2016 AJCC TNM & Cancer Stage Review

2016-2017 FCDS WEBCAST SERIES
SEPTEMBER 15, 2016
Steven Peace, CTR

AJCC Cancer Staging Instruction for Registrars
https://cancerstaging.org/CSE/Registrar

CDC & Florida DOH Attribution
“We acknowledge the Centers for Disease Control and Prevention, for its support of the Florida Cancer Data System, and the printing and distribution of the materials for the 2015-2016 FCDS Webscast Series under cooperative agreement DP003872-03 awarded to the Florida Department of Health. The findings and conclusions in this series are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention”.

FCDS would also like to acknowledge the Florida Department of Health for its support of the Florida Cancer Data System, including the development, printing and distribution of materials for the 2015-2016 FCDS Webscast Series under state contract C5065101. The findings and conclusions in this series are those of the author(s) and do not necessarily represent the official position of the Florida Department of Health.

A special thanks and acknowledgement to the staff at the AJCC for providing slides with critical content used in this presentation and available in full on the AJCC website www.cancerstaging.org

Outline
- Introduction to AJCC Cancer Staging
- AJCC Cancer Staging Manual - Purchase and Ordering Information
- AJCC Cancer Staging Manual - Organization, Chapter Outline, Contents
- Using the AJCC Cancer Staging Manual
- 2016 Coding Instruction Updates
- 2016 Category Code Updates
- Ambiguous Terminology Clarification
- Correct Use of “X”, “blank”, “88” and “99”
- AJCC Stage/Prognostic Group
- 2016 AJCC TNM Edits
- AJCC Curriculum for Registrars
- AJCC Disease Site Webinars
- AJCC Cancer Staging Manual, 8th edition
- Staging References and Resources
- Questions
Introduction

The AJCC Cancer Staging System is an "anatomic staging system".

The AJCC Cancer Staging Manual, Handbook and Staging Atlas, prepared by the American Joint Committee on Cancer, are used by physicians, cancer registries, and other allied health care professionals throughout the world to facilitate the uniform description and reporting of cancer staging for most neoplastic diseases.

Proper classification and staging is essential for physicians to assign proper treatment, evaluate results of management and clinical trials, and to serve as the standard for local, regional, and international reporting on cancer incidence and outcomes.

As knowledge of cancer biology expands, cancer staging must incorporate these advances. This is why the non-anatomic prognostic factors were added in 2010.

The Seventh Edition of the AJCC Cancer Staging Manual brings together all the currently available information on staging of cancer at various anatomic sites and incorporates newly acquired knowledge on the etiology and pathology of cancer—supplemented by selected molecular markers.

---

### Edition Publication Year Effective Dates

<table>
<thead>
<tr>
<th>Edition</th>
<th>Publication Year</th>
<th>Effective Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1977</td>
<td>1978-1983</td>
</tr>
<tr>
<td>2</td>
<td>1983</td>
<td>1984-1988</td>
</tr>
<tr>
<td>5</td>
<td>1997</td>
<td>1998-2002</td>
</tr>
<tr>
<td>6</td>
<td>2002</td>
<td>2003-2009</td>
</tr>
<tr>
<td>7</td>
<td>2009</td>
<td>2010-2016</td>
</tr>
<tr>
<td>8</td>
<td>2016</td>
<td>2017-</td>
</tr>
</tbody>
</table>

---

Purchase and Ordering Information

  - COST: $64.95
  - ISBN: 978-0-387-88440-0

- Required - Florida Mandate
  - FCDS will not purchase
  - Facility may purchase
  - Individual may purchase

- Also Required to Purchase 8th Edition in 2016-2017
  - https://cancerrstaging.org
  - http://springer.com
  - 1-800-SPRINGER

Chapter Outline and Contents

AJCC Cancer Staging Manual, 7th ed. – Chapter 1, Table 1.10, p.14

AJCC Cancer Staging Manual, 7th ed. – Chapter 52, Retinoblastoma, p.561
Chapter Outline and Contents

Identifying Neoplasms by Chapter

- Verify Primary Site against list of ICD-O-3 Topography Codes
- First Page of Each Chapter includes a list of ICD-O-3 Site Codes
- Verify Histopathologic Type against list of ICD-O-3 Histology Codes
- First Page of Many Chapters includes a list of ICD-O-3 Histology Codes
- When there is not a list of Histology Codes, go to end of chapter and review the section entitled “Histopathologic Type” to confirm histology
- If cannot verify site and/or histology then go to the Alphabetic Index at the back of the manual to find site/histology combination
- If there is not a corresponding AJCC Staging Chapter, then “NA”
Neoplasms Not in the AJCC Manual

- Not all types of cancer are AJCC-stage able.
- Use the Primary Site Codes listed at the beginning of each chapter in the AJCC Cancer Staging Manual. Use the List of Histopathologic Types listed in each chapter are toward the end of each chapter and are used in a guide to indicate the cancer types which can be AJCC-staged using that staging scheme.
- Histologic Types listed as exclusions or not listed - because they are exclusions for each individual chapter should NOT be AJCC-staged using that chapter.
- Note: Some chapters are specifically limited to certain cancer types only with a specific anatomic site (such as skin melanomas). Some chapters are specifically limited to certain histologic types 9590-9729 regardless of primary site. The site and/or histology limitation does not limit coding for the primary site here.

Neoplasms Not in the AJCC Manual

- Pediatric cancers are not included in the AJCC Cancer Staging Manual with only a few exceptions. See below for exceptions.
- These cancers would ordinarily be considered un-stage able in this system.
- However, if a physician has staged a pediatric case using TNM (clinically or pathologically), then this staging may be coded and unknown codes should be used for any unspecified fields.
- Exceptions: Musculoskeletal Sites (sarcoma), Lymphoid Neoplasms, Retinoblastoma, and Other Neoplasms of Primary Site and/or Histology where a relevant chapter that would include pediatric cases exists.
Neoplasms Not in the AJCC Manual

- When the primary site is not clear, not specified or unknown.
- AJCC staging of the cancer should be based on "reasonable clinical certainty" of a primary site identification. You cannot assign TNM to C80.9 or C76.* cases.
- When there is not "reasonable clinical certainty" indicating one primary site, then the AJCC staging should be "not applicable" (as for an unknown primary site).
- When a case is assigned a Primary Site Code of "body system, NOS" that would also include sub-sites such as "colon, NOS" versus "sigmoid colon" the case cannot be staged due to lack of specificity of tumor origin or degree of cancer spread from that NOS primary site at diagnosis, including regional lymph nodes.
- Exception: Histology-based chapters such as "lymphoid Neoplasms"

Read the Chapter Introduction, Anatomy and Rules Before You Start

- These 3 sections are too often overlooked or skimmed. This is where most of your questions will be answered...not in the coding section.
- The Rules for Classification instruct you as to which diagnostic and staging tests, imaging, biopsy, sentinel or excised nodes, etc. can and should be used when assigning clinical or pathologic TNM.
- Sometimes the Cancer Staging Form and/or the AJCC Chapter includes anatomic drawings to help clarify local/regional anatomy.
- Always review the Prognostic Features as this will help you identify which laboratory tests, symptoms, or other factors are important for staging.

2016 TNM Coding Instruction Update

- A New Format and Appearance for T, N, and M Category Codes
  - Old Format:
    - Clinical Stage – T1N0M0 Stage IA
    - Pathologic Stage – pT1N0M0 Stage IA
  - New Format:
    - Clinical Stage – cT1 cN0 cM0 Stage IA
    - Clinical Stage – pT1 cN0 cM0 Stage IA
Stage Classifications – Points in Time

- Stage can be defined at specified (different) points in time
  - Clinical – before any treatment has been given
  - Pathologic – pathologic findings at time of surgical resection
  - Post-Treatment – after neoadjuvant therapy – clinical and/or pathologic evidence of response to presurgical treatment(s)
  - Retreatment – recurrence after disease free interval
  - Autopsy – unsuspected prior to death, incidental finding
Clinical Stage - Pretreatment Stage

- Pretreatment or Clinical Stage is Stage at Time of Diagnostic Workup
- Patient Medical History
- Physical Examination
- Diagnostic Imaging
- Endoscopy
- Biopsy of primary site
- Biopsy of single node or sentinel nodes
- Biopsy of metastatic sites
- Exploratory Surgery
- Other relevant lab tests, biomarker tests, or examinations
Pathologic Stage

- Must meet chapter-specific criteria for surgical resection to assign
- Includes all of the clinical stage information from clinical stage, plus
  - Observations at time of surgical resection from operative report
  - Pathologic Examination of surgically resected primary specimen
  - Pathologic Examination of surgically resected regional lymph nodes
  - Pathologic Examination of biopsy or resection of metastasis

Post-Treatment Stage

- Documents measured response to initial (neoadjuvant) therapy(s)
  - Complete Response
  - Partial Response
  - No Response
  - Progression
- May be clinical measurement only - yc
  - Based on post-treatment imaging, physical examination, biopsy
- More often it is post-treatment pathologic stage – yp
  - Based on post-treatment surgical resection of primary site and regional nodes
  - Must meet chapter-specific criteria for surgical resection
- What about pre-treatment with less than 1 month of endocrine therapy including various hormones (prostate, breast, thyroid)? Not Neoadjuvant Tx...
What is the "yc" prefix?

When will "yc" be allowed?

2016 AJCC TNM Coding Instruction Updates

2016 AJCC TNM Category Code Updates

2016 Valid Codes for "T" Category

2016 Clinical "T" Codes

2016 Pathologic "T" Codes
Use of Unknown "X" Designation

- X used when:
  - Information is unknown for specific category
  - Clarification of unknown
    - Unknown to physician providing patient care
    - Not unknown to one physician, but known to other physicians
    - Not unknown to registrar, but lack of documentation in chart
  - Misuse of X from registrar, lacking chart information
  - Can alter code analyses
  - Can lead to:
    - Incorrect analyses
    - Wrong conclusions about national status of patient care

Use of Unknown "X" Designation

- TX and/or NX cases usually cannot have stage assigned
- X category only used for T and N
- When absolutely necessary
- Exception examples (not exhaustive list of every option)
  - Any T and/or Ax N0 M0 with M1 in stage IV
  - Any T4b N2 M1 - T4b N3 M1 - AJCC 7th Edition
  - Category reclassified to N1 and only one stage group
  - Low risk of N0 and T1 or T2 or T3 and N0 or N1
  - T4b N3 M0 in stage IV

Use of Unknown "X" Designation

- MX is NOT valid option for AJCC staging
- MX eliminated from AJCC 7th Edition
- Always should be used unless clinical or pathologic evidence of metastases
- Pathologists should not use MX:
  - OP-OP should not comment on MX unless MX is present
  - Pathologists cannot assign stage group unless case is MX
Key Points for Blank & X:

- X can only be used according to AJCC definitions
- Must use blank if AJCC criteria for X is not met
- Remember MX does NOT exist
- Assigning MX only requires patient to have had H&P
  - Does not exist unless exam found H&P on chart
- FM not assigned if not exam on chart
- Treatment plan might not be different

Blank vs. X:

- AJCC defines T for T and N categories
- Cannot be assessed
- Cannot use X for other situations
  - No surgical resection is NOT T5R MX/MXblank Stage 95
- Blank should be used when
  - No information is available on chart
  - Cannot be assessed
  - Cannot be recommended
  - Patient not eligible for clinical or pathologic stage
  - T categories are blank
  - Stage group is blank or 95

CoC FORDS Values – Blank, X, 88, 99:

- T, N, and M data fields
  - Tumor allowed by CoC
    - Further exploration from AJCC
  - Blank indicates
    - No information or missing record
    - Do not have if any examination was performed
    - Complete absence of the stage classification on each category
  - X indicates not assessed
    - Cannot be assessed
    - Cannot be recommended
    - Cannot be added
    - Does not exist if T value was assessed or T value is valid
  - 88 indicates not applicable, not defined by AJCC
  - 99 indicates not applicable, not defined by AJCC
<Blank>, 88, 99, or “X”

Composition of Stage Groupings

Standard Composition of Stage Groupings

- Clinical Stage Group
  - cT
  - cN
  - cM
- Pathologic Stage Group
  - pT
  - pN
  - pM
- Postneoadjuvant Therapy Stage Group
  - pT"
Carcinoma In Situ - Exceptions

CIS Exception to Stage Grouping

- Carcinoma in situ (CIS) definition
- Does not involve any structure that allows tumor spread
- Only primary site
- Regional nodes not involved
- Distant sites
- CIS exception to stage grouping principles
  - 264, N0 category
  - 290-390 category
  - Caution for pathologic stage 0
  - Requires support from histologic analysis
  - Cannot assess based on small sample
  - Potential sampling error if less than 100 cells

Source: Louise Currence, CTR (reviewed by Donna Gress, CTR)

2016 AJCC TNM EDITS

- Date of Diagnosis
- Use of 'c' or 'p' prefix
- Comparison to Surgery
- Comparison to Tumor Size Summary
- Comparison of Stage Group to T, N, and M Values
- No Allowance for Undefined Parent Codes
- Comparison to New Field, Tumor Size Summary
- Comparison of Stage Group to T, N, and M Values

2016 AJCC TNM EDITS
MORE COMPLEX EDITS

- Date of Diagnosis
- Use of 'c' or 'p' prefix
- Comparison to Surgery
- Comparison to Tumor Size Summary
- Comparison to New Field, Tumor Size Summary
- Comparison of Stage Group to T, N, and M Values
- No Allowance for Undefined Parent Codes
- Comparison to New Field, Tumor Size Summary
- Comparison of Stage Group to T, N, and M Values
AJCC Presentations for Registrars

https://cancerstaging.org/CSE/Registrar/Pages/Presentations.aspx

AJCC Presentations for Registrars

https://cancerstaging.org/CSE/Registrar/Pages/Presentations.aspx

AJCC Disease Site Webinars

- AJCC 7th Edition Chapter Specific
- Slides and Presentations by AJCC Staff
- Clarifications for Registrars and "TNM Cliffs Notes"
  - Focus: uniqueness, differences, exceptions, or special concerns
- Each webinar will include:
  - Overview and Learning Objectives
  - Anatomy Affecting Stage
  - Classification Issues
  - Assigning T, N, M, Stage Group
  - Information & Questions on AJCC Staging and Summary
- 5 Disease Site webinars will include:
  - Melanoma
  - Lung
  - Breast
  - Colorectal
  - Prostate
Purchase and Ordering Information

- C005 5339.99
- ISBN: 978-3-319-40617-6
- 5429 pages
- 512 illustrations
- 387 color illustrations
- Required - Florida Mandate
  - FCDS will not purchase
  - Facility may purchase
  - Individual may purchase
- https://cancerstaging.org
- http://springer.com
- 1-800-SPRINGER

Staging References and Resources

Information and Questions on AJCC Staging

Staging References and Resources

AJCC Web site

- https://cancerstaging.org
- Cancer Staging Education Registrar menu includes
  - Training in Everything - stage classification (multicentre guide)
  - Presentations
  - Self-study or group before materials
- AJCC's guide to Staging AJCC Enumeration and Reports for Staging
- AJCC, T.A.C. (with Category Schemes for Reporting) Data Items, 2016
- AJCC Curriculum for Registrars
  - A free self-study module of increasing difficulty on staging topics
  - Just choose several areas of interest, learning sessions online, self-paced

Staging References and Resources

AJCC Web site
- [https://cancerstaging.org](https://cancerstaging.org)
- Cancer Staging Education: Physician menu includes
  - Articles
  - Webinars
  - 10 facts on cancer staging sites and some disease sites
- Cancer Staging Education: General menu includes
  - Staging Moments
  - 10 web-based presentations in cancer conference format to promote accurate staging with resources and substrates

Staging References and Resources

AJCC Cancer Staging Manual and Atlas
Order at [http://cancerstaging.net](http://cancerstaging.net)

Staging References and Resources

CAnswer Forum
- Submit questions to AJCC Forum
- Located within CAnswer Forum
- Provides information for all
- Allows trading for educational purposes
- Special AJCC sub-forums for staging education questions
- [http://cancerbulletin.facs.org/forums/](http://cancerbulletin.facs.org/forums/)

Staging References and Resources
Staging References and Resources

Thank you

Questions