# AJCC Cervix Uteri Version 9 Cancer Staging System

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# **Version 9 Cervical Cancer Protocol Format**



#### **Protocol Format**

#### AJCC updated to protocol format

- Same information as previous AJCC chapters which has 3 key components:
- 1. Staging report format which is key information for managing physician to document
- 2. Explanatory notes which provide guidance
- 3. Supplemental information

#### Why change?

- Easier for users to find what they need ... just when they need it
- Users wanted a synoptic styled report format
- Synoptic reports are proven to increase accurate and complete documentation



# Diving deeper into the key components

#### 1. Staging report format

- Provides all of the key information
- Includes new items
  - Modalities used for staging
  - Clinical staging and workup
  - Pathological staging and workup

#### 2. Explanatory notes

- Provide the same details found in previous AJCC chapters
- Includes images for primary site, nodal map, and T N M categories

#### 3. Supplemental information includes general staging rules



# **NEW** Features – Clinical Staging and Workup Table

DIAGNOSTIC WORKUP	DESCRIPTION	SPECIFIC CONTRIBUTION TO TNM CATEGORY	
Clinical exam			
Colposcopy	Size, local spread	T1a-T1b	
Biopsy	Microscopic confirmation	T1a-T4	
Endocervical curettage	Microscopic confirmation	T1a-T1b	
Conization, cone biopsy Loop electrosurgical excision procedure (LEEP)	Microscopic confirmation	T1a1 - may be treatment	
Inspection and palpation	Visible and palpable lesions	T1b-T4	
Exam under anesthesia (EUA) Cystoscopy Proctoscopy	Size, spread to vagina, parametrium, or pelvic wall Bladder or rectum mucosa involvement	T1b-T4	
Imaging			
CT	Chest/abdomen/pelvis for T1b-T4	T1b-T4, N0-2; T1a not seen on imaging	
PET/CT (whole body)	Base of neck to mid-thigh	T1b-T4, N0-2, M0-1	
MRI	Pelvis – define extent of local disease	T1b-T3b, N0-1; T1a not seen on imaging	
US	Pelvis – define extent of local disease	T1b-T3b, N0-1; T1a not seen on imaging	
Intravenous urography (IVP)	Hydronephrosis	T3b	
X-ray lungs, skeleton	Pulmonary metastasis	M1 distant metastasis	
Labs			
p16	Immunohistochemistry (IHC), microscopy	Histopathological classification	

#### **Contains following elements**

- Common diagnostic workup
- Description of the evaluation
- How each workup contributes to TNM category for staging

The workup list is made up of workup options, *not* required workup



# **NEW Features – Pathological Staging and Workup**

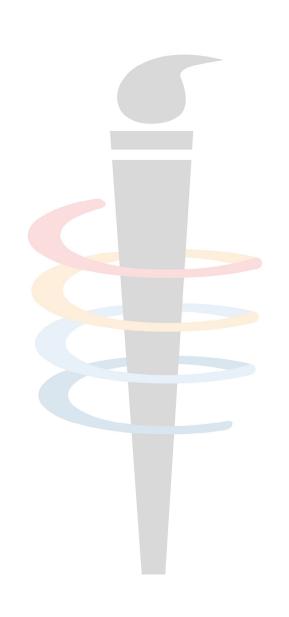
CATEGORY	SPECIMEN	PATHOLOGIST	MANAGING PHYSICIAN (Stage Documented by Cancer Registry)	
General Information		Assignment of pTNM categories are based on surgical resection specimen, as well as intraoperative findings, biopsy procedures and clinical evaluation up to the point of definitive surgical treatment, if available     All other surgical procedure specimens use cTNM. For example, biopsy of a positive regional lymph node without surgical resection of the primary carcinoma is classified as cN1	Assignment of pTNM categories for the patient requires use of information from all biopsy procedures performed during the clinical evaluation up to and including definitive surgical treatment     Requires information from clinical assessment or imaging studies or interoperative findings to assign pTNM categories (may not change pTNM, but must be considered)	
pTX		Not for use by pathologist; assigned only by managing physician	May assign if unable to determine pT category after surgical resection	
рТО		No tumor found in specimen and never identified on diagnostic biopsies	No tumor found in specimen and never identified on diagnostic biopsies	
pT1	Conization specimen,	Pathologic information from surgical specimen(s) only	Pathology Report(s)	
pT1a	trachelectomy, simple or radical			
pT1a1	hysterectomy			
pT1a2				
pT1b		If unable to determine greatest dimension from microscopic examination of surgical specimen(s), may use clinical or imaging measurement, if available	Pathology Reports +/- appropriate imaging studies, interoperative findings and clinical evaluation	
pT1b1				
pT1b2				
pT1b3				
pT2	Simple or radical hysterectomy			
pT2a				
pT2a1				
pT2a2				
pT2b		Perineural invasion of the parametrium malifies as parametrial involvement		

- Emphasizes the role of the pathologist in assessing resection specimen
- Emphasizes the role of the managing physician in assigning TNM categories and stage to the *patient*



# **Key Changes in Cervix Uteri Staging**

- All types of imaging allowed
- Designation of HPV association status
- **\***T category changes
- **❖N** category changes
- **❖**M category assessment changes





# **Imaging**

- All imaging modalities allowed for staging, including
  - CT
  - MRI
  - PET or PET/CT or PET/MRI
  - US recommended worldwide
  - Roentgenography of lungs and skeleton recommended worldwide
- The above imaging modalities are allowed for all staging classifications
  - Clinical
  - Pathological
  - Posttherapy Clinical and Posttherapy Pathological



#### **HPV-association Status**

Required documentation: whether cancer is HPV-associated or HPV-independent

- AJCC Version 9 histology list includes both types of histologies
- HPV-independent cervical cancers generally have poorer prognosis
- p16 IHC overexpression is a good surrogate for HPV-association
- P16 IHC is a data item for registrars to collect



# T Category and N Category

#### T Category

- T1a: horizontal spread removed
- T1b subcategories: dimensions changed, new T1b3

#### N Category

- N1: pelvic nodes only
   N1mi micromets, N1a macromets
- N2: para-aortic nodal with/without pelvic nodal involvement N2mi micromets, N2a macromets



# **AJCC Prognostic Stage Groups**

- Nodal status now plays role in stage groups
  - 8<sup>th</sup> edition every stage group included Any N
    - Positive nodes had no effect on stage groups
  - N1 for TX-T3 M0 is stage IIIC1 TX, T0, T1-3 N1 M0 IIIC1
     N2 for TX-T3 M0 is stage IIIC2 TX, T0, T1-3 N2 M0 IIIC2
  - Any N is now only used with stage groups IVA and IVB

T4	Any N	M0	IVA
Any T	Any N	M1	IVB



# **Key Staging Information by classification for Cervix Uteri carcinoma**



#### **Clinical Classification**

- Imaging by all modalities incorporated into clinical staging
  - Includes CT, MRI, PET

- Lymph node status
  - Assessed by imaging or surgical means (FNA, bx, sentinel node)
  - Use appropriate N category suffix (f) or (sn)
  - Isolated tumor cells (ITCs) are *not* considered nodal mets



# **Pathological Classification**

- pT category
  - Cancer not visible and confined to cervix:
    - Cervical excision (cold knife conization or loop electrosurgical excision procedure [LEEP])
       \*\*Cervical bx and endocervical curettage are not sufficient for pathological classification\*\*
  - All other cancers suitable for excision:
    - simple or radical hysterectomy, radical trachelectomy
- pN category
  - At least 1 node with cancer involvement is required
  - Use appropriate N category suffix (f) or (sn)
  - Isolated tumor cells (ITCs) are *not* considered nodal mets, NO(i+)
  - Nodal information is collected by registrars in site-specific data items
- Perineural invasion in parametrium qualifies as pT2b



# **Factors Important for Clinical Care**

- Tumor size
  - Size may be based on clinical examination, radiographic, or pathologic
  - In descending order of priority: pathologic > radiographic > clinical exam
- Lymph node mets
  - Micro & macro-metastases will be important for future data analysis
  - Micro is N1mi, N2mi
  - Macro is N1a, N2a
- p16
  - p16 IHC overexpression is a good surrogate of HPV-association
  - HPV-associated tumors have a more favorable prognosis than HPV-independent tumors



# **Grading**

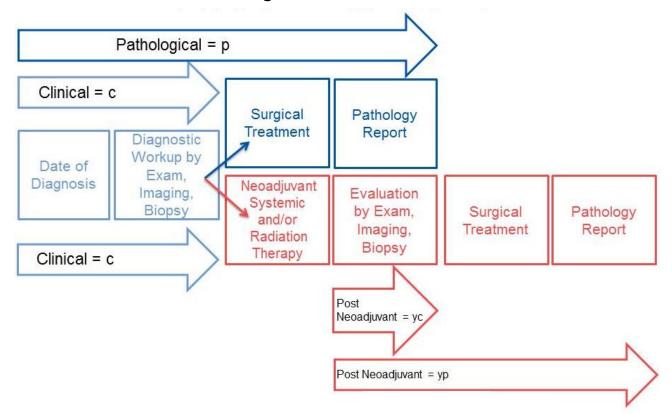
- Grading is encouraged for squamous and usual type adenocarcinoma
- Grading is G1, G2, G3
  - Squamous cell carcinoma grading is the degree of differentiation
  - Adenocarcinoma grading incorporates architecture and nuclear features
- Special cases
  - Endometrioid uses the same grading system as endometrioid of uterine corpus
  - Aggressive subtypes are not graded
    - These include clear cell cancer, carcinosarcoma, neuroendocrine cancer
  - Rare subtypes of adenocarcinoma like adenoid basal cell carcinoma are GX



# **Timing is Everything**

#### **AJCC Stage Classifications**

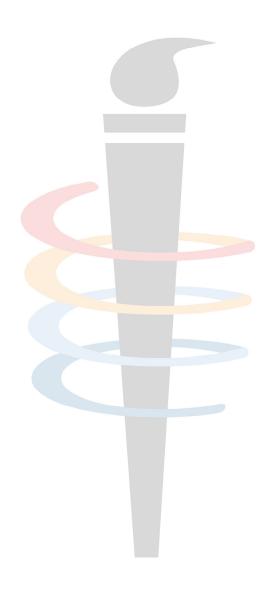
**Defining Time Frame and Criteria** 



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### **Access to Version 9 Protocol**





#### **Access to Version 9 Cervix Uteri Protocol**

- Kindle on Amazon
  - Purchase as ebook or paperback
  - Free software to enable reading on PC, MAC, tablet, and phone
  - Individual ownership of ebook content, not to be shared
- Facility may purchase Kindle ebook for staff
  - Group purchase allowed
  - Purchaser emails links for users to download AJCC ebook
- Institutional access vendors
  - Multiple vendors who supply ebooks to hospital libraries
  - EHR companies may include content in their software, staging tables or complete protocol

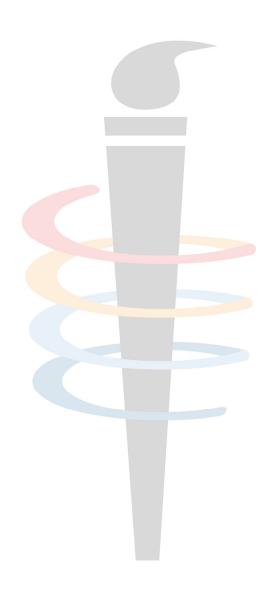


### **FAQ**

- AJCC has FAQ document on website
  - Covers most common questions
  - Provides information and options for institutional purchases
- Additional questions should be directed to ajcc@facs.org



# Information and Questions on AJCC Staging





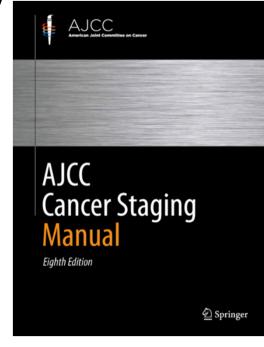
#### **AJCC Web Site**

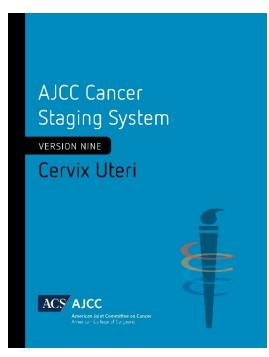
https://cancerstaging.org

https://www.facs.org/quality-programs/cancer-programs/american-

joint-committee-on-cancer/

- General information
  - Overview
  - Version 9
  - Cancer Staging Systems
    - AJCC 8th edition Chapter 1: Principles of Cancer Staging
  - Cancer Staging Education
  - FAQ & Resources

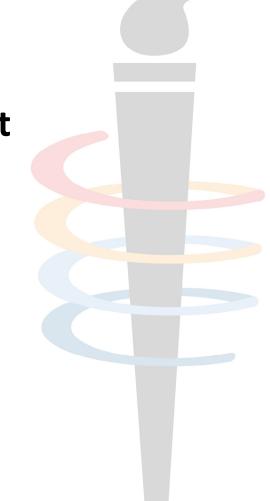






# Developed through generous support from the American Cancer Society







### **Thank You**

