Explaining Blanks and X, Ambiguous Terminology and Support for AJCC Staging

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Overview

- Provide guidance to cancer registrars on key topics
  - Blank vs. X in registry data fields
  - Ambiguous terminology
  - Stage classification to use based on treatment provided
  - Guidelines from other sources
  - Information and questions on AJCC staging
Learning Objectives

• Recognize difference in definitions of blank and X

• Demonstrate correct usage of blank and X

• Employ critical thinking to terminology used

• Analyze physician terminology intent by multiple methods

• Determine stage classifications to apply by treatment choice

• Utilize appropriate guidelines

• Identify resources for AJCC staging
Registry Data Fields – Blank vs. X
Completing Registry Data Fields

• Registry data fields seen on software screen
  – CLINICAL T N M Stage Group
  – PATHOLOGIC T N M Stage Group

• Use appropriate c or p data fields
  – Based on what is needed to assign stage correctly
  – Follows AJCC staging rules

• Do NOT use just elements in that one line

• Match stage assigned by physician
  – According to AJCC rules
Blank vs. X

• AJCC defines X for T and N categories
  – Cannot be assessed

• Cannot use X for other situations
  – No surgical resection is NOT pTX pNX pM blank Stage 99

• Blank should be used when
  – No information is available in chart
  – Cannot be assigned a valid AJCC value
  – Patient not eligible for pathologic stage
Registry Data Fields - Examples

- Patient had bowel obstruction and went directly to surgery where colon cancer was found

- Physician assigned pathologic stage
  - pT4a pN2a cM0 Stage IIIC

- cT blank  cN blank  cM0    Stage group blank or 99
- pT4a      pN2a      pM blank  Stage group 3C

- Cannot assign clinical stage, cancer not known prior to definitive treatment
  - AJCC is stage group blank, but CoC requires non-blank value for clinical stage
- pM is blank because appropriate M is cM0
Registry Data Fields - Examples

• Patient had CT chest with LLL tumor and mediastinal nodes, mediastinotomy removed 4 nodes confirming N3 disease, concurrent chemoradiation will be given.

• Physician assigned clinical stage
  – T2a N3 M0 Stage IIIb (implied c, same as cT2a cN3 cM0)

• cT2a  cN3  cM0  Stage group 3B
• pT blank  pN blank  pM blank  Stage group blank

• Biopsy of nodes is part of staging workup, cN
• Cannot assign pathologic stage, no resection of primary
  – Not stage 99, implies criteria met but information unknown
• Clinical stage of in situ cancer of breast, with total mastectomy and no nodal resection

• $cT$ blank $cN0$ $cM0$ Stage group 0

• $pTis$ $pN$ blank $pM$ blank Stage group 0

• Can assign clinical and pathologic stage
  – Rules state in situ assigned $pTis$ $cN0$ $cM0$ for clinical and pathologic
    • $pTis$ for clinical stage means $cT$ is left blank
  – Rules state both clinical and pathologic stage 0
  – Rule put in place because nodes are usually not resected for in situ cancers
  – Meets breast criteria for pathologic classification
Registry Data Fields - Examples

• Clinical stage of in situ cancer of bladder with TURB and no cystectomy

• cT blank  cN0  cM0  Stage group 0
• pTis  pN blank  pM blank  Stage group blank

• Cannot assign pathologic stage
  – Bladder criteria of cystectomy has not been met
  – Common to not find invasive tumor on TURB
  – Do not use stage group 99, pathologic stage criteria not met
    • 99 implies criteria met but information unknown
  – Rules state that in situ assigned pTis cN0 cM0
Registry Data Fields - Examples

• Diagnostic workup includes biopsy of bone showing mets from breast ca, no breast resection

• cT1  cN1  cM blank  Stage Group 4
• pTblank  pNblank  pM1  Stage Group 4

• pM1 for clinical stage, biopsy was during workup
• pM1 is both clinical and pathologic stage IV according to AJCC rules
  – Case with pM1 may be grouped as clinical and pathologic stage IV regardless of c or p status of T and N
CoC FORDS Values – Blank, X, 88, 99

- T, N, and M data fields
  - Values allowed by FORDS
  - Further explanations from AJCC

- Blank indicates
  - No information in medical record
  - Do not know if any assessment was performed
  - Criteria not met for this stage classification so each category (T,N,M) is blank

- X indicates not assessed
  - T cannot be assessed
  - N cannot be assessed
  - Does not apply to M, if patient was examined it can be assigned
  - Criteria met for this stage classification so each category is valid value or X

- 88 indicates not applicable, not defined by AJCC
• Stage group data fields
  – Values allowed by FORDS
  – Further explanations from AJCC

  – Blank indicates
    • No information in medical record or
    • Criteria not met for pathologic staging
      – CoC does not allow blank for clinical staging

  – 99 indicates unknown, not defined by AJCC
    • 99 indicates T or N are unknown, and stage cannot be assigned
    • 99 indicates T, N, or M are not specific enough to assign stage
      – Example: T2 assigned when T2a or T2b needed to assign stage
    • CoC mandates non-blank for clinical stage group, use 99
    • Do not use 99 if pathologic staging criteria not met, use blank

  – 88 indicates not applicable, not defined by AJCC
Key Points for Blank & X

Does patient meet criteria for that stage classification?

- **Yes** – patient meets classification criteria
  - If physician could not assess T and/or N for the patient, and
  - Definitive information for T and N not in chart
  - Use TX and/or NX

- **Yes** – patient meets classification criteria
  - No information about diagnostic workup or resection pathology in chart
  - Do not use X
    - Implies physician did not assess or have info on patient’s T and/or N
  - Use blank
    - Indicates registrar could not find information in chart
Key Points for Blank & X

Does patient meet criteria for that stage classification?

• No – patient does NOT meet classification criteria
  – Do NOT use X
    • Indicates patient eligible for staging
    • Implies physician did not assess or have info on patient’s T and/or N
  – Must use blanks
    • Indicates patient did not meet classification criteria
Key Points for Blank & X

• X can only be used according to AJCC definitions

• Must use blanks if AJCC criteria for X is not met

• Remember MX does NOT exist

• Assigning cM0 only requires patient to have had H&P
  – Does not mean registrar must find H&P on chart
  – If physician suspects mets
    • It will be mentioned
    • Treatment plan will be different
Ambiguous Terminology
Ambiguous Terminology

- AJCC does NOT
  - Define ambiguous terminology
  - Mandate how words should be interpreted

- How to interpret words for cancer involvement
  - Review clinician’s statements
  - Treatment choices may indicate clinician’s impression
  - Review and analysis of entire case
    - Physical exam
    - Medical history of all other diseases
    - Symptoms
    - Imaging
    - Lab tests
    - Diagnostic procedures
    - All other available information

- Judgment call based on all aspects of patient’s care
Ambiguous Terminology Example

• Lung case
  – CT chest reports mediastinal adenopathy
  – Patient scheduled for LUL lobectomy

• Are the mediastinal nodes involved with cancer?

• Imaging analysis
  – CXR are not sensitive and enlarged nodes may be involved
  – CT, MRI, PET are very sensitive, could be infection, inflammation, immune system reaction, or cancer

• Treatment analysis
  – NCCN guidelines indicate surgery is not the primary therapy for known involvement of mediastinal nodes (N2)

• Decision: mediastinal nodes are NOT involved
Ambiguous Terminology Example

• Duodenum case
  – CT abd/pelvis reports duodenal tumor with extensive inflammation, exudate and adherent to other loops of small bowel
  – Patient scheduled for resection of tumor in duodenum

• Does adherence mean other bowel involved with cancer?

• Imaging and treatment analysis
  – Exudate is fluid leaking from blood vessels due to inflammation
  – Inflammation causing adherence, not tumor, if extensive adherence they would not resect just local tumor and not do more treatment, either more surgery or chemotherapy

• Decision: other small bowel are NOT involved
Stage Classification
Based on Treatment
Stage Classification Based on Treatment

- **Surgical Treatment**
  - Clinical
  - Pathologic

- **Systemic and/or Radiation ONLY**
  - Clinical

- **Neoadjuvant Therapy**
  - Clinical
  - yclinical (after systemic/radiation but before surgery)
  - ypathologic (after systemic/radiation AND surgery)

  - Can NEVER do pathologic after neoadjuvant therapy
  - Registrars do not have data field to record yc
Guidelines from Other Sources
CS Rules NOT Used for AJCC

• CS rules do not apply to AJCC
  – Underlying principles are similar
  – Detailed rules are not the same
CS Rules NOT Used for AJCC

- CS rules do not apply to AJCC
  - AJCC Clinical and pathologic based on
    - Different points in time
    - Specific criteria
  - Not exactly same as CS eval codes
CS Rules NOT Used for AJCC

• Rootstock – this is foundation or base of a plant

• Graft – plant that you want to grow
  – It would not grow or survive on its own
  – This plant needs a strong foundation or base
  – It is grafted onto a rootstock which provides strong foundation

• Example on next slide is
  – Left - Jacaranda tree = AJCC
    • Tree is all AJCC, rootstock and entire plant, no grafts
  – Right - Royal Poinciana = Collaborative Stage
    • Tree is EOD & Summary Stage grafted onto AJCC rootstock

• Trees are very different – they are not the same
AJCC and CS Are Not The Same

AJCC is the rootstock and entire tree

CS is EOD & Summary Stage grafted onto the AJCC rootstock
Other Sources Not Used for AJCC Staging

- Guidelines from other sources cannot be used for assigning AJCC stage

- Other sources not used for assigning AJCC stage
  - MPH
  - CS
  - FORDS (only use allowable codes, do not use ambiguous terms or any rules for assigning AJCC TNM)
  - SEER Program Coding Manual
  - Any manual that is not
    - AJCC 7th edition Cancer Staging Manual or Handbook
    - AJCC 2nd edition Cancer Staging Atlas

- Rules are valid only for publication to which they belong
Information and Questions on AJCC Staging
AJCC Web site

• https://cancerstaging.org

• Cancer Staging Education menu includes
  – Articles
    • 18 articles on AJCC staging in various medical journals
  – Resources
    • Staging Moments – 15 case-based presentations in cancer
      conference format to promote accurate staging with answers
      and rationales
  – Webinars
    • 14 free webinars on staging rules and some disease sites

• Watch for education plans and content in the future
AJCC Cancer Staging Manual and Atlas

Order at http://cancerstaging.net
CAnswer Forum

• Submit questions to AJCC Forum
  – Located within CAnswer Forum
  – Provides information for all
  – Allows tracking for educational purposes

• http://cancerbulletin.facs.org/forums/
Summary
Summary

- Discriminate between blank and X usage
  - Assign X according to AJCC rules

- Apply critical thinking when interpreting physician’s words
  - Do not use registry ambiguous terminology lists
  - Take into account available information

- Recognize appropriate stage classifications for each case
  - Treatment choices will identify eligible stage options

- Differentiate guidelines available for registrars

- Identify resources
  - Information and guidance
  - Obtain answers to questions
Thank you

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