

Cancer Staging 2017

NAACCR 2016-2017 Webinar Series

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●●● Q&A

- Please submit all questions concerning webinar content through the Q&A panel.
- Reminder:
 - If you have participants watching this webinar at your site, please collect their names and emails.
 - We will be distributing a Q&A document in about one week. This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.



●●● Fabulous Prizes



●●● Updates

- 8th Edition AJCC has been postponed
 - AJCC 7th edition should be used to assign cases diagnosed 2010-2017
 - 8th edition will be used for cases diagnosed in 2018
- There will not be a v17 layout
 - No major changes for cases diagnosed in 2017
 - Registrars should wait until release of v16d edits metafile before the start abstracting 2017 cases.
 - V16d edits metafile is scheduled for release in late January or early February



v15-v16 update

Data Items	Pre-Conversion	Post-Conversion	Abstracted in v16
Clinical T	1a	cT1a	cT1a
Clinical N	0	cN0	cN0
Clinical M	0	cM0	cM0
Clinical Stage	1	1	1
Pathologic T	2	pT2	pT2
Pathologic N	0	pN0	pN0
Pathologic M			cM0
Pathologic Stage	2	2	2



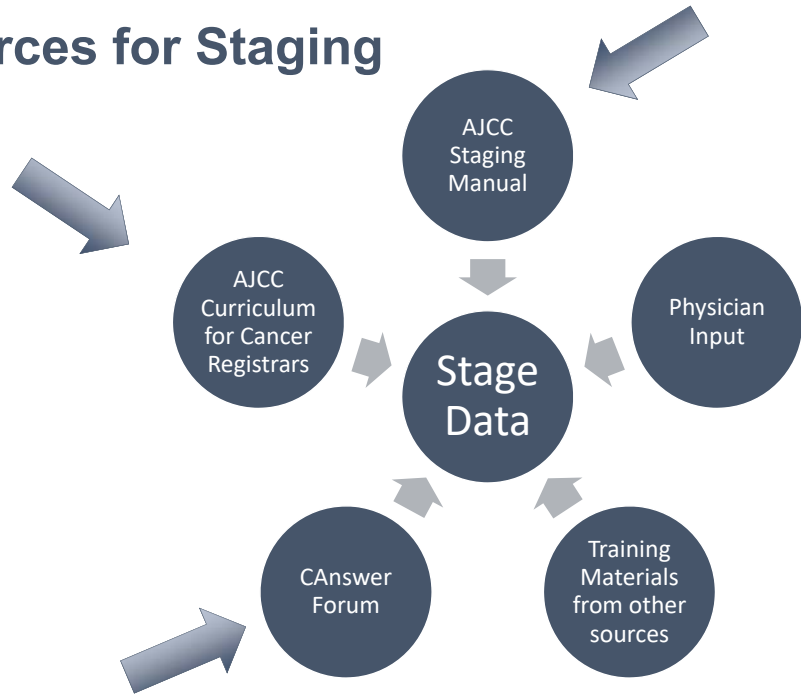
Edits

- Current metafile is v16c
 - Most software vendors and central registries should be using the v16c metafile
- When flaws in edit logic are identified, the only way to send corrections is release a new metafile.
- If registrars suspect there may be an error in edit logic (the edit won't allow the registrar to enter correct information), they should contact their central registry.
 - Do not report suspected edit errors to the CAnswer forum.
 - Central registries will report these issues to Jim Hofferkamp jhofferkamp@naaccr.org and he will find a solutions through the NAACCR TNM Edits WG.





Resources for Staging



•••• Physician Staging

- TNM Stage was meant to be assigned by a physician in an clinical setting.
 - Whenever possible, physician stage should be used assign the clinical and pathologic stage data items.
 - The registrars role is to make sure rules were followed for assigning stage and correct any gross errors.
- *Ultimately, it is the registrars responsibility to **enter** the correct codes into the stage data items.*

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•••• What would you enter into your abstract?

- A physician assigns a pathologic stage for a prostate case of T2a N0 M0 Stage IIA. You know the patient did not have a prostatectomy.

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•••• What would you enter into your abstract?

- A physician assigns a clinical stage for a lung cancer case of T2a N1 M0 Stage IIA.
- The only imaging reports you have available refer to *possible malignant lymphadenopathy*.
- You cannot find a more definitive statement in the patients record of lymph node metastasis.
- The patient did not have surgery, but was treated with chemotherapy and radiation.

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•••• Comment from one registrar...

- If they have a higher stage than I have documentation for, I usually assume they know something I don't and use their stage.
- But if I have higher stage documentation then I will consider entering a different stage into the abstract.
- It gets really tricky when all they give me is stage group. This is especially a problem with stage IV cases.

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Jim's Coding Tips...

1. Rules for classification trump all other rules
2. For the T and N...blank or x is based on whether or not the rules for classification for the T has been met.
3. Do not use pathologic values in clinical data items or clinical values in pathologic data items unless you have a rule saying you can.
 - M
 - pM values can be used in the cM data item if pathologic confirmation of distant mets was confirmed prior to any treatment.
 - cM can be used in the pM data item if pT and pN are not blank (x's are ok...just can't be blank)
 - In situ rule
 - pTis can be used in the cT and pT.
 - cN0 can be used in cN and pN



Rules for Classification

- Rules for Classification were written to help physicians classify stage into clinical and pathologic groupings
- Chapter rules take precedence over general rules
- If there is nothing in the chapter rules indicating a deviation from the general rules, follow the general rules.



Clinical and Pathologic Stage



Clinical Stage
Pretreatment Stage

Patient is diagnosed
With cancer.



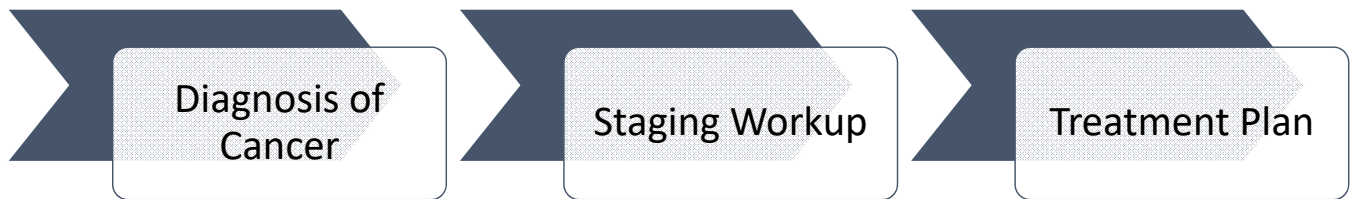
Pathologic Stage
Postsurgical Stage

Patient has definitive
surgery for cancer.

*Clinical and Pathologic stage reflect the stage at diagnosis.
They reflect what the physician thought the stage was at different points in time*



Clinical/Pre-Treatment Stage



- Clinical stage helps physicians select the patients initial therapy
- Can be used to compare groups of patients





Pathologic/ Post-Surgical Stage

Clinical Stage Information

Operative Findings

Pathologic Evaluation of Resected Specimen

Post-Surgery/ Pre-Adjuvant Treatment Stage Information

- Helps with prognosis and outcome
- Helps to guide adjuvant therapy



Rules for Classification-General Rules

- Clinical Stage
 - Diagnosis
 - Some kind of clinical exam
- Pathologic Stage
 - Excision of the primary site
 - Removal of regional lymph nodes



Rules for Classification-Blanks vs X

- If rules for classification have not been met, leave the T, N, and M fields **blank** (99 for stage group).
 - Leave the T and N blank if the rules for classification of the T value have not been met.
 - If rules for N have been met, but the rules for T have not been met leave both blank
 - If rules for T have been met but rules for N have not been met, assign the appropriate T value and X for N value.
- See fourth row of Table 1.6 on page 10
 - *Pathologic assessment of the primary tumor (pT) is necessary to assign pathologic assessment of nodes (pN)....*



Blanks vs X's

Have the rules for classification for T been met?

Yes

No

T and N will not be blank
Must be X or valid value

T and N will be blank

Data Item	Value
Clinical T	cT2
Clinical N	cN0
Clinical M	cM0
Clinical Stage	2

Data Item	Value
Pathologic T	pT2
Pathologic N	pNX
Pathologic M	cM0
Pathologic Stage	99

Data Item	Value
Clinical T	
Clinical N	
Clinical M	
Clinical Stage	99

Data Item	Value
Pathologic T	
Pathologic N	
Pathologic M	
Pathologic Stage	99

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Pop Quiz 1

- A patient presents for a lung CT and is found to have lung cancer.
- A clinical work-up was done and the physician assigned T3 N2 M0 Stage IIIA.
- The patient is treated with chemotherapy and radiation only.
 - Have the rules for classification for clinical T been met?
 - Have the rules for classification for pathologic T been met?

Data Item	Value
Clinical T	cT3
Clinical N	cN2
Clinical M	cM0
Clinical Stage	3A
Pathologic T	
Pathologic N	
Pathologic M	
Pathologic Stage	99

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Pop Quiz 2

- A patient presents for a lung CT and is found to have lung cancer.
 - Imaging and bronchoscopy are done and the physician assigned a stage of T1a N0 M0 Stage IA.
 - The patient had a wedge resection and then was treated with radiation and chemotherapy.
 - Pathology confirmed a T2a tumor.
 - No lymph nodes removed.

Data Item	Value
Clinical T	cT1a
Clinical N	cN0
Clinical M	cM0
Clinical Stage	1A
Pathologic T	pT2a
Pathologic N	pNX
Pathologic M	cM0
Pathologic Stage	99

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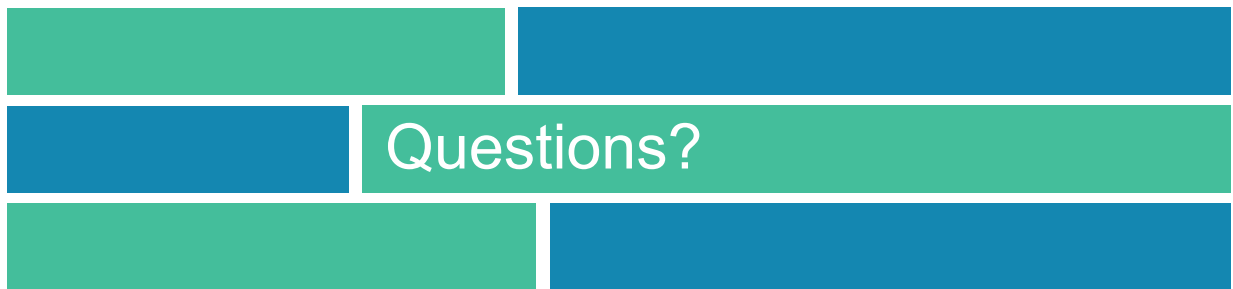


Pop Quiz 3

- A patient with muscle invasive **bladder** cancer presents for cystoprostatectomy.
 - Pathology revealed urothelial cell carcinoma confined to the bladder.
 - Six pelvic lymph nodes were removed and found to be negative for malignancy.
 - Review of the **prostate** revealed an incidental finding of adenocarcinoma involving both lobes, but confined to the prostate.
- How would we stage the prostate case?

Data Item	Value
Clinical T	
Clinical N	
Clinical M	
Clinical Stage	99
Pathologic T	pT2c
Pathologic N	pN0
Pathologic M	cM0
Pathologic Stage	2B

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Using

pValues in cData Items

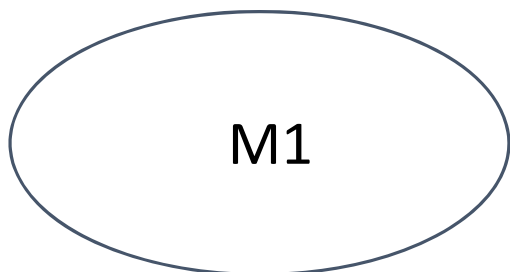
cValues in pData Items

... cValues in pData Items and Vice Versa

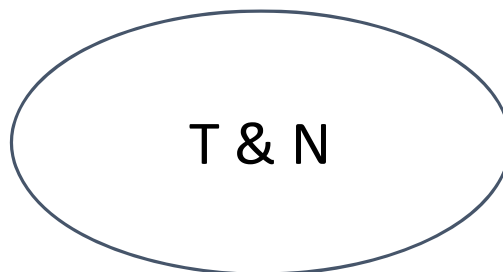
- **Do not** use pathologic values in clinical data items or clinical values in pathologic data items **unless** you have a rule saying you can.



☐ Distant Mets



- If patient has distant mets, patient will have a stage regardless of T&N



- If no T, then T&N are blank
- If T, then T&N are either X's or valid value



☐ cM in the pM data item

- cM values may be used in the pM data items if pT and pN are not blank.
- If pT and pN are blank, cM may not be used in the pM data item.



Pop Quiz 4

- A patient presents for an EGD and is found to have a mass in the lower esophagus. A biopsy confirmed well differentiated adenocarcinoma. A CT was negative for metastasis.
- The patient went on to have a surgical resection of the tumor.
- Pathology showed a tumor that invaded into the submucosa. No lymph nodes were removed.

Data Item	Value
Clinical T	cTX
Clinical N	cN0
Clinical M	cM0
Clinical Stage	99
Pathologic T	pT1b
Pathologic N	pNX
Pathologic M	cM0
Pathologic Stage	99

cM values may be used in the pM data items if pT and pN are not blank.

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Pop Quiz 5

- A patient presents for a lung CT and is found to have a 3.1 cm tumor confined to the left lung. A bronchoscopy with biopsy confirmed small cell carcinoma.
- CT of the brain showed a lesions in the left temporal lobe highly suspicious for metastasis.
- The patient was treated with chemotherapy and radiation to the primary and to the brain.

Data Item	Value
Clinical T	cT2a
Clinical N	cN0
Clinical M	cM1b
Clinical Stage	4
Pathologic T	
Pathologic N	
Pathologic M	
Pathologic Stage	99

If pT and pN are blank, cM may not be used in the pM data item.

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••• pM Values in the cM Data Item

- If distant mets is pathologically confirmed prior to treatment...
 - A pM value is assigned
 - The pM value is entered into the cM data item



••• Pop Quiz 6

- A patient presents for a routine colonoscopy and is found to have a large fungating tumor in the sigmoid colon. A biopsy confirmed carcinoma.
- A CT scan showed liver metastasis. The mass was biopsied and found to be metastasis.
- The patient went on to have a segmental resection that showed a tumor that invaded into the submucosa. No lymph nodes were removed.

Data Item	Value
Clinical T	cTX
Clinical N	cN0
Clinical M	pM1a
Clinical Stage	4a
Pathologic T	pT1
Pathologic N	pNX
Pathologic M	pM1a
Pathologic Stage	4a

If distant mets is pathologically confirmed prior to treatment, a pM value is entered in the cM data item.

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Pop Quiz 7

- A patient presents for a routine colonoscopy and is found to have a large fungating tumor in the sigmoid colon. A biopsy confirmed carcinoma. A CT showed liver metastasis.
- The patient went on to have a segmental resection that showed a tumor that invaded into the submucosa.
 - Resection of the liver tumor confirmed metastasis.
 - No lymph nodes were removed.

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Data Item	Value
Clinical T	cTX
Clinical N	cN0
Clinical M	cM1a
Clinical Stage	4a
Pathologic T	pT1
Pathologic N	pNX
Pathologic M	pM1a
Pathologic Stage	4a

If distant mets is pathologically confirmed prior to treatment, a pM value is entered in the cM data item.



Pop Quiz 8

- A patient presents for a routine colonoscopy and is found to have a large fungating tumor in the sigmoid colon. A biopsy confirmed carcinoma. A CT showed liver metastasis.
- The patient went on to have a segmental resection that showed a tumor that invaded into the submucosa.
 - No lymph nodes were removed.

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Data Item	Value
Clinical T	cTX
Clinical N	cN0
Clinical M	cM1a
Clinical Stage	4a
Pathologic T	pT1
Pathologic N	pNX
Pathologic M	cM1a
Pathologic Stage	4a

cM values may be used in the pM data items if pT and pN are not blank.



Pop Quiz 9

- A patient presents for a routine colonoscopy and is found to have a large fungating tumor in the sigmoid colon. A biopsy confirmed carcinoma.
- The patient went on to have a segmental resection that showed a tumor that invaded into the submucosa. No lymph nodes were removed.
- A CT done after surgery, but before chemotherapy showed a liver tumor highly suspicious for malignancy.

Pg.. 143-156

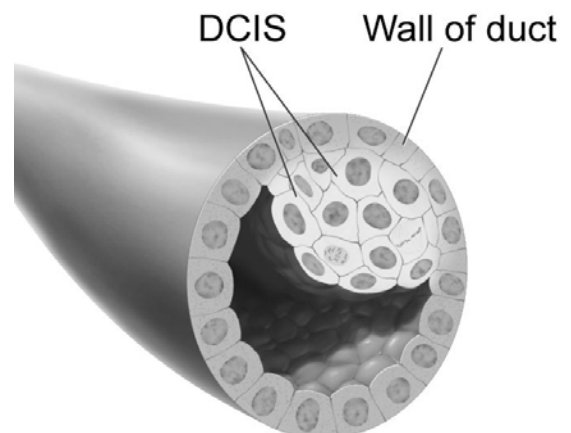
Data Item	Value
Clinical T	cTX
Clinical N	cNX
Clinical M	cM0
Clinical Stage	99
Pathologic T	pT1
Pathologic N	pNX
Pathologic M	cM1a
Pathologic Stage	4a

cM values may be used in the pM data items if pT and pN are not blank.



In Situ

- By definition in situ indicates there is not spread to regional/distant organs or lymph nodes
- In order to call a tumor in situ a pathologist must review the entire tumor under a microscope.
- Results from the pathologic review of the entire tumor is recorded in the pT not cT
 - **Cannot have a cTis**
- **See page 12 of the AJCC manual**



••• In Situ Stage Grouping Exception

- An exception was made that allows us to use the pTis for both the clinical and pathologic stage and to use the cN0 for both the clinical and pathologic stage.
 - The criteria for rules for classification have to be met in order to get a clinical or pathologic stage.
 - There must be microscopic confirmation the tumor is in situ
- A second exception was made that allows us to use the cN0 in the pN data item if no lymph nodes were removed



••• In Situ of the Breast-Pop Quiz 10

- A breast cancer patient has core biopsy that comes back as carcinoma in situ.
- She returns for a lumpectomy and is found to have ductal carcinoma in situ with negative margins.
- No lymph nodes were removed

Data Item	Value
Clinical T	pTis
Clinical N	cN0
Clinical M	cM0
Clinical Stage	0
Pathologic T	pTis
Pathologic N	cN0
Pathologic M	cM0
Pathologic Stage	0

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●●● In Situ Core Biopsy-Pop Quiz 11

- A patient has a breast biopsy that is positive for ductal carcinoma in situ. There is no clinical evidence of regional or distant mets.
- She then has a segmental mastectomy that reveals a 1 cm invasive ductal carcinoma

Data Item	Value
Clinical T	pTis
Clinical N	cN0
Clinical M	cM0
Clinical Stage	0
Pathologic T	p1b
Pathologic N	pNX
Pathologic M	cM0
Pathologic Stage	99

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●●● In Situ Core Biopsy-Pop Quiz 12

- A patient has a mammogram showing a small mass suspicious for malignancy.
- The patient had a lumpectomy that confirmed ductal carcinoma in situ.

Data Item	Value
Clinical T	cTX
Clinical N	cNX
Clinical M	cM0
Clinical Stage	99
Pathologic T	pTis
Pathologic N	cN0
Pathologic M	cM0
Pathologic Stage	0

There must be microscopic confirmation the tumor is in situ for the “in situ” exception to apply.

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Bladder-Pop Quiz 13

- A patient with bladder tumor has a TURB and is found to have a noninvasive papillary urothelial carcinoma.
- No further surgery done.

Data Item	Value
Clinical T	pTa
Clinical N	cN0
Clinical M	cM0
Clinical Stage	0a
Pathologic T	
Pathologic N	
Pathologic M	
Pathologic Stage	99

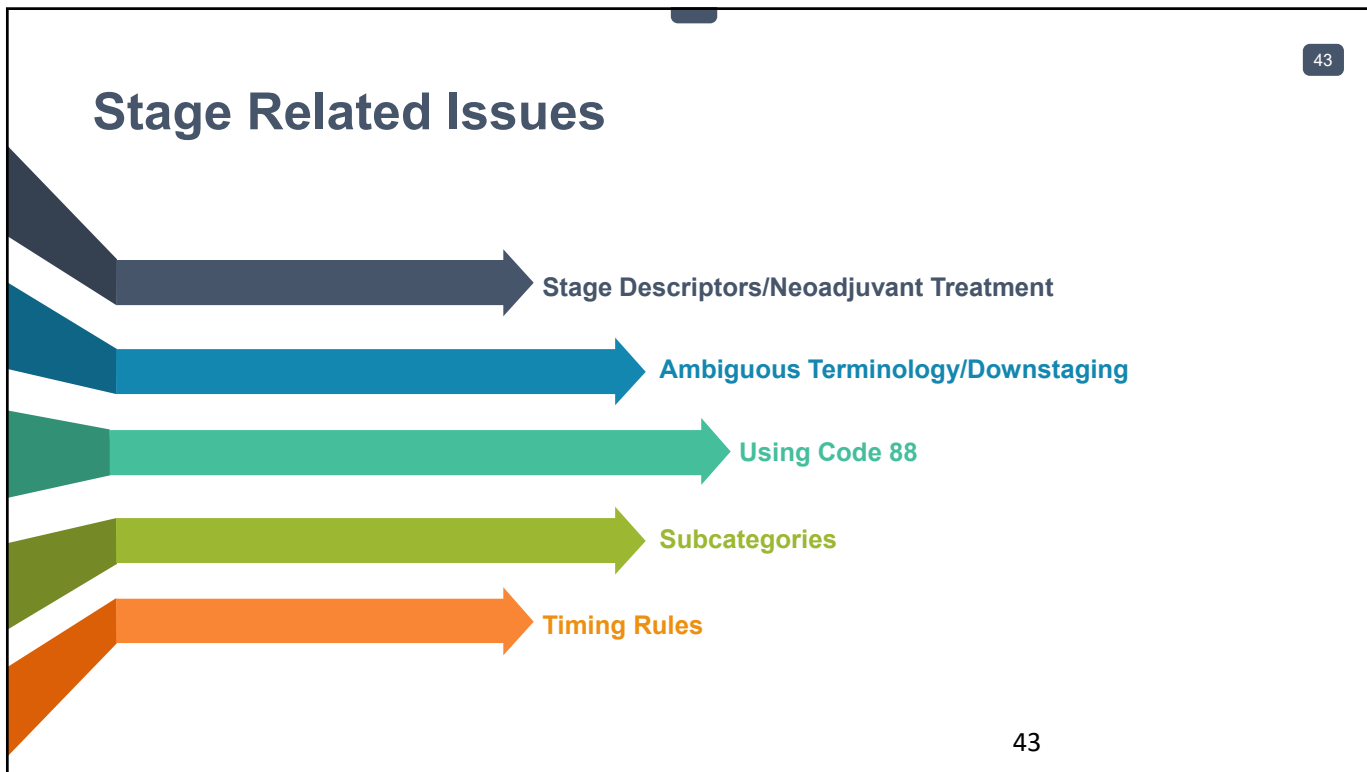
The criteria for rules for classification have to be met in order to get a clinical or pathologic stage.

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Other Issues





••••• **TNM CLIN DESCRIPTOR**
Clinical Stage (Prefix/Suffix) Descriptor (CoC)

- 0 None
- 1 E (Extranodal, lymphomas only)
- 2 S (Spleen, lymphomas only)
- 3 M (Multiple primary tumors in a single site)
- 5 E & S (Extranodal and spleen, lymphomas only)
- 9 Unknown, not stated in patient record

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Pop Quiz 14

- A patient is diagnosed with lymphoma of the stomach. Staging work-up revealed the lymphoma was stage I.

- TNM CLIN DESCRIPTOR
 - 0 None
 - 1 E (Extranodal, lymphomas only)
 - 2 S (Spleen, lymphomas only)
 - 3 M (Multiple primary tumors in a single site)
 - 5 E & S (Extranodal and spleen, lymphomas only)
 - 9 Unknown, not stated in patient record

Data Item	Value
Clinical T	88
Clinical N	88
Clinical M	88
Clinical Stage	1A
Pathologic T	88
Pathologic N	88
Pathologic M	88
Pathologic Stage	99

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TNM PATH DESCRIPTOR

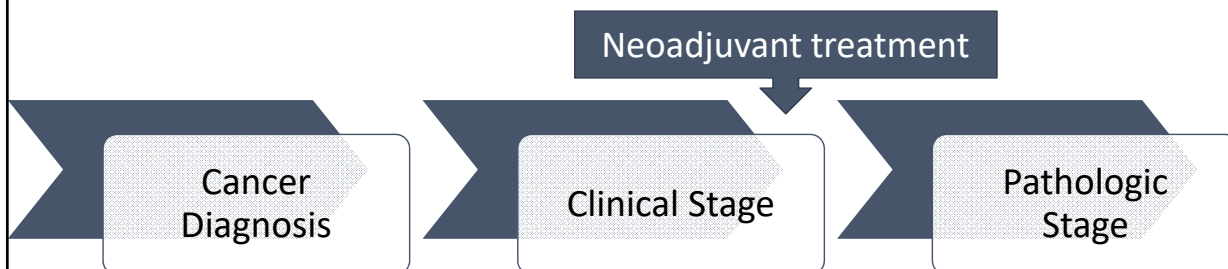
Pathologic Stage (Prefix/Suffix) Descriptor (CoC)

- 0 None
- 1 E (Extranodal, lymphomas only)
- 2 S (Spleen, lymphomas only)
- 3 M (Multiple primary tumors in a single site)
- 4 Y (Classification during or after initial multimodality therapy) — pathologic staging only
- 5 E & S (Extranodal and spleen, lymphomas only)
- 6 M & Y (Multiple primary tumors and initial multimodality therapy)
- 9 Unknown, not stated in patient record

Applies to the pT and pN only



y Prefix (TNM Path Descriptor 4)



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••• y Prefix-Pop Quiz 15

- A patient is diagnosed with breast cancer.
 - Imaging shows a 62mm tumor confined to the left breast.
 - No indication of skin or chest wall involvement.
 - A biopsy of an enlarged axillary lymph node was positive for metastasis.
- The patient receives neoadjuvant chemotherapy.
- A modified radical mastectomy shows:
 - 4.7mm tumor confined to the breast
 - 16 negative axillary lymph nodes.

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••• y Prefix Pop Quiz 15

- Without the Y prefix it would look like the cT and cN were grossly overestimated!

Data Item	Value
Clinical T	cT3
Clinical N	cN1
Clinical M	cM0
Clinical Stage	3A
Pathologic T	p1a
Pathologic N	pN0
Pathologic M	cM0
Pathologic Stage	1A

4 Y (Classification during or after initial multimodality therapy)—pathologic staging only



••• Ambiguous Terminology Pop-Quiz 16

- A patient presented to the ER with pneumonia. An X-ray show a 1 cm mass in the lower lobe of the left lung most likely representing lung carcinoma.
- Also noted was left sided hilar and mediastinal lymphadenopathy.
- The patient was discharged and did not return. No additional information available.

Data Item	Value
Clinical T	cT1a
Clinical N	cNX
Clinical M	cM0
Clinical Stage	99
Pathologic T	
Pathologic N	
Pathologic M	
Pathologic Stage	99

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••• Ambiguous Terminology Pop-Quiz 17

- A patient had a PET CT that showed a 1cm tumor confined to the left lower lobe of the lung and enlarged hilar lymph nodes suspicious for malignancy.
- A spiral CT showed a 1.2cm tumor in the left lung and hilar lymphadenopathy strongly suggestive of metastasis.
- Biopsy of the lung tumor confirmed malignancy. The patient was treated with radiation to lower lobe of the left lung and hilar region and chemotherapy.

Data Item	Value
Clinical T	cT1a
Clinical N	cN1
Clinical M	cM0
Clinical Stage	IIA
Pathologic T	
Pathologic N	
Pathologic M	
Pathologic Stage	99

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••• “Downstaging”

- When uncertain information is all that is available, choose the lower or lesser category.
 - Example
 - Endoscopic ultrasound shows a tumor in the esophagus. It cannot be determined if the tumor is confined to the muscularis propria (T2) or invades into the adventitia tissues (T3).
 - “Downstage” to T2
- Do *not* downstage when you have disparities between staging values
 - Example
 - Surgeon says patient has a T2 tumor, but radiation oncologist says patient has a T3
 - The downstaging concept does not apply to this situation.



●●●● Clinical Timing Rule

- Includes staging information obtained before initiation of definitive treatment.
Or
- Within 4 months after the date of diagnosis
Use Information from whichever is shorter



Cancer
Diagnosis



Treatment



The window closes if there is any disease progression!



●●●● Pathologic Timing Rule

- Includes staging information obtained through completion of first course treatment
Or
- Identified within 4 months after the date of diagnosis
Whichever is longer



Cancer
Diagnosis



Surgery



Adjuvant
treatment



The window closes if there is any disease progression!



Subcategories

- Some stage groupings require subcategories
 - Values can be entered into the T, N, and M categories without subcategories.
 - If the subcategories are required for a unique stage group, but the subcategories cannot be assigned, stage group must be 99



Subcategories-Pop Quiz 18

- A patient with biopsy confirmed renal cell carcinoma has imaging that shows an 8cm tumor extending through the kidney along the renal vein to the vena cava.
- No indication of additional disease.

Data Item	Value
Clinical T	cT3
Clinical N	cN0
Clinical M	cM0
Clinical Stage	III
Pathologic T	
Pathologic N	
Pathologic M	
Pathologic Stage	99

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Subcategories- Pop Quiz 19

- A patient had mole removed from their left arm. Pathology showed malignant melanoma with a Breslow's depth of 1.3mm's. subsequent work-up did now show any metastasis.
- Wide excision was negative for residual disease.

Data Item	Value
Clinical T	cT2
Clinical N	cN0
Clinical M	cM0
Clinical Stage	99
Pathologic T	pT2
Pathologic N	pNX
Pathologic M	cM0
Pathologic Stage	99

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No applicable Site/Histology or Stage Group

- Not all site/histology combinations can be assigned an AJCC stage.
 - Primary CNS
 - Leukemia
- Some chapters do not have applicable stage groups for a site/histology combination.
 - No in situ stage group for ovary, prostate, soft tissue sarcoma, etc
- Enter 88's in the T, N, M, and Stage Group data item for these sites



Pop Quiz 20

••• No applicable Site/Histology or Stage Group

- A patient is diagnosed with a malignant glioblastoma confined to the occipital lobe of the brain.
- A patient is diagnosed with an in situ prostate cancer.

Data Item	Value
Clinical T	88
Clinical N	88
Clinical M	88
Clinical Stage	88
Pathologic T	88
Pathologic N	88
Pathologic M	88
Pathologic Stage	88

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Questions?

Walk Through

Colon

- A patient was found to have a 3cm mass in her descending colon. Biopsy of the mass revealed adenocarcinoma.
- Left hemicolectomy: 2.5 cm adenocarcinoma of descending colon involves pericolic fat but does not penetrate the serosa; 2 of 17 lymph nodes positive for metastasis.

Data Item	Value
Clinical T	cTX
Clinical N	cNX
Clinical M	cM0
Clinical Stage	99
Pathologic T	pT3
Pathologic N	pN1B
Pathologic M	cM0
Pathologic Stage	3B

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Breast

- Imaging showed 1.5cm tumor in the upper outer quadrant of the right breast.
 - Core biopsy confirmed ductal carcinoma.
 - Remainder of exam was negative.
- Right breast lumpectomy and right sentinel lymph node biopsy path:
 - 1 cm ductal carcinoma confined to the breast
 - 1 of 1 axillary lymph node positive for metastasis, 2.3 mm in size.

Data Item	Value
Clinical T	cT1c
Clinical N	cN0
Clinical M	cM0
Clinical Stage	1A
Pathologic T	pT1b
Pathologic N	pN1a
Pathologic M	cM0
Pathologic Stage	2A

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Melanoma

- A patient has a suspicious mole removed at her physician's office.
 - Pathology confirmed a melanoma with Breslow’s depth of 1.2mm.
 - No ulceration was present.
- Physical exam did not show enlarged lymph nodes.
- A sentinel lymph node biopsy showed micro metastasis in 1 of 3 lymph nodes.
- She then had a wide excision and lymphadenectomy with removal of 12 lymph nodes
 - Wide Excision was negative for residual melanoma.
 - 12 lymph nodes negative for malignancy

Data Item	Value
Clinical T	cT2a
Clinical N	cN0
Clinical M	cM0
Clinical Stage	1B
Pathologic T	pT2a
Pathologic N	pN1a
Pathologic M	cM0
Pathologic Stage	3A

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Questions?

Quiz 2

Case Scenarios

●●● CE Certificate Quiz Survey

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- Phrase
- Link
 - <http://www.surveygizmo.com/s3/3282557/Staging-2016>



●●● Coming Up....

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- Collecting Cancer Data: Colon
 - 2/2/2017
- Boot Camp
 - 3/2/17



••• And Our Fabulous Prizes Go To...

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[Redacted Name] [Redacted Name]

[Redacted Name] [Redacted Name]

[Redacted Name] **Thank You!**

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