Negative bone, skin and soft tissue margins.

SUMMARY CANCER DATA
Procedure: Resection of right proximal fibula and tibia
Tumor Site: Right proximal fibula
Tumor Location and Extent: Epiphysis / Metaphysis / Soft tissues
Tumor Size: 8.5 cm maximum dimension
Histologic Type: Osteosarcoma, predominantly osteoblastic, focal chondroblastic
Necrosis: Approximately 50%
Histologic Grade: G3, high grade
Margins: Free of neoplasm

Pre-resection Treatment: Chemotherapy
Treatment Effect: Approximately 50%

Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Bone 01 Scenario

Answer Key:

Grade Clinical:

Correct Answer: H

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 01/17/2018 right proximal fibula biopsy (the diagnostic biopsy obtained during the clinical timeframe) was positive for osteosarcoma, that was further described as, "Histologic Grade: High." The osteosarcoma was only described using terminology (high grade), the preferred grading system (Grades 1-3) was not provided.
Since the preferred grading system (Grades 1 through 3) was not used to grade the bone tumor (osteosarcoma), codes 1 through 3 do not apply in this case. However, when the grade is described only as "high grade," there is a default code for bone tumors. A "high grade" bone tumor may be either Grade 2 or Grade 3, so when the "high grade" tumor is not also specified as grade 2 or grade 3, the default code (code H) must be used.
A "high grade" bone tumor is recorded as grade H when not further specified. Code the Clinical Grade as H (Stated as "high grade" only).
Note: Neither Grade 2 nor Grade 3 can apply in this case because it is unclear whether the "high grade" bone tumor is equivalent to Grade 2 ("Moderately differentiated, high grade") or Grade 3 ("Poorly differentiated, high grade").

Grade Pathological:

Correct Answer: 9

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy.
In this case, the patient underwent neoadjuvant therapy (neoadjuvant chemotherapy). Therefore, no valid Pathological Grade can be coded. Any grade provided by a post-

neoadjuvant resection pathology report would only be recorded in the Post-Therapy Grade field.
Although there is no applicable Pathological Grade, the Pathological Grade field cannot be blank. The general instructions for Grade Pathological in the 2018 Grade Manual instruct one to use code 9 (Unknown) in several situations, including when neoadjuvant therapy is followed by a resection.
Code the Pathological Grade as 9 (Grade cannot be assessed (GX); Unknown).

Grade Post Therapy:

Correct Answer: 3

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient underwent neoadjuvant therapy prior to the surgical resection. In this case, the patient did undergo neoadjuvant therapy (neoadjuvant chemotherapy), followed by a surgical resection (right proximal tibia and fibula resection). There is a post-therapy timeframe, so the Post-Therapy Grade cannot be left blank.
The 04/05/2018 right proximal tibia and fibula resection (the surgical resection obtained during the post-therapy timeframe) was positive for, "Treated osteosarcoma of the proximal fibula," per the Final Diagnosis. The Summary Cancer Data section further defines the residual/treated tumor as, "Histologic Grade: G3, high grade."
This osteosarcoma of the fibula (bone tumor) was graded using the preferred three-grade system (i.e., Grade 1 through 3). The pathologist noted this bone tumor was grade 3. Although the grade was also stated to be "high grade," this does not change the grade. The pathologist did clearly indicate the preferred three-grade system was used, and this tumor was grade 3. High grade bone tumors may be either grade 2 or grade 3. In this case, the high grade tumor was grade 3.
A grade 3 (high grade) tumor is recorded as grade 3. Code the Post-Therapy Grade as 3 (G3: Poorly differentiated, high grade).
Note 1: The Clinical Grade cannot be used to complete the Post-Therapy Grade field. Although the Pathological Grade may include the grade from the clinical staging timeframe (the clinical work-up), the Post-Therapy Grade does not. The Post-Therapy Grade only includes the surgical resection from the yp staging timeframe as defined by the AJCC. For coding grade, the yp staging timeframe only includes the surgical resection findings following neoadjuvant therapy. Any grade identified during the clinical staging timeframe is excluded.
Note 2: Grade H (the default code for "high grade") cannot apply in this case because the pathologist did clearly indicate which high grade category the bone tumor belonged in (i.e., "G3: poorly differentiated, high grade").

Bone 02 Scenario

Primary Site: C41.4
Histology: 8801
Behavior: 3

Abstracted Text

Physical Exam
07/16/2018 - cc: Pt w/ locally advanced, non-resectable sarcoma of the Lt hip w/o evidence of mets. Plan: Refer to rad-onc for XRT, possible chemo.

07/03/2018 - Path Report #1
FINAL DIAGNOSIS
Left acetabular lesion, needle core biopsy:
Undifferentiated spindle cell sarcoma, at least intermediate grade (FNCLCC grade 2 of 3).

Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Bone 02 Scenario

Answer Key:

Grade Clinical:

Correct Answer: 2

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 07/03/2018 left acetabular lesion (acetabulum, a hip bone) needle core biopsy (the diagnostic biopsy obtained during the clinical timeframe) was positive for, "Undifferentiated spindle cell sarcoma, at least intermediate grade (FNCLCC grade 2 of 3)." The bone tumor was graded using the preferred three-grade system (i.e., Grade 1 through 3). The pathologist noted this bone tumor was grade 2.
Note: The FNCLCC is equivalent to the preferred three-grade system used for bone tumors. Bone tumor grade may not always be identified as an FNCLCC grade because the recommended grading system for bone is similar to that used for soft tissue sarcomas (i.e., the FNCLCC grade). If the bone tumor is graded using a three-grade system (including the FNCLCC grade) then it is recorded in the appropriate grade field. Although the grade was also stated to be "intermediate grade," this does not change the grade. The pathologist did clearly indicate the preferred three-grade system was used, and this tumor was grade 2.
The only terms used to describe the histologic grade of this tumor were, "FNCLCC grade 2 of 3" (the preferred grading system) and "intermediate grade." The term "undifferentiated" in "undifferentiated spindle cell sarcoma" is a part of the **histologic type** of the sarcoma and not a grade that is recorded in this data item. The 2018 ICD-O-3 Update Table confirms "Undifferentiated spindle cell sarcoma" is a new term for the established histology code 8801/3. Be sure to refer to the 2018 ICD-O-3 Update table to look for new terms and new codes for cases diagnosed 2018 and later.
When a histology includes terms like "undifferentiated," care must be taken to apply the grade rules in the 2018 Grade Manual first. Do not assume that all histologies including the term "undifferentiated" are histologies with an implied grade.
Per clarification from the standard setters (CAnswer Forum), the "undifferentiated" is ignored since it is a part of the histologic type, and not a grade. The pathologist did provide the preferred grade (Grade 2 of 3). The preferred grade is recorded in this data item.
A grade 2 of 3 bone tumor is recorded as grade 2. Code the Clinical Grade as 2 (G2: Moderately differentiated, high grade).
Note: Grade 3 (undifferentiated) does not apply in this case. Since the term "undifferentiated" is part of the histologic type, it is not also included in the grade field.

The term "undifferentiated" may only be used to code grade if the pathologist describes the grade of the tumor as undifferentiated.

Grade Pathological:

Correct Answer: 9

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy.
This patient did not undergo a resection of the primary tumor that qualifies as a pathological assessment (pathological timeframe). The patient underwent a diagnostic biopsy of the primary tumor only. This procedure is included in the clinical timeframe only.
The diagnostic biopsy grade is only included in the Clinical Grade because the patient does not meet the pathological timeframe requirements (a resection of the primary bone tumor). No valid Pathological Grade can be coded if no qualifying surgical resection was performed (i.e., there is no pathological timeframe).
Although there is no applicable Pathological Grade, the Pathological Grade field cannot be blank. The general instructions for Grade Pathological in the 2018 Grade Manual instruct one to use code 9 (Unknown) in several situations, including when no resection of the primary site is performed.
Code the Pathological Grade as 9 (Grade cannot be assessed (GX); Unknown).
Note: Although the 2018 Grade Manual indicates the Pathological Grade may include any grade information from the Clinical Grade field because all information from clinical staging through the surgical staging is considered "Pathological," this only applies when the patient also meets the pathological staging criteria. In this case, the patient does not meet the pathological staging criteria, so the Clinical Grade is not also included in this data item.

Grade Post Therapy:

Correct Answer: blank

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient undergoes neoadjuvant therapy prior to the surgical resection (i.e., the patient meets the requirements for post-therapy staging as defined in the AJCC manual). There can

be no post-therapy timeframe if the patient did not undergo neoadjuvant therapy, followed by a surgical resection.
This patient did not undergo neoadjuvant therapy prior to a resection of the primary tumor. This patient did not undergo a resection of the primary tumor. This patient only underwent a diagnostic biopsy (clinical assessment) of the primary tumor. The general instructions for Grade Post-Therapy in the 2018 Grade Manual instruct one to leave the Post-Therapy Grade blank when there is no neoadjuvant therapy (a clinical and/or pathological case only).
Code the Post-Therapy Grade as Blank (No neoadjuvant therapy).

Breast 01 Scenario

Primary Site: C50.9
Histology: 8500
Behavior: 2

Abstracted Text

06/01/2018 - Path Report #1
FINAL DIAGNOSIS
A-B: Right breast, lateral and medial, stereotactic-guided core needle biopsies for calcifications:
Ductal carcinoma in situ with the following features:
Architectural pattern: Cribriform.
Nuclear grade: High grade.
Necrosis: Present, focal.
Associated calcifications: Present.
Invasive carcinoma: Not identified.

08/01/2018 - Path Report #2
FINAL DIAGNOSIS
A: Right breast, mastectomy:
Ductal carcinoma in situ, intermediate grade, in a background of fibroadenomas and nodular sclerosing adenosis, and extremely close to the anterior/inferior margin (see appropriate summary below for additional details).

SUMMARY CANCER DATA
Procedure type: Mastectomy.
Specimen laterality: Right.
Size (extent) of DCIS: Nearly 130 mm (gross measurement of the nodular area which has DCIS in most of submitted sections).
Histologic type: Ductal carcinoma in situ.
Architectural pattern: Solid and cribriform with extension into sclerosing adenosis.
Nuclear grade: Intermediate grade.
Necrosis: Central necrosis present.
Calcifications: Present.

Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Breast 01 Scenario

Answer Key:

Grade Clinical:

Correct Answer: H

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 06/01/2018 right breast biopsy (the diagnostic biopsy obtained during the clinical timeframe) was positive for ductal carcinoma in situ (DCIS) that was stated to be, "Nuclear grade: High grade."
The Nuclear Grade is used to code the grade for in situ cancers. Codes L, M, and H (the Nuclear Grade codes or the preferred grading system codes) have priority over codes A through D (the default differentiation codes, like "poorly differentiated"). Codes 1 through 3 (the preferred grading system codes for invasive cancers) do not apply to in situ cancers.
A Nuclear Grade of "High" is recorded as grade H for an in situ cancer. Code the Clinical Grade as H (Nuclear Grade III (High) (in situ only)).

Grade Pathological:

Correct Answer: H

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy. The Pathological Grade includes any grade information from the Clinical Grade field because all information from clinical staging through the surgical staging is considered "Pathological."
The 08/01/2018 right breast mastectomy (the surgical resection obtained during the pathological timeframe) was positive for, "Ductal carcinoma in situ, intermediate grade." The DCIS was also described as, "Nuclear grade: Intermediate grade."
The Nuclear Grade is used to code the grade for in situ cancers. Codes L, M, and H (the Nuclear Grade codes or the preferred grading system codes) have priority over codes A through D (the default differentiation codes, like "poorly differentiated"). Codes

1 through 3 (the preferred grading system codes for invasive cancers) do not apply to in situ cancers.
The grade determined during the pathological timeframe was only intermediate nuclear grade (i.e., grade code M). However, the grade determined during the clinical timeframe was high nuclear grade (i.e., grade code H). The clinical grade was the highest grade documented from the primary tumor. Since the Pathological Grade field includes any grade information from the clinical staging through the pathological (surgical) staging, the Clinical Grade will also be recorded in the Pathological Grade field for this case.
The Clinical Grade was greater than the Pathological Grade (high grade > intermediate grade). Code the Pathological Grade as H (Nuclear Grade III (High) (in situ only)).
Note: Grade M (Intermediate grade) does not apply in this case because the Clinical Grade was greater than the Pathological Grade and the patient did not undergo neoadjuvant treatment prior to the surgical resection.

Grade Post Therapy:

Correct Answer: blank

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient undergoes neoadjuvant therapy prior to the surgical resection (i.e., the patient meets the requirements for post-therapy staging as defined in the AJCC manual). There can be no post-therapy timeframe if the patient did not undergo neoadjuvant therapy, followed by a surgical resection.
This patient did not undergo neoadjuvant therapy prior to the 08/01/2018 right breast mastectomy. The general instructions for Grade Post-Therapy in the 2018 Grade Manual instruct one to leave the Post-Therapy Grade blank when there is no neoadjuvant therapy (a clinical and/or pathological case only).
Code the Post-Therapy Grade as Blank (No neoadjuvant therapy).

Breast 02 Scenario

Primary Site: C50.2
Histology: 8502
Behavior: 3

Abstracted Text

01/10/2018 - Path Report #1
FINAL DIAGNOSIS
Right breast lesion at 1 o'clock, ultrasound guided core biopsies:
Invasive lobular carcinoma with LCIS with the following features:
Histologic grade: Low grade
Number of cores involved: 3 of 3
Greatest length of Invasive - 7 mm, LCIS - 7 mm
Lymphovascular invasion: Negative

02/15/2018 - Path Report #2
FINAL DIAGNOSIS
1. Right axillary sentinel node, excisional biopsy:
One lymph node, negative for carcinoma by H - E and immunohistochemical evaluation (0/1).
2. Right breast tissue at 1 o'clock, excision:
Invasive lobular carcinoma with the following features:
A. Histologic type: Invasive lobular carcinoma
B. Histologic grade: Low grade (Nottingham):
1. Nuclear pleomorphism: Low
2. Mitotic rate: Low
3. Glandular differentiation: Low
4. Composite score: 5 of 9

Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Answer Key:

Grade Clinical:

Correct Answer: B

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 01/10/2018 right breast core biopsy (the diagnostic biopsy obtained during the clinical timeframe) was positive for invasive lobular carcinoma, "Histologic grade: Low grade." The invasive carcinoma was only described using terminology (low grade); the preferred grading system (Nottingham grade or Nottingham score) was not provided. Additionally, there is no indication this "low grade" designation was based on the preferred Nottingham grading system.
Although the right breast core biopsy also showed lobular carcinoma in situ (LCIS), the grade of the invasive tumor is coded when both invasive and in situ components are present. The pathologist did not provide a grade for the LCIS. The only grade provided was "low grade" and this presumably refers to the invasive lobular carcinoma.
Since the preferred grading system (Nottingham) was not used to grade the invasive lobular carcinoma, codes 1 through 3 do not apply in this case. Further clarification from the standard setters (CAnswer Forum) confirms code 1 does not apply to this "low grade" tumor because the Nottingham grade was not provided and there is no other indication the "low grade" assessment was based on the Nottingham grading system (i.e., "G1: Low combined histologic grade (favorable), SBR score of 3-5 points").
When the grade is described using terminology only (e.g., low grade), codes A through D must be used.
The Breast Clinical Grade table in the 2018 Grade Manual only provides the differentiation terminology associated with grades A through D (i.e., well differentiated, moderately differentiated, etc.). In order to determine whether the terminology "low grade" can be assigned a valid A through D code, one must use the Coding Guidelines for Generic Grade Categories table in the 2018 Grade Manual. This Generic Grade Categories table provides a map (or a crosswalk) for using terminology (listed in the Description column) to assign the appropriate grade (listed in the Assigned Grade Code column).
The Generic Grade Categories table confirms a "low grade" tumor can be assigned a valid grade code (grade B).
"Low grade" is recorded as grade B for an invasive cancer. Code the Clinical Grade as B (Moderately differentiated).
Note: The Generic Grade Categories table is only used when the site-specific Grade Table includes the generic codes A through D.
de Clinical

Grade Pathological:

Correct Answer: 1

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy. The Pathological Grade includes any grade information from the Clinical Grade field because all information from clinical staging through the surgical staging is considered "Pathological."
However, when the primary tumor is diagnosed using only terminology (e.g., low grade) during the clinical timeframe, but the preferred grading system (Nottingham grade/score) is used during the pathological timeframe, the Pathological Grade records the grade provided using the preferred grading system. The Clinical Grade is not taken into account because the preferred grading system has priority per clarification from the standard setters (CAnswer Forum).
The 02/15/2018 right breast excision (the surgical resection obtained during the pathological timeframe) was positive for invasive lobular carcinoma, "Histologic grade: Low grade (Nottingham): Composite score: 5 of 9." The overall Nottingham grade was low grade, and the Nottingham histologic score was 5 of 9.
The combined ("overall") Nottingham grade was 1 (Nottingham score 5/9). The Nottingham combined histologic grade is the preferred grade system recorded in the Breast Grade fields.
A combined Nottingham grade of 1, or a Nottingham histologic score of 5, is recorded as grade 1 for a combined score of 3-5 points. Code the Pathological Grade as 1 (G1: Low combined histologic grade (favorable); SBR score of 3-5 points).

Grade Post Therapy

Correct Answer: blank

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient undergoes neoadjuvant therapy prior to the surgical resection (i.e., the patient meets the requirements for post-therapy staging as defined in the AJCC manual). There can be no post-therapy timeframe if the patient did not undergo neoadjuvant therapy, followed by a surgical resection.
This patient did not undergo neoadjuvant therapy prior to the 02/15/2018 right breast excision. The general instructions for Grade Post-Therapy in the 2018 Grade Manual instruct one to leave the Post-Therapy Grade blank when there is no neoadjuvant therapy (a clinical and/or pathological case only).

Code the Post-Therapy Grade as Blank (No neoadjuvant therapy).

Colon and Rectum 01 Scenario

Primary Site: C18.0
Histology: 8510
Behavior: 3

Abstracted Text

01/11/2018 - Path Report #1
FINAL DIAGNOSIS
Cecum mass, biopsy:
Colonic adenocarcinoma, high grade, associated with marked granulation tissue.

CLINICAL DATA
Abnormal CT scan. Colonoscopy demonstrated an infiltrated partially obstructing large mass within the cecum. The mass is circumferential.

01/24/2018 - Path Report #2
FINAL DIAGNOSIS
Right colon, resection:
Colonic medullary carcinoma.
All surgical margins are negative.
All lymph nodes are negative for metastatic carcinoma.
Immunohistochemical loss of MLH-1 and PMS-2 expression.
Please see staging summary for further details.

SUMMARY CANCER DATA
Procedure: Right hemicolectomy.
Tumor site: Cecum.
Tumor size: 5.2 x 3.9 x 0.8 cm.
Histologic type: Invasive poorly differentiated carcinoma (medullary carcinoma).
Histologic grade: High-grade.
Tumor extension: Carcinoma invades through muscularis propria and into pericolonic tissue.
Macroscopic tumor perforation: Not identified.
Large vessel (venous) invasion: Not identified.
Lymphovascular invasion: Not identified
Perineural invasion: Not identified
Tumor budding and/or poorly-differentiated clusters/component: No significant tumor budding identified (score low, 0-4 buds).
Tumor deposits: Not identified.
Tumor features suggestive of microsatellite instability (MMR/MSI-H): Right colon location, high number of tumor infiltrating lymphocytes, medullary carcinoma subtype and lack of "dirty necrosis".

Treatment effect: No pre-surgical therapy.
Regional lymph nodes:
Number of lymph nodes examined: 32.
Number of lymph nodes involved by tumor: 0.
Margins: Proximal, distal, radial uninvolved. Radial margin is closest margin at 1.5 cm.
Pathologic stage: pT3, pN0 (AJCC 8th ed).

Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Colon and Rectum 01 Scenario

Answer Key:

Grade Clinical

Correct Answer: 9

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 01/11/2018 cecum mass biopsy (the diagnostic biopsy obtained during the clinical timeframe) was positive for "Colonic adenocarcinoma, high grade." The only grade provided during the clinical timeframe was "high grade" per the pathologist. The clinical grade was provided using terminology ("high grade") only.
The colon and rectum are graded using a preferred four-grade system (G1-G4, well differentiated to undifferentiated). Grade Table 02 (the applicable grade table for Colon and Rectum) only provides the preferred grade codes 1-4 (G1-G4). The additional generic grade categories (A-D) are not applicable for the Colon and Rectum because they are not included in Grade Table 02. Therefore, the Generic Grade Categories table in the 2018 Grade Manual cannot be used to determine a Clinical Grade.
The Coding Guidelines for Generic Grade Categories, Note 1, states, "Only use the table below when the appropriate grade table for a cancer uses the generic categories with alphabetic codes A-D. Do not use the table below 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."
Since the Colon and Rectum grade table does not include codes A-D, the Generic Grade Categories table cannot be used to convert the term "high grade" to grade code D.
This rectal tumor was only graded using a non-preferred grading system (terminology) that cannot be recorded in the Colon and Rectum Grade fields.
Code the Clinical Grade as 9 (Grade cannot be assessed (GX); Unknown).

Grade Pathological

Correct Answer: 3

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy. The Pathological Grade includes any grade information from the Clinical Grade field because all information from clinical staging through the surgical staging is considered "Pathological."

However, when the primary tumor is diagnosed using only a non-preferred grading system during the clinical timeframe, but the preferred grading system (G1-G4, well differentiated to undifferentiated) is used during the pathological timeframe, the Pathological Grade records the grade provided using the preferred grading system. The Clinical Grade is not taken into account because the preferred grading system has priority.

The 01/24/2018 right hemicolectomy (the surgical resection obtained during the pathological timeframe) was positive for colonic medullary carcinoma that was further described in the Summary Cancer Data as, "Invasive poorly differentiated carcinoma (medullary carcinoma)," and "Histologic grade: High-grade."

Both a nuclear grade (high grade) and the differentiation (poorly differentiated) were provided for this cecum primary. The colon and rectum are graded using a four-grade system (G1-G4, well differentiated to undifferentiated). This cecum tumor was graded using the preferred four-grade system recorded in the Colon and Rectum Grade fields (poorly differentiated).

The term "high-grade" is not used to code the grade in this case. The additional generic grade categories (A-D) are not applicable for the Colon and Rectum because they are not included in Grade Table 02. However, for colon and rectum primaries, codes 1 through 4 (well differentiated to undifferentiated) are the preferred grading system codes and they have priority when both a preferred grading system and a non-preferred (or non-coded) grading system are used.

A poorly differentiated tumor is recorded as grade 3. Code the Pathological Grade as 3 (G3: Poorly differentiated).

Grade Post Therapy

Correct Answer:

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient undergoes neoadjuvant therapy prior to the surgical resection (i.e., the patient meets the requirements for post-therapy staging as defined in the AJCC manual). There can be no post-therapy timeframe if the patient did not undergo neoadjuvant therapy, followed by a surgical resection.

This patient did not undergo neoadjuvant therapy prior to the 01/24/2018 right hemicolectomy. The general instructions for Grade Post-Therapy in the 2018 Grade Manual instruct one to leave the Post-Therapy Grade blank when there is no neoadjuvant therapy (a clinical and/or pathological case only).
Code the Post-Therapy Grade as Blank (No neoadjuvant therapy).

Colon and Rectum 02 Scenario

Primary Site: C18.7
Histology: 8140
Behavior: 3

Abstracted Text

07/18/2018 - Path Report #1
FINAL DIAGNOSIS
Colon, sigmoid at 20 cm (mass), biopsy:
Invasive well differentiated colonic adenocarcinoma.

08/09/2018 - Path Report #2
FINAL DIAGNOSIS
A. Sigmoid colon, resection:
- Invasive adenocarcinoma (see Summary Cancer Data below).
B. Right posterior pelvic margin, excision:
- Fibroadipose, negative for malignancy.
C. Anastomotic rings, removal:
- Two grossly unremarkable anastomotic intestine rings; gross exam only.

SUMMARY CANCER DATA
Procedure: Robotic-assisted laparoscopic low anterior resection
Tumor Site: Sigmoid colon
Tumor Size: Greatest dimension (centimeters): 4.5 cm
Macroscopic Tumor Perforation: Not identified
Histologic Type: Adenocarcinoma
Histologic Grade: Low grade
Tumor Extension: Tumor invades through the muscularis propria into pericolorectal tissue
Margins: All margins are uninvolved by invasive carcinoma, high-grade dysplasia
Radial margin: 2.8 cm
Distal margin: 4.5 cm
Proximal margin: 7 cm
Treatment Effect: No known presurgical therapy
Lymphovascular Invasion: Not identified
Perineural Invasion: Not identified
Tumor Deposits: Not identified
Regional Lymph Nodes:
Number of Lymph Nodes Involved: 0
Number of Lymph Nodes Examined: 15
Pathologic Stage Classification (pTNM, AJCC 8th Edition): pT3 pN0

Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Colon and Rectum 02 Scenario

Answer Key:

Grade Clinical:

Correct Answer: 1

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 07/18/2018 sigmoid colon mass biopsy (the diagnostic biopsy obtained during the clinical timeframe) was positive for "Invasive well differentiated colonic adenocarcinoma."
The colon and rectum are graded using a four-grade system (G1-G4, well differentiated to undifferentiated). This sigmoid colon tumor was graded using the preferred four-grade system recorded in the Colon and Rectum Grade fields.
A well differentiated tumor is recorded as grade 1. Code the Clinical Grade as 1 (G1: Well differentiated).

Grade Pathological:

Correct Answer: 9

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy. The Pathological Grade includes any grade information from the Clinical Grade field because all information from clinical staging through the surgical staging is considered "Pathological."
However, when the primary tumor grade is provided using the preferred grading system (G1-G4, well differentiated to undifferentiated) during the clinical timeframe, but graded using additional generic grade terminology (e.g., "low grade") during the pathological timeframe, the Clinical Grade is not taken into account or recorded in the Pathological Grade.
The preferred grading system only has priority over additional generic grade terminology when both are used during the **same staging timeframe** per clarification from the standard setters (CAnswer Forum). In this case, the preferred grading system

was only used during the clinical timeframe, and not during the pathological timeframe. Therefore, it cannot also be coded in the Pathological Grade.
Note 2 indicates, "Assign the highest grade from the primary tumor. If the clinical grade is the highest grade identified, use the grade that was identified during the clinical time frame for both the clinical grade and the pathological grade." However, this instruction does not apply to this case. The Clinical Grade cannot be assumed to be greater than the Pathological Grade, and, therefore, included in the Pathological Grade field when the grading systems are not the same.
Additionally, the first bullet for Note 2 also does not apply to this case. The bullet states, "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." This bullet only indicates the clinical grade may be used when no grade whatsoever is provided on the resection. A grade was provided on the resection in this case, it is simply not a grade that may be coded since the grade was provided using a non-preferred grading system (generic grade terminology).
The 08/09/2018 low anterior resection (the surgical resection obtained during the pathological timeframe) was positive for invasive adenocarcinoma, "Histologic grade: Low grade." The only grade provided during the pathologic timeframe was "low grade" per the pathologist.
The colon and rectum are graded using a preferred four-grade system (G1-G4, well differentiated to undifferentiated). Grade Table 02 (the applicable grade table for Colon and Rectum) only provides the preferred grade codes 1-4 (G1-G4). The additional generic grade categories (A-D) are not applicable for the Colon and Rectum because they are not included in Grade Table 02. Therefore, the Generic Grade Categories table in the 2018 Grade Manual cannot be used to determine a Pathologic Grade.
The Coding Guidelines for Generic Grade Categories, Note 1, states, "Only use the table below when the appropriate grade table for a cancer uses the generic categories with alphabetic codes A-D. Do not use the table below 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."
Since the Colon and Rectum grade table does not include codes A-D, the Generic Grade Categories table cannot be used to convert the term low grade to grade code B. This sigmoid colon tumor was only graded using a non-preferred grading system that cannot be recorded in the Colon and Rectum Grade fields.
Code the Pathological Grade as 9 (Grade cannot be assessed (GX); Unknown).

Grade Post-therapy:

Correct Answer: Blank

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient undergoes neoadjuvant therapy prior to the surgical resection (i.e., the patient meets

the requirements for post-therapy staging as defined in the AJCC manual). There can be no post-therapy timeframe if the patient did not undergo neoadjuvant therapy, followed by a surgical resection.
This patient did not undergo neoadjuvant therapy prior to the 08/09/2018 low anterior resection. The general instructions for Grade Post-Therapy in the 2018 Grade Manual instruct one to leave the Post-Therapy Grade blank when there is no neoadjuvant therapy (a clinical and/or pathological case only).
Code the Post-Therapy Grade as Blank (No neoadjuvant therapy).

Lung 01 Scenario

Primary Site: C34.1
Histology: 8070
Behavior: 3

Abstracted Text

01/22/2018 - Path Report #1
FINAL DIAGNOSIS
Right upper lobe lung, biopsy:
Invasive, moderate to poorly differentiated squamous cell carcinoma.

03/03/2018 - Path Report #2
FINAL DIAGNOSIS
A) Lung, right upper lobe, wedge resection:
- Invasive squamous cell carcinoma, see Summary Cancer Data.
- 1 lymph node (N2) within mediastinal adipose, negative for carcinoma.
B) Lung, right upper lobe, wedge resection:
- Lung with emphysematous changes and mild chronic inflammation.
- 1 peribronchial lymph node (N1), negative for carcinoma.

SUMMARY CANCER DATA
Procedure: Wedge resection
Specimen Laterality: Right
Tumor Site: Upper lobe
Histologic Type: Invasive squamous cell carcinoma, moderately differentiated
Tumor Size: 3.9cm
Tumor Focality: Single tumor
Tumor Extent:
Visceral Pleura Invasion: Present
Direct Invasion of Adjacent Structures: Mediastinum
Involved Structure(s): Mediastinal fibroadipose
Treatment Effect: No known presurgical therapy
Lymphovascular Invasion: Not identified
Margins: All margins are uninvolved by carcinoma
Distance of Invasive Carcinoma from Closest Margin: 0.3 cm
Closest Margin: Mediastinal soft tissue (deep)
Regional lymph nodes:
N1 nodes: N1 nodes with carcinoma: 0 / Total N1 nodes examined: 1
N2 nodes: N2 nodes with carcinoma: 0 / Total N2 nodes examined: 1
N3 nodes: N3 nodes with carcinoma: 0 / Total N3 nodes examined: 0
Pathologic stage classification (pTNM, AJCC 8th Edition)
Primary Tumor (pT): pT4

Regional Lymph Nodes (pN): pN0
Distant Metastases (pM): Not applicable

Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Lung 01 Scenario

Answer Key:

Grade Clinical:

Correct Answer: 3

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 01/22/2018 right upper lobe lung biopsy (the diagnostic biopsy obtained during the clinical timeframe) was positive for, "Invasive, moderate to poorly differentiated squamous cell carcinoma."
The lung is graded using a four-grade system (G1-G4, well differentiated to undifferentiated). This lung tumor was graded using the preferred four-grade system recorded in the Lung Grade fields.
In this case, the pathologist provided two applicable grades ("moderately to poorly differentiated"). The General Grade Coding Instructions for Solid Tumors in the 2018 Grade Manual instruct one to code the highest grade when there is more than one grade available for a given timeframe. Moderately differentiated and poorly differentiated are recorded as grade 2 and 3, respectively. Therefore, the higher grade (poorly differentiated) must be recorded.
A poorly differentiated tumor is recorded as grade 3. Code the Clinical Grade as 3 (G3: Poorly differentiated).

Grade Pathological

Correct Answer: 3

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy. The Pathological Grade includes any grade information from the Clinical Grade field because all information from clinical staging through the surgical staging is considered "Pathological."
The 03/03/2018 right upper lobe wedge resection (the surgical resection obtained during the pathological timeframe) was positive for, "Invasive squamous cell carcinoma, moderately differentiated," per the Summary Cancer Data.

The lung is graded using a four-grade system (G1-G4, well differentiated to undifferentiated). This right upper lobe lung tumor was graded using the preferred four-grade system ("moderately differentiated") recorded in the Lung Grade fields.
The grade determined during the pathological timeframe was only moderately differentiated (i.e., grade code 2). However, the grade determined during the clinical timeframe was poorly differentiated (i.e., grade code 3). The clinical grade was the highest grade documented from the primary tumor. Since the Pathological Grade field includes any grade information from the clinical staging through the pathological (surgical) staging, the Clinical Grade will also be recorded in the Pathological Grade field for this case.
The Clinical Grade was greater than the Pathological Grade (poorly differentiated > moderately differentiated). Therefore, the Pathological Grade (moderately differentiated, grade code 2) does not apply. Code the Pathological Grade as 3 (G3: Poorly differentiated).

Grade Post Therapy:

Correct Answer: blank

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient undergoes neoadjuvant therapy prior to the surgical resection (i.e., the patient meets the requirements for post-therapy staging as defined in the AJCC manual). There can be no post-therapy timeframe if the patient did not undergo neoadjuvant therapy, followed by a surgical resection.
This patient did not undergo neoadjuvant therapy prior to the 03/03/2018 right upper lobe wedge resection. The general instructions for Grade Post-Therapy in the 2018 Grade Manual instruct one to leave the Post-Therapy Grade blank when there is no neoadjuvant therapy (a clinical and/or pathological case only).
Code the Post-Therapy Grade as Blank (No neoadjuvant therapy).

Lung 02 Scenario

Primary Site: C34.1
Histology: 8070
Behavior: 3

Abstracted Text

Physical Exam
12/14/2018 - cc: PTA lung adenocarcinoma. PTA CT identified a 6.3 cm RUL mass w/ extension into chest wall. Given tumor size/extension, pt treated w/ neoadjuvant concurrent radiation and chemo (Carboplatin and Paclitaxel). Plan: Restaging imaging and resection.

06/01/2018 - Path Report #1
FINAL DIAGNOSIS
A) Lung, right upper lobe, CT-Guided core needle biopsy:
- Poorly differentiated adenocarcinoma.
B) Lymph node, 4R/lower paratracheal, biopsy:
- Lymphoid tissue negative for carcinoma.
C) Lymph node, level 7/subcarinal, biopsy:
- Lymphoid tissue negative for carcinoma.
D) Lymph node, 4R #2, lower paratracheal, biopsy:
- Lymphoid tissue negative for carcinoma.
E) Lymph node, Precarinal, biopsy:
- Lymphoid tissue negative for carcinoma.
F) Lymph node, 4L/lower paratracheal, biopsy:
- Lymphoid tissue negative for carcinoma.
G) Lymph node, 4R/lower paratracheal #3, biopsy:
- Lymphoid tissue negative for carcinoma.
H) Lymph node, 4L/lower paratracheal #2, biopsy:
- Lymphoid tissue negative for carcinoma.

12/17/2018 - Path Report #2
FINAL DIAGNOSIS
A) Lung, right upper lobe with 2nd, 3rd, and 4th ribs, lobectomy with chest wall resection:
- Residual poorly differentiated adenocarcinoma with extensive treatment effect; see Summary Cancer Data.
- 2 lymph nodes, negative for carcinoma.

SUMMARY CANCER DATA
Procedure: Lobectomy with chest wall resection
Specimen Laterality: Right

Tumor Site: Upper lobe
Histologic Type: Invasive adenocarcinoma
Histologic Grade: G3: Poorly differentiated
Tumor Size: 4.5cm
Tumor Focality: Single tumor
Tumor Extent
Visceral Pleura Invasion: Present
Direct Invasion of Adjacent Structures: Chest wall
Involved Structure(s): Intercostal soft tissue
Treatment Effect: Less than 10% residual viable tumor
Lymphovascular Invasion: Not identified
Margins: All margins are uninvolved by carcinoma
Regional lymph nodes:
N1 nodes: N1 nodes with carcinoma: 0 / Total N1 nodes examined: 2
N2 nodes: N2 nodes with carcinoma: 0 / Total N2 nodes examined: 0
N3 nodes: N3 nodes with carcinoma: 0 / Total N3 nodes examined: 0
Pathologic stage classification (pTNM, AJCC 8th Edition)
TNM Descriptors: y (post-treatment)
Primary Tumor (pT): pT3
Regional Lymph Nodes (pN): pN0
Distant Metastases (pM): Not applicable - pM cannot be determined

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Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Lung 02 Scenario

Answer Key:

Grade Clinical:

Correct Answer: 3

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 06/01/2018 right upper lobe lung biopsy (the diagnostic biopsy obtained during the clinical timeframe) was positive for "Poorly differentiated adenocarcinoma."
The lung is graded using a four-grade system (G1-G4, well differentiated to undifferentiated). This lung tumor was graded using the preferred four-grade system ("poorly differentiated") recorded in the Lung Grade fields.
A poorly differentiated tumor is recorded as grade 3. Code the Clinical Grade as 3 (G3: Poorly differentiated).

Grade Pathological:

Correct Answer: 9

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy.
In this case, the patient underwent neoadjuvant therapy (neoadjuvant chemotherapy and radiation). Therefore, no valid Pathological Grade can be coded. Any grade provided by a post-neoadjuvant resection pathology report would only be recorded in the Post-Therapy Grade field.
Although there is no applicable Pathological Grade, the Pathological Grade field cannot be blank. The general instructions for Grade Pathological in the 2018 Grade Manual instruct one to use code 9 (Unknown) in several situations, including when neoadjuvant therapy is followed by a resection.
Code the Pathological Grade as 9 (Grade cannot be assessed (GX); Unknown).

Grade Post Therapy:

Correct Answer: 3

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient underwent neoadjuvant therapy prior to the surgical resection. In this case, the patient did undergo neoadjuvant therapy (neoadjuvant concurrent radiation and chemotherapy), followed by a surgical resection (right upper lung lobectomy with chest wall resection). There is a post-therapy timeframe, so the Post-Therapy Grade cannot be left blank.
The 12/17/2018 right upper lung lobectomy with chest wall resection (the surgical resection obtained during the post-therapy timeframe) was positive for, "Residual poorly differentiated adenocarcinoma," per the Final Diagnosis. The Summary Cancer Data section further defines the residual tumor as, "Histologic Grade: G3: Poorly differentiated."
Both the preferred numeric grade and the corresponding differentiation (poorly differentiated) were provided for this lung primary. The lung is graded using a four-grade system (G1-G4, well differentiated to undifferentiated). This lung tumor was graded using the preferred four-grade system recorded in the Lung Grade fields.
A poorly differentiated or grade 3 tumor is recorded as grade 3. Code the Post-Therapy Grade as 3 (G3: Poorly differentiated).
Note: The Clinical Grade cannot be used to complete the Post- Therapy Grade field. Although the Pathological Grade may include the grade from the clinical staging timeframe (the clinical work-up), the Post-Therapy Grade does not. The Post-Therapy Grade only includes the surgical resection from the yp staging timeframe as defined by the AJCC. For coding grade, the yp staging timeframe only includes the surgical resection findings following neoadjuvant therapy. Any grade identified during the clinical staging timeframe is excluded.

Prostate 01 Scenario

Primary Site: C61.9
Histology: 8140
Behavior: 3

Abstracted Text

01/03/2018 - Path Report #1
FINAL DIAGNOSIS
A: Prostate, LLB:
Benign prostate gland. Negative for malignancy.
B: Prostate, LLM:
Benign prostate gland. Negative for malignancy.
C: Prostate, LLA:
Benign prostate gland. Negative for malignancy.
D: Prostate, LB:
Benign prostate gland. Negative for malignancy.
E: Prostate, LLM:
Adenocarcinoma, Gleason score 4 + 4 = 8, involving 1 of 2 cores, involving 10% of the tissue volume. No evidence of perineural invasion.
F: Prostate, LA:
Benign prostate gland. Negative for malignancy.
G: Prostate, RB:
Benign prostate gland. Negative for malignancy.
H: Prostate, RM:
Benign prostate gland. Negative for malignancy.
I: Prostate, RA:
Benign prostate gland. Negative for malignancy.
J: Prostate, RLB:
Benign prostate gland. Negative for malignancy.
K: Prostate, RLM:
Benign prostate gland. Negative for malignancy.
L: Prostate, RLA:
Benign prostate gland. Negative for malignancy.

03/21/2018 - Path Report #2
FINAL DIAGNOSIS
1) Left pelvic lymph node, excision:
One lymph node negative for carcinoma.
2) Right pelvic lymph node, biopsy:
One lymph node negative for carcinoma.
3) Anterior bladder neck, lymph nodes, biopsies:
Large vessels and adipose tissue, negative for carcinoma. No lymph nodes identified.

4) Prostate, 40 grams, radical prostatectomy:
Invasive prostatic adenocarcinoma with the following features:
Histologic type: Acinar adenocarcinoma.
Histologic grade: 4+3=7.
Grade group: 3.
Percentage of Gleason pattern 4: 60%.
Tumor quantitation:
Tumor size: Greatest dimension 2.5 cm.
Location of dominant nodule: Left anterior.
Extraprostatic extension: Not identified.
Seminal vesicle invasion: Not identified.
Margins: Positive for invasive carcinoma.
Non-limited (>0.3 cm). Linear length of positive margins: - 0.4 cm.
Focality: Multifocal.
Location of positive margin: Right and left bladder neck, left > right.
Treatment effect: No known presurgical therapy.
Lymph-vascular invasion: Not identified.
Perineural invasion: Present.
Regional lymph nodes: See specimens 1-3.
Minimum pathologic stage: 8th Edition AJCC: pT2, N0

Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Prostate 01 Scenario

Answer Key:

Grade Clinical:

Correct Answer: 4

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 01/03/2018 prostate needle core biopsy (the diagnostic biopsy obtained during the clinical timeframe) was positive for, "Adenocarcinoma, Gleason score 4 + 4 = 8," in one biopsy from the left lateral mid prostate (Specimen E, "Prostate, LLM") only. The remaining prostate needle core biopsies were negative.
The Gleason pattern and score (e.g., 4 + 4 = 8) are used to determine the Grade Group, which is the preferred grade system recorded in the Prostate Grade fields. In this case, only the Gleason pattern (4 + 4) and score (8) were given, so the Grade Group must be determined.
A Gleason score of 8 is recorded as grade 4 for a Gleason score of 8. Code the Clinical Grade as 4 (Grade Group 4: Gleason score 8).

Grade Pathological:

Correct Answer: 4

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy. The Pathological Grade includes any grade information from the Clinical Grade field because all information from clinical staging through the surgical staging is considered "Pathological."
The 03/21/2018 prostatectomy (the surgical resection obtained during the pathological timeframe) was positive for acinar adenocarcinoma, "Histologic grade: 4+3=7, Grade group: 3." Although the Final Diagnosis did not specifically state the type of grading used, the "Histologic grade" provided is the Gleason pattern and score ("4+3=7").

The Gleason pattern and score (e.g., 4 + 3 = 7) are used to determine the Grade Group, which is the preferred grade system recorded in the Prostate Grade fields. In this case, the Gleason pattern (4 + 3) and score (7) and the Grade Group (3) were given.
The grade determined during the pathological timeframe was only Grade Group 3 (i.e., Gleason 4 + 3 = 7). However, the grade determined during the clinical timeframe was Grade Group 4 (i.e., Gleason 4 + 4 = 8). The clinical grade was the highest grade documented from the primary tumor. Since the Pathological Grade field includes any grade information from the clinical staging through the pathological (surgical) staging, the Clinical Grade will also be recorded in the Pathological Grade field for this case.
The Clinical Grade was greater than the Pathological Grade (Grade Group 4 > Grade Group 3). Code the Pathological Grade as 4 (Grade Group 4: Gleason score 8).
Note: The Pathological Grade cannot be 3 (Grade Group 3, Gleason 4 + 3 = 7) based solely on the prostatectomy findings. Since the Clinical Grade was greater and the patient did not undergo neoadjuvant treatment prior to the prostatectomy, the grade from the prostatectomy is not coded in this data item.

Grade Post Therapy

Correct Answer: blank

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient undergoes neoadjuvant therapy prior to the surgical resection (i.e., the patient meets the requirements for post-therapy staging as defined in the AJCC manual). There can be no post-therapy timeframe if the patient did not undergo neoadjuvant therapy, followed by a surgical resection.
This patient did not undergo neoadjuvant therapy prior to the 03/21/2018 prostatectomy.
The general instructions for Grade Post-Therapy in the 2018 Grade Manual instruct one to leave the Post-Therapy Grade blank when there is no neoadjuvant therapy (a clinical and/or pathological case only).
Code the Post-Therapy Grade as Blank (No neoadjuvant therapy).

Prostate 02 Scenario

Primary Site: C61.9
Histology: 8140
Behavior: 3

Abstracted Text

02/10/2018 - Path Report #1
FINAL DIAGNOSIS
A: Left lateral base, prostate needle biopsy:
Prostate tissue with acute/chronic inflammation and atrophy, negative for malignancy
B: Left lateral mid, prostate needle biopsy:
Prostatic adenocarcinoma. Total Gleason score 3 + 3 = 6, Grade group 1.
Quantity: Carcinoma involves one of two cores, representing approximately 5 % of the tissue.
Perineural invasion: Not identified.
C: Left lateral apex, prostate needle biopsy:
Prostate tissue with acute/chronic inflammation and atrophy, negative for malignancy
D: Left base, prostate needle biopsy:
Prostate tissue with chronic inflammation and atrophy, negative for malignancy
E: Left mid, prostate needle biopsy:
Prostate tissue with chronic inflammation and atrophy, negative for malignancy
F: Left apex, prostate needle biopsy:
Prostate tissue with chronic inflammation and atrophy, negative for malignancy
G: Right base, prostate needle biopsy:
Prostate tissue with acute/chronic inflammation and atrophy, negative for malignancy
H: Right mid, prostate needle biopsy:
Prostatic adenocarcinoma. Total Gleason score 3 + 3 = 6, Grade group 1.
Quantity: Carcinoma involves one of one cores, representing approximately 10 % of the tissue.
Perineural invasion: Not identified.
I: Right apex, prostate needle biopsy:
Prostate tissue with chronic inflammation and atrophy, negative for malignancy
J: Right lateral base, prostate needle biopsy:
Prostate tissue with chronic inflammation and atrophy, negative for malignancy
K: Right lateral mid, prostate needle biopsy:
Prostate tissue with acute/chronic inflammation and atrophy, negative for malignancy
L: Right lateral apex, prostate needle biopsy:
Prostate tissue with acute/chronic inflammation and atrophy, negative for malignancy

05/14/2018 - Path Report #2
FINAL DIAGNOSIS
Prostate, robot-assisted laparoscopic radical prostatectomy:
Carcinoma of the Prostate Staging Summary:
Procedure: Radical prostatectomy.

Histologic type: Acinar adenocarcinoma.
Total Gleason score: 7.
Primary pattern: 4.
Secondary pattern: 3.
Tertiary pattern: 5.
Gleason pattern 5: Less than 5%.
Grade group (ISUP): 3.
Intraductal carcinoma: No.
Tumor quantitation:
Tumor size (dominant nodule): Multiple tumor foci are present including right and left lateral apex, and right and left posterior mid and right and left posterior base. The dominant tumor nodule is the left anterior mid gland, measuring 8 mm in largest dimension.
Extraprostatic extension: No.
Urinary bladder neck invasion: No.
Seminal vesicle invasion: No.
Lymph-vascular invasion: None.
Treatment effect: None.
Margins: Uninvolved.
Regional lymph nodes: Not submitted for examination
Number of lymph nodes examined: Zero.
Number of lymph nodes involved: Not applicable.
Size of largest metastatic deposit: Not applicable.
Extranodal extension: Not applicable.
Pathologic stage: pT2, pNX (AJCC 8th ed).

Answers:

Grade Clinical:	
Grade Pathological:	
Grade Post-therapy:	

Prostate 02 Scenario

Answer Key:

Grade Clincal:

Correct Answer: 1

Rationale:

The Clinical Grade records the highest grade from the primary tumor assessed during the clinical timeframe. The clinical timeframe is prior to any treatment (including surgical resection, systemic therapy, radiation therapy and neoadjuvant therapy).
The 02/10/2018 prostate needle core biopsy (the diagnostic biopsy obtained during the clinical timeframe) was positive for, "Prostatic adenocarcinoma. Total Gleason score 3 + 3 = 6, Grade group 1," in biopsies from the left lateral mid and right mid prostate. The remaining prostate needle core biopsies were negative.
The Gleason pattern and score (e.g., 3 + 3 = 6) are used to determine the Grade Group, which is the preferred grade system recorded in the Prostate Grade fields. In this case, both the Gleason score (6) and the Grade Group (1) were given.
A Gleason score of 6 is recorded as grade 1 for a Gleason score less than or equal to 6.
Code the Clinical Grade as 1 (Grade Group 1: Gleason score less than or equal to 6).

Grade Pathological:

Correct Answer: 3

Rationale:

The Pathological Grade records the highest grade of the primary tumor that has been surgically resected (i.e., meets AJCC-defined surgical resection requirement) without neoadjuvant therapy. The Pathological Grade includes any grade information from the Clinical Grade field because all information from clinical staging through the surgical staging is considered "Pathological."
The 05/14/2018 prostatectomy (the surgical resection obtained during the pathological timeframe) was positive for acinar adenocarcinoma, "Total Gleason score 7. Primary pattern: 4. Secondary pattern: 3. Tertiary pattern: 5." The pathologist also noted, "Grade group (ISUP): 3." The Gleason pattern is the primary pattern plus the secondary pattern. In this case the Gleason pattern is 4 + 3, for a Gleason score of 7 (4 + 3 = 7).
Although the tertiary pattern is numerically higher than the primary or secondary pattern, the tertiary pattern is not used to determine the Gleason score or the Grade Group recorded in this data item. The Gleason score only includes the primary and secondary

pattern, not the tertiary pattern. The tertiary pattern is only recorded in a Site Specific Data Item (SSDI). Since the Gleason score does not include the tertiary pattern, it is not taken into consideration in the Pathological Grade.
The Gleason pattern and score (e.g., 4 + 3 = 7) are used to determine the Grade Group, which is the preferred grade system recorded in the Prostate Grade fields. In this case, the Gleason pattern (4 + 3) and score (7) and the Grade Group (3) were given.
There are two possible Grade Groups for a Gleason score of 7 (Grade Groups 2 and 3). Special care must taken to code the appropriate Grade Group when the Gleason score is 7. Differentiating between the two requires one to consider the Gleason pattern. Gleason pattern 3 + 4, is Grade Group 2, while Gleason pattern 4 + 3, is Grade Group 3.
Code the Pathological Grade as 3 (Grade Group 3: Gleason score 7; Gleason pattern 4+3).

Grade Post Therapy:

Correct Answer: blank

Rationale:

The Post-Therapy Grade is only recorded as a non-blank value when the patient undergoes neoadjuvant therapy prior to the surgical resection (i.e., the patient meets the requirements for post-therapy staging as defined in the AJCC manual). There can be no post-therapy timeframe if the patient did not undergo neoadjuvant therapy, followed by a surgical resection.
This patient did not undergo neoadjuvant therapy prior to the 05/14/2018 prostatectomy. The general instructions for Grade Post-Therapy in the 2018 Grade Manual instruct one to leave the Post-Therapy Grade blank when there is no neoadjuvant therapy (a clinical and/or pathological case only).
Code the Post-Therapy Grade as Blank (No neoadjuvant therapy).