


AJCC 8th Edition Staging

Overview

Donna M. Gress, RHIT, CTR
Technical Editor, AJCC Cancer Staging Manual
First Author, Chapter 1: Cancer Staging Principles



AJCC
American Joint Committee on Cancer
Validating science. Improving patient care.

No materials in this presentation may be repurposed in print or online without the express written permission of the American Joint Committee on Cancer. Permission requests may be submitted at cancerstaging.org.

This webinar is sponsored by

The Centers for Disease Control and Prevention

Supported by the Cooperative Agreement Number DP13-1310


The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

National Center for Chronic Disease Prevention and Health Promotion
National Program of Cancer Registries



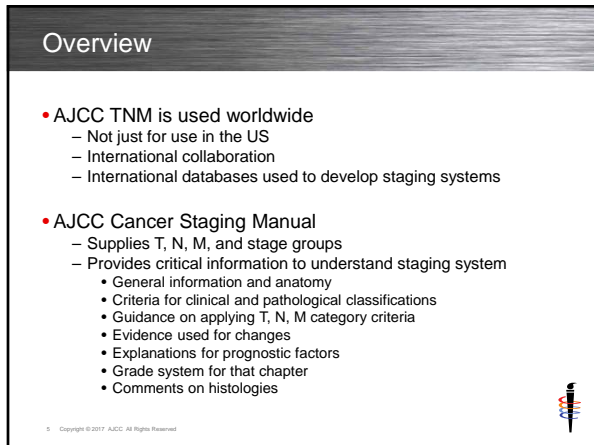
Learning Objectives

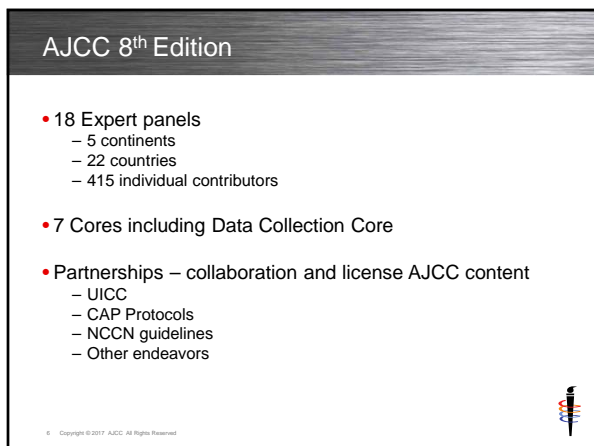
- Review development of AJCC 8th Edition
- Outline Chapter 1 – Principles of Cancer Staging
- Explain fundamental changes to disease site chapters
- Summarize new and changed disease site chapters



3 Copyright © 2017 AJCC. All Rights Reserved









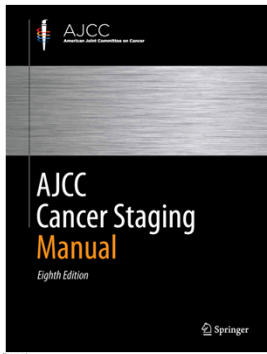
Philosophy

- Levels of evidence for key information ensure transparency
- Changes must be based on data
- Data sources
 - NCDB
 - SEER
 - Multi-institutional databases
 - International databases
 - Publications



7 Copyright © 2017 AJCC. All Rights Reserved.

AJCC Eighth Edition




8 Copyright © 2017 AJCC. All Rights Reserved.

8th Edition Dedication

Eighth Edition Dedication

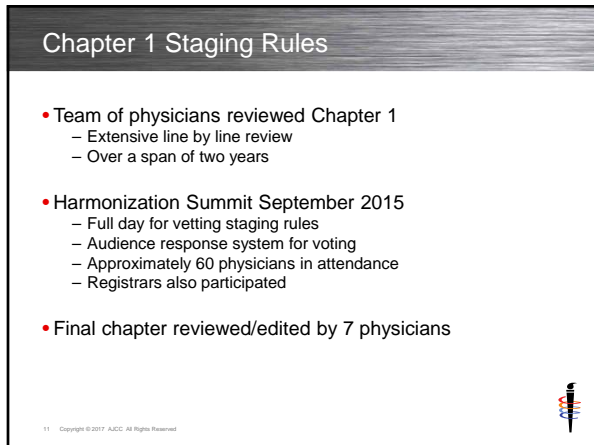
The AJCC Cancer Staging Manual, 8th Edition is dedicated to all CANCER REGISTRARS in recognition of their:

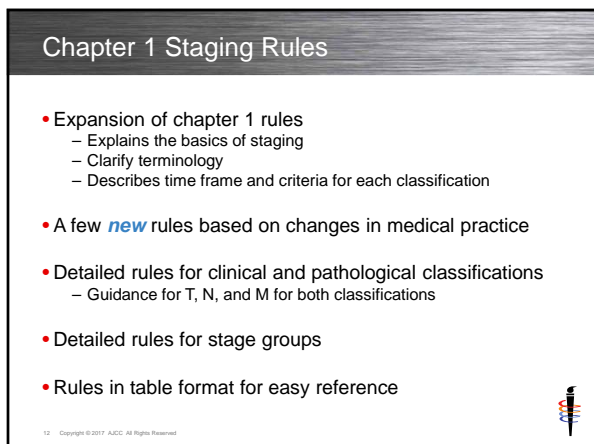
- *education and unique commitment to the recording and maintenance of data that are so vital for the care of the cancer patient;*
- *professionalism in the collection of factors that are fundamental to sustaining local, state, and national cancer registries;*
- *dedication to the cataloging of information crucial to cancer research;*
- *leadership, support, and promulgation of the principles of cancer staging;*
- **AND THEIR POSITIVE IMPACT ON CANCER PATIENT OUTCOMES.**



9 Copyright © 2017 AJCC. All Rights Reserved.








Terminology

- Pathological is new classification term for 8th edition
 - Previous editions: pathologic staging
 - 8th edition: changed to pathological staging
- Emphasize T, N, M are categories
 - Example: T category, not T stage
 - Subcategories
 - Ensured each subcategory has a main category in the table
- New term for stage groups
 - 7th edition: anatomic stage/prognostic groups
 - 8th edition: prognostic stage groups


13 Copyright © 2017 AJCC. All Rights Reserved



Chapter 1 - Structure

- Introduction
 - Role of managing physician in assigning stage
- AJCC TNM staging system
 - Introduction
 - Classifications
 - Categories and subcategories
 - Prognostic stage groups
 - Unknown designation: X
- General staging rules
 - Guiding principles
 - Table format


14 Copyright © 2017 AJCC. All Rights Reserved



Chapter 1 - Structure


- Stage classifications
 - General information and criteria
 - Table format
- Clinical
 - [Timeframe and criteria](#)
 - Detailed rules for T, N, and M
- Pathological
 - [Timeframe and criteria](#)
 - Detailed rules for T, N, and M
- Timeframe and criteria only
 - Posttherapy or Post Neoadjuvant Therapy
 - Recurrence or retreatment
 - Autopsy

15 Copyright © 2017 AJCC. All Rights Reserved



Chapter 1 - Structure


- AJCC Prognostic stage groups
 - Rules for stage group assignment
 - Table format
- Additional staging descriptors and guidelines
 - N suffixes include
 - Sentinel nodes (sn)
 - FNA or core biopsy (f)
 - Multiple primary tumors (m)
 - Guidance on synchronous and metachronous primaries
 - Unknown primary site T0



16 Copyright © 2017 AJCC. All Rights Reserved.


Chapter 1 - Structure

- Additional staging descriptors and guidelines
 - Histologic codes for staging
 - Grade
 - General rules
 - Cancer registry documentation
 - LVI
 - Coding structure with new options
 - Residual tumor and surgical margins
 - Guidance and coding instructions
 - Response to neoadjuvant therapy assessment
 - Guidance for pathologists in determining response




17 Copyright © 2017 AJCC. All Rights Reserved.

Fundamental Changes to Disease Site Chapters



New and Revised Chapters


- New AJCC staging based on
 - Sites or subsites
 - Histologies
- Split current chapters in some sites, based on
 - Anatomic subsites
 - Differences in staging due to histology
- 83 chapters in 8th edition
 - 7th edition had 57
- Chapters updated to keep pace with medical advances



19 Copyright © 2017 AJCC. All Rights Reserved

Reorganization of Chapters


- Organization of chapters by body system or function
 - Part I through Part XVIII
- Examples
 - Thyroid moved to endocrine system
 - GIST moved to soft tissue sarcoma
 - Urinary tract is its own section
 - Includes both males and females



20 Copyright © 2017 AJCC. All Rights Reserved

New Features

- Levels of Evidence
- Imaging
- Risk Assessment Models
- Recommendations for Clinical Stratification
- Prognostic factors
 - Required for stage grouping
 - Recommended for clinical care
 - Emerging factors (available online only)




21 Copyright © 2017 AJCC. All Rights Reserved

Imaging Section

- Imaging section in each chapter
- Guidance for physicians when ordering tests
- Information for radiologists on reporting results
 - Structured reporting is being promoted
- Aids communication for assigning stage


22 Copyright © 2017 AJCC. All Rights Reserved



Factors and Registry Data Collection

- Most factors similar to 7th edition
- Prognostic factors distinguished by their purpose
 - Prognostic factors required for stage grouping
 - Categories assigned along with TNM
 - Additional factors recommended for clinical care
 - Important for physicians in care of their patients
 - Emerging factors
 - Latest information, will be reevaluated as evidence grows
- Registry data collection variables
 - Recommended by physician experts
 - Guidance for surveillance community


23 Copyright © 2017 AJCC. All Rights Reserved



Histology Code Changes


- WHO Classification of Tumors used for 8th Edition
 - Defined list of histology codes and terms included in chapter
- Histology code
 - Indicates prognostic staging is only for those histologies
 - Does not indicate histology may not occur in that disease site
 - Does not include terms no longer in common usage

24 Copyright © 2017 AJCC. All Rights Reserved



Histology Code Changes

- Histology codes
 - No longer range of ICD-O-3 histologies
 - Previously were inclusive of all histologies common in registries
- Discussions ongoing with SEER
 - Regarding MPH rules
 - Guidance provided by AJCC experts
 - Example: colon cancer needs to indicate histology driving the prognosis, not the fact it arose in a polyp




25 Copyright © 2017 AJCC. All Rights Reserved

New and Changed Disease Site Chapters



New Paradigms


- Mediating variable affecting the cancer and staging
- Separate stage groups for post neoadjuvant therapy staging
- Based on specific anatomic sites and subsites
- Unknown primaries with nodal involvement
- Inclusion of staging for sites not in previous editions



27 Copyright © 2017 AJCC. All Rights Reserved

New Chapters


- New disease site chapters for staging
- Head and Neck
 - Cervical Lymph Nodes & Unknown Primary
 - HPV-Mediated (p16+) Oropharynx Cancer
 - Cutaneous Squamous Cell Carcinoma of the Head and Neck
- Thorax
 - Thymus
- Endocrine System
 - Parathyroid
 - Adrenal Neuroendocrine Tumors
- Hematologic Malignancies
 - Leukemia



28 Copyright © 2017 AJCC. All Rights Reserved.

Chapter Changes


- Split chapters resulting in some new staging
- Pancreas
 - Exocrine Pancreas – Hepatobiliary System
 - Neuroendocrine Tumor of Pancreas – Neuroendocrine Tumors
- Neuroendocrine Tumors
 - Neuroendocrine Tumors of the Stomach
 - Neuroendocrine Tumors of the Duodenum and Ampulla of Vater
 - Neuroendocrine Tumors of the Jejunum and Ileum
 - Neuroendocrine Tumors of the Appendix
 - Neuroendocrine Tumors of the Colon and Rectum
 - Neuroendocrine Tumors of the Pancreas



29 Copyright © 2017 AJCC. All Rights Reserved.

Chapter Changes


- Split chapters or sections resulting in some new staging
- Bone – one chapter, multiple staging sections
 - Appendicular Skeleton/Trunk/Skull/Face
 - Pelvis
 - Spine
- Soft Tissue Sarcoma
 - Introduction to Soft Tissue Sarcoma
 - Soft Tissue Sarcoma of Head and Neck
 - Soft Tissue Sarcoma of Trunk and Extremities
 - Soft Tissue Sarcoma of Abdomen and Thoracic Visceral Organs
 - Soft Tissue Sarcoma of Retroperitoneum
 - Soft Tissue Sarcoma – Unusual Histologies and Sites



30 Copyright © 2017 AJCC. All Rights Reserved.

Chapter Changes


- Split chapters – may be in different disease systems
- Head & Neck Pharynx
 - Nasopharynx
 - HPV-Mediated (p16+) Oropharynx
 - Oropharynx (p16-) and Hypopharynx
- Appendix
 - Appendix – Lower Gastrointestinal Tract
 - Neuroendocrine Tumors of Appendix – Neuroendocrine Tumors
- Endocrine System Thyroid
 - Thyroid – Differentiated and Anaplastic
 - Thyroid – Medullary



31 Copyright © 2017 AJCC. All Rights Reserved

Chapter Changes

- Merged chapters
 - Ovary, Fallopian Tube, and Primary Peritoneal Carcinoma
- Deleted chapters
 - Cutaneous Squamous Cell Carcinoma and Other Cutaneous Carcinomas




32 Copyright © 2017 AJCC. All Rights Reserved

Staging Changes



Head and Neck


- **Cervical Nodes and Unknown Primary**
 - New criteria for extranodal extension (ENE)
 - Extranodal extension designated as ENE(+) or ENE(-)
 - Occult primary tumors (unknown primary) are T0
 - If EBV-related stage with nasopharynx
 - If HPV-related stage with oropharynx
 - All other cases use this chapter
- **HPV-mediated (p16+) Oropharyngeal Cancer**
 - Test utilized is p16 (cyclin-dependent kinase inhibitor 2A)
 - p16+ staged with this chapter
 - p16- staged with Oropharynx (p16-) and Hypopharynx chapter
- **Cutaneous Squamous Cell Ca of Head & Neck**
 - Staging system does not change reportability requirements



34 Copyright © 2017 AJCC. All Rights Reserved

Upper Gastrointestinal Tract


- **Esophagus & Esophagogastric Junction**
 - Different stage group tables for clinical, pathological, ypathological
 - Change in tumor location criteria
 - Change in proximal stomach location for EGJ tumors
- **Stomach**
 - Different stage group tables for clinical, pathological, ypathological
 - Change in proximal stomach location for EGJ tumors



35 Copyright © 2017 AJCC. All Rights Reserved

Lower Gastrointestinal Tract


- **Colon and Rectum**
 - Histology codes do not include polyp origin
 - Histology driving prognosis utilized
 - Discussions with SEER for MPH rules
- **Anus**
 - Lesions overlying perineal body are perianal or vulvar
 - Perianal are staged with this chapter
 - Anatomical illustrations for perianal vs skin



36 Copyright © 2017 AJCC. All Rights Reserved

Neuroendocrine Tumors


- Well differentiated is not the grade
 - It is histologic type
- NET may be Grade 1, Grade 2, or Grade 3
 - Most common is G1 and G2
 - Rare well differentiated NET G3 are included
- Grade based on
 - Mitotic count
 - Ki-67 index



37 Copyright © 2017 AJCC. All Rights Reserved

Thorax


- Lung
 - New designations to specify type of *in situ*
 - New size cut points
 - New T1mi
 - Tables with criteria for multiple tumors vs separate tumors
 - Revisions and new M1 subcategories



38 Copyright © 2017 AJCC. All Rights Reserved

Bone and Soft Tissue Sarcoma

- Bone
 - T category by type of bone
 - Appendicular skeleton, trunk, skull, facial bones
 - Spine
 - Pelvis
 - Must assign grade according to AJCC grade table
- Soft tissue sarcoma
 - Separate chapters based on site and/or histology
 - GIST chapter in this section




39 Copyright © 2017 AJCC. All Rights Reserved

Skin

- Merkel cell carcinoma
 - Rule changes for cN category
 - Critical to indicate sentinel nodes only
 - Different stage groups for clinical and pathological
- Melanoma
 - New size cut points for T category
 - Mitotic rate no longer used
 - Redesigned stage tables
 - Different stage groups for clinical and pathological


40 Copyright © 2017 AJCC. All Rights Reserved



Breast

- Two breast stage group tables: anatomic & prognostic
- Anatomic stage group
 - Only in global regions where biomarkers tests not routinely available
- Prognostic stage group
 - Used in countries where biomarker tests routinely performed
- Cancer registries **must** use Prognostic Stage Group table
 - If biomarkers not available, case reported as unstaged
 - T, N, M information assigned, but registry stage group is 99
- Lobular carcinoma *in situ* **not** staged
 - Does not affect reportability – ask your standard-setter


41 Copyright © 2017 AJCC. All Rights Reserved



Male Genital Organs


- Prostate
 - Grade Group
 - WHO and International Society of Urologic Pathologists (ISUP)
 - Formalized changes to Gleason scoring
 - Adoption of prognostically important Grade Groups
 - Table in AJCC chapter
 - No pT2 subcategories

42 Copyright © 2017 AJCC. All Rights Reserved



Endocrine System


- Thyroid Differentiated and Anaplastic
 - Differentiated
 - New age cut point <55 or ≥55
 - Anaplastic
 - New T categories



43 Copyright © 2017 AJCC. All Rights Reserved


Hematologic Malignancies

- Hodgkin and Non-Hodgkin Lymphomas
 - Lugano
 - SLL/CLL now uses Lugano and Rai
- Plasma Cell Myeloma
 - RISS staging
- Leukemia
 - Prognostic factors required for clinical care



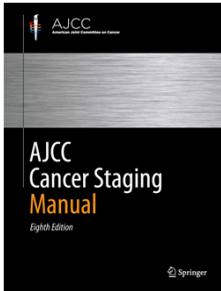
44 Copyright © 2017 AJCC. All Rights Reserved

Information and Questions on AJCC Staging



AJCC Web site


- <https://cancerstaging.org>
- Ordering information
 - Cancerstaging.net
- General information
 - Education
 - Articles
 - Errata



46 Copyright © 2017 AJCC. All Rights Reserved

CAnswer Forum

- Submit questions to AJCC Forum
 - NEW 8th Edition Forum
 - 7th Edition Forum will remain
 - Located within CAnswer Forum
 - Provides information for all
 - Allows tracking for educational purposes
- <http://cancerbulletin.facs.org/forums/>




47 Copyright © 2017 AJCC. All Rights Reserved

Summary



Summary


- 8th edition is a significant step forward
- Education planned for physicians and registrars
- Significant disease site changes will be communicated
- AJCC Web site provides roadmap for information
- Congratulations to Cancer Registrars on 8th edition dedication




40 Copyright © 2017 AJCC. All Rights Reserved.

Thank you

Donna M. Gress, RHIT, CTR
Technical Editor AJCC Cancer Staging Manual
First Author, Chapter 1: Cancer Staging Principles



AJCC
American Joint Committee on Cancer
Validating science. Improving patient care.



633 N. Saint Clair, Chicago, IL 60611-3211
cancerstaging.org

No materials in this presentation may be repurposed in print or online without the express written permission of the American Joint Committee on Cancer. Permission requests may be submitted at cancerstaging.org.

This webinar is sponsored by

The Centers for Disease Control and Prevention

Supported by the Cooperative Agreement Number DP13-1310

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



National Center for Chronic Disease Prevention and Health Promotion
National Program of Cancer Registries
