

# GYN Malignancies



FCDS 2012/2013 Educational Webcast Series  
October 18, 2012  
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Updated for 2012 Requirements and CSv02.04

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## Presentation Outline

- Anatomy of the Female Reproductive System
- Overview of Major GYN Cancer Characteristics
- Multiple Primary and Histology Coding Rules
- Collaborative Stage Data Collection System (CSv2)
- C.S. Site Specific Factors
- Treatment Options

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## Presentation Outline

- Cervix, Vagina, Vulva – SCC & HPV and Melanoma
- Corpus Uteri – Epithelial (carcinoma, Mullerian tumor)
- Corpus Uteri – Mesenchymal (pure sarcoma)
- Corpus Uteri – Mixed Tumors (adenosarcoma)
- Ovary/Fallopian Tube – Epithelial Stromal Tumors (serous, mucinous, endometrioid)
- Ovary/Fallopian Tube – Germ Cell Tumors
- Ovary/Fallopian Tube – Borderline Malignancy
- Primary Peritoneal Malignancy

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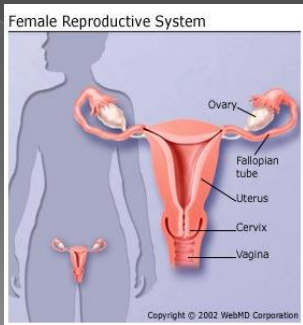
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## Female Reproductive System



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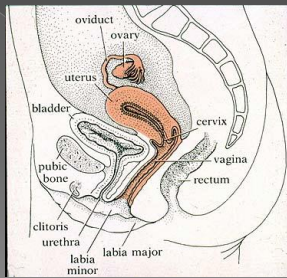
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## Female Reproductive System



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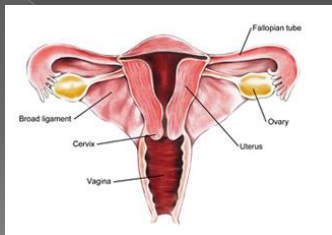
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## Female Reproductive System



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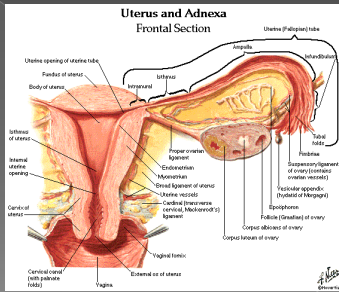
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# Female Reproductive System



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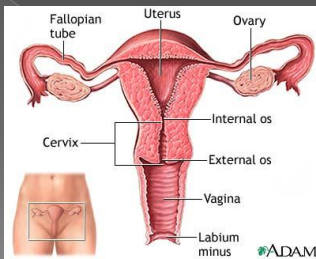
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# Female Reproductive System



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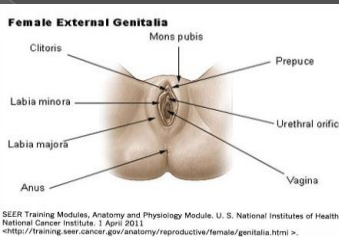
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# Female Reproductive System



SEER Training Module, Anatomy and Physiology Module, U.S. National Institutes of Health, National Cancer Institute, 3 April 2011  
<http://training.seer.cancer.gov/anatomy/reproductive/female/genitalia.html>

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## Typical Chain of Events

- General History & Physical
- Gynecologic Exam – routine or symptoms
- PAP/D&C – cytology
- Colposcopy/Biopsy – histology
- Conization – Biopsy or Treatment
- Hysterectomy – Treatment
- TAH/BSO – Treatment
- Omentectomy (debulking)

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## Overview – Cervix, Vagina, Vulva

- Incidence and Mortality
- Causes & Risk Factors
- Signs and Symptoms
- WHO Classification
- MP/H Rules
- Collaborative Stage Core Items
- Collaborative Stage SSFs
- Treatment Guidelines



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## Incidence and Mortality

- Cervix – 2012 estimates
  - > U.S. New Cases – 12,170
  - > U.S. Deaths – 4,220
  - FL. New Cases – 910
  - FL. Deaths – 300
- Vulva – 2012 estimates
  - > U.S. New Cases – 4,490
  - > U.S. Deaths – 950
  - FL. New Cases – 340
  - FL. Deaths – 70
- Vagina – 2012 estimates
  - > U.S. New Cases – 2,680
  - > U.S. Deaths – 840
  - FL. New Cases – 187
  - FL. Deaths – 63

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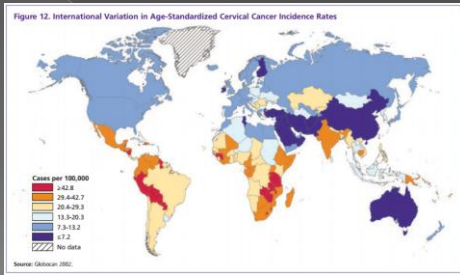
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## Cervical Cancer - Global



Source: Global Cancer Facts & Figures 2007

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## Causes and Risk Factors

### Environmental

- HPV Infection
- Birth Control Pills
- Smoking
- Not Getting Screened

### Genetic

- Median age at dx 48
- DES Exposure
- Family History

**Women added to list of cancer-causing agents**

The World Health Organization's International Agency for Research on Cancer (IARC) has added two new agents to its list of cancer-causing agents: **Human Papillomavirus (HPV)** and **Pharyngeal cancer**.

Agent	Classification	Associated Cancers
Human Papillomavirus (HPV)	Group 1: Carcinogenic to humans	Cervical cancer, anal cancer, oropharyngeal cancer
Pharyngeal cancer	Group 1: Carcinogenic to humans	Pharyngeal cancer



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## Signs and Symptoms

- #1 - HPV Infection
- Unusual vaginal discharge
- Vaginal bleeding between periods
- Bleeding after menopause
- Bleeding or pain during sex



<http://www.medicinenet.com/cervical>

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## PAP and HPV Testing

- ◉ >6 Million Women in U.S. have HPV Infection – at risk
- ◉ >33% of Women Eligible for Screen are NOT Screened
- ◉ Routine Screening detects most cancers pre-invasive
- ◉ PAP/HPV Screening detects >90% of cancers
- ◉ Annual PAP No Longer Routine
- ◉ Post-Menopausal Risk
- ◉ Other HPV Cancers

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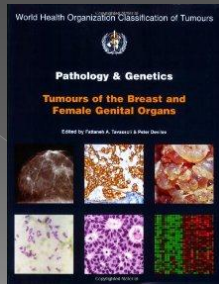
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## WHO Histologic Classification

- ◉ Squamous cell carcinoma
- ◉ Adenocarcinoma
- ◉ Adenosquamous carcinoma



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## Other Characteristics

- ◉ Not Reportable Non-invasive carcinoma (after 1/1/96)
  - CIS (cervix)
  - CIN III
- ◉ Reportable Intraepithelial Neoplasia
  - > CIS (except cervix)
  - > Vulva VIN III
  - Vaginal VAIN III
- ◉ Skin of vulva – reportable as C51.9

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## Overview – Corpus Uteri

- U.S. Incidence and Mortality
- Causes & Risk Factors
- Signs and Symptoms
- WHO Classification
- MP/H Rules
- Collaborative Stage Core Items
- Collaborative Stage SSFs
- Treatment Guidelines



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## Incidence and Mortality

- Uterine Corpus – 2012 estimates
  - > U.S. New Cases – 47,130
  - > FL. New Cases – 2,910
- > U.S. Deaths – 8,010
- > FL. Deaths – 494



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## Causes and Risk Factors

### Environmental

- Birth Control pills
- Smoking
- Obesity
- Diabetes,
- High-fat-diet
- Early age at menarche
- Reproductive and menstrual history
- Nulliparity
- Late menopause
- Tamoxifen (hormone replacement)
- Radiation Therapy

### Genetic

- Family history
- Lynch syndrome
- Older age (55 years or older)



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## Signs and Symptoms

- Abnormal vaginal bleeding (other than during menstruation) spotting
- Abnormal vaginal discharge
- Pelvic pain
- Pain during intercourse
- Pain or difficulty when emptying the bladder

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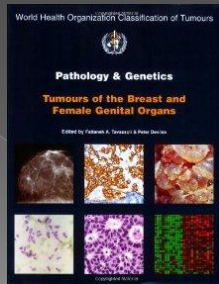
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## WHO Histologic Classification

- **Adenosarcoma**
  - > 8380
- **Carcinoma and Carcinosarcoma**
  - > 8000-8790, 8980-8981, 9700-9701
- **Sarcoma**
  - > 8890-8898, 8930-8931



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## Other Characteristics

- ICD-O-3 term "stromal endometriosis" [8931/3] - Reportable



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## Overview – Ovary

- U.S. Incidence and Mortality
- Causes & Risk Factors
- Signs and Symptoms
- WHO Classification
- MP/H Rules
- Collaborative Stage Core Items
- Collaborative Stage SSFs
- Treatment Guidelines



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## Incidence and Mortality

- Ovary – 2012 estimates
  - > U.S. New Cases – 22,280      FL. New Cases - 1495
  - > U.S. Deaths – 15,500      FL Deaths - 1040
- Primary Peritoneal New Cases - ??
- Primary Peritoneal Deaths - ??
- Impact on Change in Classification - ??

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## Causes and Risk Factors

- |   |  |
|---|--|
| <p><b>Environmental</b></p> <ul style="list-style-type: none"> <li>○ Investigated but not conclusively associated with the development of this neoplasm</li> <li>○ Oophorectomy reduces risk of ovarian and fallopian tube cancer but may increase risk for primary peritoneal cancer after prophylactic salpingo-oophorectomy</li> </ul> | <p><b>Genetic</b></p> <ul style="list-style-type: none"> <li>○ Family history</li> <li>○ BRCA1 and BRCA2 mutations</li> <li>○ Lynch syndrome</li> <li>○ HNPCC syndrome (hereditary nonpolyposis colorectal cancer)</li> <li>○ Fallopian Tube-NCCN- suggested that these cancer may be the origin of some ovarian and primary peritoneal cancers</li> </ul> |
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## Signs and Symptoms

- Suspicious/palpable pelvic mass detected on abdominal/pelvic exam
- Ascites
- Abdominal distention
- Bloating
- Pelvic or abdominal pain
- Difficulty eating or feeling full quickly eating or feeling full quickly
- Urinary symptoms (urgency or frequency) without other obvious source of malignancy

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## Signs and Symptoms

- Screening Options – not supported
  - > Transvaginal Ultrasound
  - > Pelvic Examination
  - > CA-125
- CA-125 is a tumor marker for ovarian cancer - monitor disease progression.
- Normal is , 35 U/ml

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## WHO Histologic Classification

- **Ovarian Epithelial**
  - > Serous cystadenocarcinoma
  - > Mucinous cystadenocarcinoma
  - > Endometrioid adenocarcinoma
  - > Clear cell cystadenocarcinoma
- **Ovarian Germ Cell Tumors**
  - > Dysgerminoma
  - > Embryonal carcinoma
  - > Choriocarcinoma
  - > Teratoma – malignant reportable
- **Borderline Malignant Neoplasms**



<http://www.gynecancerdoctor.com/womenscancer/cancer-information-in-depth/ovarian-cancer-main-menu-87/65-ovarian-cancer-what-is-it>

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## WHO Histologic Classification

WHO Histologic Classification	Pathology
<b>Granulosa cell tumors</b>	
Adult	Malignant
Juvenile	Malignant
<b>Thecoma</b>	
Thecomas typical	Benign
Thecomas, luteinized	Malignant potential
Thecoma with increased mitotic figures	Malignant potential
<b>Fibroma</b>	
Cellular fibroma	Malignant potential
Cellular fibroma with increased mitotic figures	Malignant potential
Fibrosarcoma	Malignant
Stromal tumor with minor sex cord elements	Benign
Sclerosing stromal tumor	Benign
Signet ring stromal tumors	Malignant potential
Unclassified	
<b>Sertoli-Leydig cell tumors</b>	
Well differentiated	Malignant potential
Intermediate differentiation	Malignant
Poorly differentiated	Malignant
Sertoli-Leydig tumors with heterologous elements	Malignant potential
<b>Sertoli cell tumors</b>	
Leydig cell tumors	Benign
Stromal-Leydig cell tumors	Benign
Sex cord tumors with annular tubules (SCTAT)	Malignant
Microscopic SCTAT associated with Peutz-Jeghers syndrome	Benign
Gynandroblastoma	Malignant/Malignant potential
Unclassified sex cord stromal tumors	Malignant potential
Steroid cell tumors	Malignant

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## Other Characteristics

- Changes in classification of ovarian neoplasms
- Changes in case reportable rules
- Borderline Malignancy
- Primary Peritoneal
- Primary Ovarian



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## Other Characteristics

### Borderline Neoplasm of Ovary

- 1973 – 1989 Not Reportable ICD-O
- 1990 – 2000 Reportable ICD-O-2
- 2001 – 2014 Not Reportable ICD-O-3
- 2015 – Not Reportable ICD-O-4

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### Other Characteristics

- Epithelial Neoplasms – Ovary
  - > Serous cystadenocarcinomas.
  - > Mucinous cystadenocarcinomas.
  - > Endometrioid adenocarcinomas.
  - > Clear cell cystadenocarcinomas.
  - > Other & Mixed

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### Other Characteristics

- Epithelial Neoplasms – Peritoneum
  - > Serous cystadenocarcinomas.
  - > Mucinous cystadenocarcinomas.
  - > Endometrioid adenocarcinomas.
  - > Clear cell cystadenocarcinomas.
  - > Other & Mixed

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### Other Characteristics

- Epithelial Neoplasms – Ovary/Peritoneum
  - > Bulky Disease at First Presentation
  - > Common Sites for Seeding
    - Peritoneum
    - Diaphragm
    - Liver Surface
  - > Pulmonary & Pleural Involvement Common

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## Other Characteristics

- ◉ Historical Assessment
- ◉ Classified as Ovarian in Origin
  - > Serous Tumors with Ovarian Involvement
  - > Mucinous Tumors with Ovarian Involvement
- ◉ Current Evaluation Criteria – evolving
- ◉ Improvements in Imaging and IHC/FISH expected to reduce misclassification

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## Other Characteristics

- ◉ Serous Tumors forming 6mm mass in ovary should be considered ovarian primaries.
- ◉ Serous Tumors forming multiple small ovarian masses should be considered peritoneal if the disease is mainly extraovarian.
- ◉ Mucinous neoplasms metastatic to ovary are often misclassified as ovarian primaries.

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## Multiple Primary and Histology Coding Rules



- ALL GYN Sites – See Other Sites
- Terms & Definitions
  - Multiple Primary Rules
  - Histology Coding Rules



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## Terms and Definitions

- **Parametrium** - Connective tissue of the pelvic floor extending from the fibrous subserous coat of the supracervical portion of the uterus laterally between the layers of the broad ligament
- **Uterine adnexa** - Appendages of the uterus, namely the ovaries, fallopian tubes, and ligaments that hold the uterus in place

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## Terms and Definitions

Other Sites Terms and Definitions

Other Sites Equivalent Terms, Definitions and Tables  
Excludes Head and Neck, Colon, Lung, Melanoma of Skin, Breast, Kidney, Renal Pelvis, Ureter, Bladder, Brain, Lymphoma and Leukemia

Column 1: Required Histology: Table 2 continued	Column 2: Combined with Histology	Column 3: Combination Term	Column 4: Code
Gyn malignancies with two or more of the histologies in column 2	Clear cell Endometrioid Mucinous Papillary Serous Squamous Transitional (Bremer)	Mixed cell adenocarcinoma	8323

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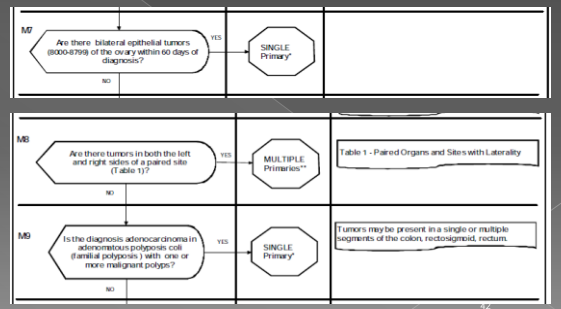
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## Multiple Primary Rules



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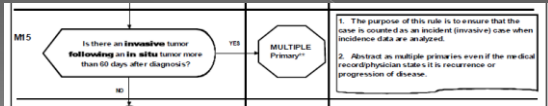
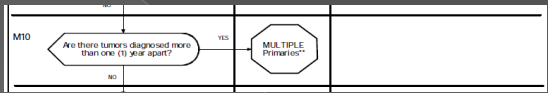
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## Multiple Primary Rules



1. The purpose of this rule is to ensure that the case is coded as an incident (invasive) case when incidence data are analyzed.  
2. Abstract as multiple primaries even if the medical record/physician states it is recurrence or progression of disease.

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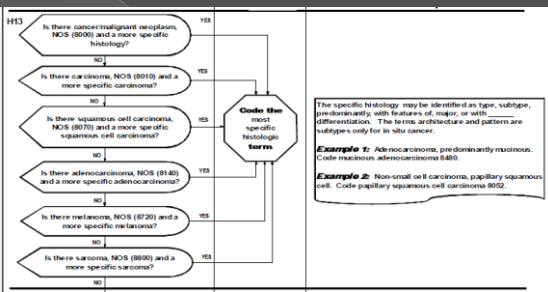
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## Histology Coding Rules



The specific histology may be identified as type, subtype, predominantly, with features of, major, or with differentiation. The terms architecture and pattern are multiples only for in situ cancer.

**Example 1:** Adenocarcinoma, predominantly mucinous. Code mucinous adenocarcinoma 8480.

**Example 2:** Non-small cell carcinoma, papillary squamous cell. Code papillary squamous cell carcinoma 8052.

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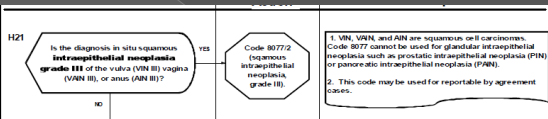
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## Histology Coding Rules



1. VIN, VAN, and AN are squamous cell carcinomas. Code 8077 cannot be used for glandular intraepithelial neoplasia such as prostatic intraepithelial neoplasia (PIN) or pancreatic intraepithelial neoplasia (PanIN).  
2. This code may be used for reportable by agreement cases.

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## Histology Coding Rules

<p><b>H16</b></p> <p>Does the tumor have <b>multiple specific histologies</b> or is there a non-specific histology with <b>multiple specific histologies</b>?</p> <p style="text-align: center;">NO</p>	YES	<p>Code the appropriate combination read code (Table 2)</p>	<p>The specific histologies may be identified as type, subtype, predominant, with features of, major, or with differentiation.</p> <p><b>Example 1</b> (multiple specific histologies): Mucinous and papillary adenocarcinoma. Code 925 (adenocarcinoma with mixed subtypes)</p> <p><b>Example 2</b> (multiple specific histologies): Combined small cell and squamous cell carcinoma. Code 8045 (combined small cell carcinoma)</p> <p><b>Example 3</b> (non-specific with multiple specific histologies): Adenocarcinoma with papillary and clear cell features. Code 925 (adenocarcinoma with mixed subtypes)</p>
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## Staging GYN Cancers

Federation Internationale de Gynecologie et d'Obstetrique (FIGO)



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## TNM – FIGO – CS Data Collection

- Use the FIGO stage stated in the medical record by the clinician or pathologist
- **When both FIGO stage and extension detail are available, record the code with extension detail in preference to a statement of FIGO stage**
- FIGO, TNM, CS are nearly identical – CS has more details
- *Examples*
  - > 100 FIGO Stage I
  - > 112 FIGO Stage IA2 (cervix)
  - > 220 FIGO Stage IIB
  - > 330 FIGO Stage IIIC
  - > 331 FIGO Stage IIIC1 (corpus)
  - > 410 FIGO Stage IVA

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# TNM – FIGO – CS Data Collection

## Staging

**Table 1**  
American Joint Committee on Cancer (AJCC)  
**TNM and FIGO Staging System for Ovarian and Primary Peritoneal Cancer (7th ed., 2010)**  
Primary Tumor (T)

TNM	FIGO	TNM	FIGO
TX	Primary tumor cannot be assessed	T3	III
T0	No evidence of primary tumor		III
T1	I		III
T1a	IA	T3a	IIIA
T1b	IB	T3b	IIIB
T1c	IC	T3c	IIIC
T2	II		IIIC
T2a	IIA		IIIC
T2b	IIB		IIIC
T2c	IIC		IIIC

*Regional Lymph Nodes (N)*  
NX Regional lymph nodes cannot be assessed  
N0 No regional lymph node metastasis  
N1 IIC Regional lymph node metastasis

*Distant Metastasis (M)*  
M0 No distant metastasis  
M1 IV Distant metastasis (excludes peritoneal metastasis)

Note: Liver capsule metastasis is T3/Stage III; liver parenchymal metastasis, M1/Stage IV. Pleural effusion must have positive cytology for M1/Stage IV.

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# TNM – FIGO – CS Data Collection

## Staging

**Table 1 (Continued)**  
American Joint Committee on Cancer (AJCC)  
**TNM and FIGO Staging System for Ovarian and Primary Peritoneal Cancer (7th ed., 2010)**

Stage Grouping	T	N	M
Stage I	T1	N0	M0
Stage IA	T1a	N0	M0
Stage IB	T1b	N0	M0
Stage IC	T1c	N0	M0
Stage II	T2	N0	M0
Stage IIA	T2a	N0	M0
Stage IIB	T2b	N0	M0
Stage IIC	T2c	N0	M0
Stage III	T3	N0	M0
Stage IIIA	T3a	N0	M0
Stage IIIB	T3b	N0	M0
Stage IIIC	T3c	N0	M0
	Any T	N1	M0
Stage IV	Any T	Any N	M1

The staging system for ovarian and primary peritoneal cancer is also used for malignant germ cell tumors, malignant sex cord-stromal tumors, and carcinosarcoma (malignant mixed müllerian tumors).

Note: For histologic grade and histopathologic type, see AJCC staging manual.

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- o Cervix/Vulva/Vagina
  - > Based on Clinical Evaluation
  - > T: Depth of Invasion (CS Ext)
  - > N and M: Standard




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CS COLLABORATIVE STAGE DATA COLLECTION SYSTEM		TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
000	In situ, intraepithelial, noninvasive, preinvasive; Cancer in situ WITH endocervical gland involvement (See Note 3)	Tis	Tis	IS	IS
010	Cervical intraepithelial neoplasia (CIN) Grade III	Tis	Tis	IS	IS
110	Minimal microscopic stromal invasion less than or equal to 3 mm in depth (measured from the base of the epithelium) and less than or equal to 7 mm in horizontal spread FIGO Stage IA1	T1a1	T1a1	L	L
120	Microscopic stromal invasion greater than 3 mm and less than or equal to 5 mm in depth, (measured from the base of the epithelium) and less than or equal to 7 mm in horizontal spread FIGO Stage IA2	T1a2	T1a2	L	L
135	Invasive carcinoma confined to cervix, microscopic size of stromal invasion and horizontal spread not specified	T1aNOS	T1aNOS	L	L
140	FIGO Stage IA [NOS]	T1aNOS	T1aNOS	L	L

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## Staging Cervical Cancer

Federated of Gynecology and Obstetrics (FIGO) Surgical Staging Systems for Carcinoma of the Uterine Cervix	TNM Categories	FIGO Stages	Surgical-Pathologic Findings
<b>TX</b>			
<b>T0</b>			
<b>T1a*</b>			
<b>T1</b>			
<b>T1a**</b>			
<b>T1a1</b>			
<b>T1a2</b>			
<b>T1b</b>			
<b>T1b1</b>			
<b>T1b2</b>			
<b>T2</b>			

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CS COLLABORATIVE STAGE DATA COLLECTION SYSTEM	
<ul style="list-style-type: none"> <li>● <b>Corpus Uteri</b></li> <li>● Based on Surgical Evaluation</li> <li>● TNM based on FIGO staging                             <ul style="list-style-type: none"> <li>&gt; T: Depth of Invasion</li> <li>&gt; N and M: Standard</li> </ul> </li> <li>● 3 Different CS Schema – NEW for 2010, TNM 7<sup>th</sup> ed.                             <ul style="list-style-type: none"> <li>&gt; Leiomyosarcoma, endometrial stromal sarcoma                                     <ul style="list-style-type: none"> <li>• 8890-8898, 8930-8931</li> </ul> </li> <li>&gt; Carcinoma and Carcinosarcoma                                     <ul style="list-style-type: none"> <li>• 8000-8790, 8980-8981, 9700-9701</li> </ul> </li> <li>&gt; Adenosarcoma                                     <ul style="list-style-type: none"> <li>• 8933</li> </ul> </li> </ul> </li> </ul>	54

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# Staging Uterine Carcinoma

**Staging-Endometrial Carcinoma**

**Table 1**  
AJCC Tumor-Node-Metastases (TNM) and International Federation of Gynecology and Obstetrics (FIGO) Surgical Staging Systems for Endometrial Cancer

Primary Tumor (T) TNM Categories Stages	FIGO Stages	Surgical-Pathologic Findings	Regional Lymph Nodes (N) TNM Categories Stages	FIGO Stages	Surgical-Pathologic Findings
T0		No evidence of primary tumor (Carcinoma in situ (preinvasive carcinoma))	NX		Regional lymph nodes cannot be assessed
T1	I	Tumor limited to endometrium or invades less than one-half of the myometrium	N0		No regional lymph node metastases
T1a	IA	Tumor invades less than one-half of the myometrium	N1	IBC1	Regional lymph node metastases to pelvic lymph nodes (positive pelvic nodes)
T1b	IB	Tumor invades one-half or more of the myometrium	N2	IBC2	Regional lymph node metastases to para-aortic lymph nodes, with or without positive pelvic lymph nodes
T2	II	Tumor invades abnormal connective tissue of the cervix but does not extend beyond cervix*			
T3a	IIIA	Tumor invades adnexa and/or distal parametrium (direct extension or metastasis)†	M0		No distant metastases
T3b	IIIB	Tumor invades bladder and/or rectum (direct extension or metastasis)†	M1	IVB	Distant metastases (includes metastases to inguinal lymph nodes, intra-peritoneal abscesses, or lungs, liver, or bone. It excludes metastases to para-aortic lymph nodes, vagina, pelvic venous, or axilla)‡
IBC		Metastases to pelvic and/or para-aortic lymph nodes (axilla and/or lower thoracic, axilla) and distant metastases			
T4	IVA	Tumor invades bladder, mucosa and/or bowel (blatant adnexa is not sufficient to classify as tumor as T3)			

\*Stage IA, IB, or IBC  
†Note: FIGO no longer includes Stage I (T1).  
‡Intracavitary glandular involvement only should be considered as Stage I and as high as Stage II.  
§Positive lymphatics to be reported separately without changing the stage.

Used with the permission of the American Joint Committee on Cancer (AJCC), Chicago, Illinois. The original and primary source for this information is the AJCC Cancer Staging Manual, Seventh Edition (2010) published by Springer Science and Business Media LLC (SBM). For complete information and data supporting the staging tables, visit [www.springer.com/9781447832234](http://www.springer.com/9781447832234). Any citation or quotation of this material must be credited to the AJCC as its primary source. The inclusion of this information herein does not authorize any reuse or further distribution without the expressed, written permission of Springer SBM, on behalf of the AJCC, and Reprinted from: Pincetti B, Carney J, Hager H, et al. Revised FIGO staging for carcinoma of the vulva, cervix and endometrium. FIGO Committee on Gynecologic Oncology. Int J Gynecol Obstet 2009;108:103-104. Copyright 2009, with permission from International Federation of Gynecology and Obstetrics. *Continued*

**CS COLLABORATIVE STAGE DATA COLLECTION SYSTEM**

Code	Description	TNM 7 Map
000	In situ, intraepithelial, noninvasive, preinvasive	Tis
100	Invasive cancer confined to corpus uteri	TINOS
110	Confined to endometrium (stroma)	T1a
120	Tumor invades less than one-half of myometrium Invasion of inner half of myometrium	T1a
123	Endocervical glandular involvement WITH tumor limited to endometrium or invading less than one-half of myometrium (See Note 3)	T1a
125	FIGO Stage IA	T1a
130	Tumor invades one-half or more of myometrium Invasion of outer half of myometrium (See Note 4)	T1b
133	Endocervical glandular involvement WITH tumor invading one-half or more of myometrium (See Note 3)	T1b

# Staging Uterine Sarcoma


**Staging-Uterine Sarcoma**

**Table 2**  
AJCC Tumor-Node-Metastases (TNM) and International Federation of Gynecology and Obstetrics (FIGO) Surgical Staging Systems for Uterine Sarcomas (includes Leiomyosarcoma and Endometrial Stromal Sarcoma)

Primary Tumor (T) TNM Categories Stages	FIGO Stages	Definition	Distant Metastasis (M) TNM Categories Stages	FIGO Stages	Definition
T0		No evidence of primary tumor	M0		No distant metastasis
T1	I	Tumor limited to the uterus	M1	IVB	Distant metastasis (excluding adnexa, pelvic and abdominal tissue)†
T1a	IA	Tumor 5 cm or less in greatest dimension			
T1b	IB	Tumor more than 5 cm			
T2	II	Tumor extends beyond the uterus, within the pelvis			
T2a	IIA	Tumor involves adnexa			
T2b	IIB	Tumor involves other pelvic tissues			
T3	III*	Tumor infiltrates abdominal tissues (not just protruding into the abdomen)			
T3a	IIIA	One side			
T3b	IIIB	More than one side			
T4	IVA	Tumor invades bladder or rectum			

\*Note: Simultaneous tumors of the uterine corpus and ovary/belvis in association with ovarian/pelvic endometriosis should be classified as independent primary tumors.  
†Carcinosarcomas should be staged as carcinosarcomas of the endometrium (see Table 1).  
‡In this stage, lesions must infiltrate abdominal tissues and not just protrude into the abdominal cavity.

Used with the permission of the American Joint Committee on Cancer (AJCC), Chicago, Illinois. The original and primary source for this information is the AJCC Cancer Staging Manual, Seventh Edition (2010) published by Springer Science and Business Media LLC (SBM). For complete information and data supporting the staging tables, visit [www.springer.com/9781447832234](http://www.springer.com/9781447832234). Any citation or quotation of this material must be credited to the AJCC as its primary source. The inclusion of this information herein does not authorize any reuse or further distribution without the expressed, written permission of Springer SBM, on behalf of the AJCC, and Reprinted from: D'Angelo E, Patel J. Uterine sarcomas: a review. Int J Gynecol Obstet 2011;116:131-139. Copyright 2010, with permission from International Federation of Gynecology and Obstetrics.



- **Ovarian**
- Based on Combined Clinical/Surgical Evaluation
- T: based on bilaterality, positive ascites, other sites
- N and M: standard

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- **1. Ascites Positive ascites changes stages I and II to IC and IIC.**

- **3. Abdominal organs\* coded to FIGO III**  
\* Abdominal mesentery, diaphragm, gallbladder, infracolic omentum, kidneys, large intestine except rectum and sigmoid, peritoneal surface of liver, omentum, pancreas, pericolic gutter, peritoneum, NOS, small intestine, spleen, stomach, ureters  
\* Involvement may be direct or discontinuous Gynecologic Cancers

- **2. Pelvic organs\* coded to FIGO Stage II**  
\* Adnexa, bladder (including serosa), uterine ligaments, cul de sac, fallopian tubes, parametrium, pelvic peritoneum, pelvic wall, rectum, sigmoid colon, ureter, uterus, uterine serosa

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- **4. CS Mets at DX**
- Liver parenchymal metastases area coded in M1
- Implants (discontinuous metastases) seeding, salting, studding, talcum powder appearance
- Determine whether implants are
  - > T2 in the Pelvis
  - > T3 outside the pelvis
  - > M1
- Implants outside the pelvis must be microscopically confirmed and coded.

- **5. Post Cytoreduction (debulking) - Residual Tumor Status**

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## Staging Ovarian

- Surgical Staging Should Include:
  - > Removal of para-aortic lymph nodes
  - > Removal pelvic lymph nodes
  - > Removal primary tumor
  - > Uterus
  - > Cervix
  - > Vagina
  - > Peritoneal washing
  - > Removal of omentum
  - > Liver examination with biopsy as indicated
  - > Scraping of under right diaphragm

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## Staging Ovarian

**Staging**

**Table 1**  
**American Joint Committee on Cancer (AJCC)**  
**TNM and FIGO Staging System for Ovarian and Primary Peritoneal Cancer (7th ed., 2010)**  
**Primary Tumor (T)**

TNM		FIGO	
<b>Tx</b>	Primary tumor cannot be assessed	<b>T3</b>	Tumor involves one or both ovaries with microscopically confirmed peritoneal metastasis outside the pelvis
<b>T0</b>	No evidence of primary tumor	<b>T3a</b>	Microscopic peritoneal metastasis beyond pelvis (no macroscopic tumor)
<b>T1</b>	Tumor limited to ovaries (one or both)	<b>T3b</b>	Macroscopic peritoneal metastasis beyond pelvis 2 cm or less in greatest dimension
<b>T1a</b>	Tumor limited to one ovary; capsule intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings	<b>T3c</b>	Peritoneal metastasis beyond pelvis more than 2 cm in greatest dimension and/or regional lymph node metastasis
<b>T1b</b>	Tumor limited to both ovaries; capsule intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings		
<b>T1c</b>	Tumor limited to one or both ovaries with any of the following: capsule ruptured, tumor on ovarian surface, malignant cells in ascites or peritoneal washings		
<b>T2</b>	Tumor involves one or both ovaries with pelvic extension	<b>Regional Lymph Nodes (N)</b>	
<b>T2a</b>	Extension and/or implants on uterus and/or fallopian tubes; no malignant cells in ascites or peritoneal washings	<b>Nx</b>	Regional lymph nodes cannot be assessed
<b>T2b</b>	Extension to and/or implants on other pelvic tissues; no malignant cells in ascites or peritoneal washings	<b>N0</b>	No regional lymph node metastasis
<b>T2c</b>	Pelvic extension and/or implants (T2a or T2b) with malignant cells in ascites or peritoneal washings	<b>N1</b>	Regional lymph node metastasis
		<b>Distant Metastasis (M)</b>	
		<b>M0</b>	No distant metastasis
		<b>M1</b>	Distant metastasis (includes peritoneal metastasis)

Note: Liver capsule metastasis is T3Stage III; liver parenchymal metastasis, M1 Stage IV. Pleural effusion must have positive cytology for M1 Stage IV.

[Continued](#)

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- Primary Peritoneal
- Based on Combined Clinical/Surgical Evaluation
- T: based on positive ascites and other involvement
- N and M: standard

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- 1. Ascites Positive ascites changes stages I and II to IC and IIC.
- 2. Pelvic organs\* coded to FIGO Stage II  
\* Adnexa, bladder (including serosa), uterine ligaments, cul de sac, fallopian tubes, parametrium, pelvic peritoneum, pelvic wall, rectum, sigmoid colon, ureter, uterus, uterine serosa
- 3. Abdominal organs\* coded to FIGO III  
\* Abdominal mesentery, diaphragm, gallbladder, infracolic omentum, kidneys, large intestine except rectum and sigmoid, peritoneal surface of liver, omentum, pancreas, pericolic gutter, peritoneum, NOS, small intestine, spleen, stomach, ureters  
\* Involvement may be direct or discontinuous  
Gynecologic Cancers

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- 4. CS Mets at DX
  - Liver parenchymal metastases area coded in M1
  - Implants (discontinuous metastases) seeding, salting, studding, talcum powder appearance
  - Determine whether implants are
    - T2 in the Pelvis
    - T3 outside the pelvis
    - M1
  - Implants outside the pelvis must be microscopically confirmed and coded.

5. Post Cytoreduction (debulking) - Residual Tumor Status

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FCDS Required GYN Site Specific Factors

Schema Name	2012 FCDS Required	Additional CoC Required
Adnexa/Uterine/Other	None	None
Cervix	None	1
Corpus Adenosarcoma	2	1,3,4,5,6
Corpus Carcinoma	2	1,3,4,5,6
Corpus Sarcoma	2	1,3,4,5,6
Fallopian Tube	None	1,4,5,6,7
Genital/Female/Other	None	None
Merkel Cell/Vulva	3,11	1,16,17,18,22
Ovary	None	1,2,3
Peritoneum/Female/Gen	25	1,2,3
Placenta	1	2
Vagina	None	1,2,3,4,5,6,7
Vulva	11	10

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### CS Coding Issues

#### CS TUMOR SIZE: Instructions for Coding

- **Use of code 990.** Code 990, Microscopic focus or foci only and no size is given, should be used when no gross tumor is seen and tumor is only identified microscopically.
- **Note:** The terms microscopic focus, microfocus, and microinvasion are NOT the same as [macroscopic] focal or focus. A macroscopic focus or foci indicates a very small or isolated area, pinpoint, or spot of tumor that may be visible grossly. Only tumor identified microscopically should be coded to 990. If the tumor is described as both a microscopic focus and a specific size, code the specific size.
- **Example:** Ovary specimen: extensive cystic disease with focal areas of tumor seeding.
- **Disregard "focal" and code tumor size to 999 unknown.**

Collaborative Stage Data Collection System User Documentation and Coding Instructions: Part I Section 1, Effective January 1, 2012 pg. 30, Version 02.04

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### CS Coding Issues

- CS Extension
- For certain sites such as **ovary**, discontinuous metastasis is coded in the CS Extension field area.
- **Contiguous (direct) extension only.** With the exception of mucinous carcinoma of the corpus uteri, ovary, fallopian tube and female peritoneum, all codes represent contiguous (direct) extension of tumor from the site of origin to the organ/structure/tissue represented in the code.

Collaborative Stage Data Collection System User Documentation and Coding Instructions: Part I Section 1, Effective January 1, 2012 pg. 34 & 35 Version 02.04

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### CS Coding Issues

#### CODING "NONE" VS. "UNKNOWN" IN THE COLLABORATIVE STAGE DATA COLLECTION SYSTEM, TNM AND SUMMARY STAGE

- **INACCESSIBLE LYMPH NODES RULE**
- Regional lymph nodes are not palpable for inaccessible lymph nodes sites such as corpus uteri and ovary
- The best description concerning regional lymph nodes will be on imaging studies or in the surgeon's evaluation at the time of exploratory surgery or definitive surgery
- If regional lymph nodes for these sites are not mentioned on imaging or exploratory surgery, they are presumed to be clinically negative (code 000) based on the inaccessible lymph nodes rule

Collaborative Stage Data Collection System User Documentation and Coding Instructions: Part I Section 1, Effective January 1, 2012 pg. 45 Version 02.04

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# Primary Treatment



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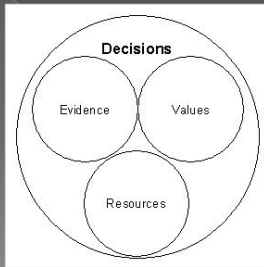
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# NCCN Treatment Guidelines Cervix, Vulva, Vagina



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# Surgery



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## Radiation Therapy

- External radiation therapy uses high-energy X-rays
- Internal radiation, or brachytherapy



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## Chemotherapy

National Comprehensive Cancer Network® NCCN Guidelines™ Version 1.2012  
 Cervical Cancer

CHEMOTHERAPY REGIMENS FOR RECURRENT OR METASTATIC CERVICAL CANCER<sup>1</sup>  
 (Strongly consider clinical trial)

First-line combination therapy	Possible first-line single-agent therapy	Second-line therapy <sup>1†</sup>
<ul style="list-style-type: none"> <li>• Cisplatin/paclitaxel<sup>1,2</sup></li> <li>• Carboplatin/paclitaxel<sup>3</sup></li> <li>• Cisplatin/topotecan<sup>4</sup></li> <li>• Cisplatin/gemcitabine (category 2B)<sup>5</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Cisplatin (preferred as a single agent)<sup>2</sup></li> <li>• Carboplatin<sup>6</sup></li> <li>• Paclitaxel<sup>7</sup></li> </ul>	(Agents listed are category 2B unless otherwise noted) <ul style="list-style-type: none"> <li>• Bevacizumab</li> <li>• Docetaxel</li> <li>• 5-FU (5-Fluorouracil)</li> <li>• Gemcitabine</li> <li>• Ifosfamide</li> <li>• Irinotecan</li> <li>• Mitomycin</li> <li>• Topotecan</li> <li>• Pemetrexed (category 3)</li> <li>• Vinorelbine (category 3)</li> </ul>

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## Chemotherapy

**Drugs Approved for Prevention/Treatment of HPV Infection or Cancer**

Cervix (Recombinant HPV Bivalent Vaccine)
Recombinant Human Papillomavirus (HPV) Bivalent Vaccine
Gardasil (Recombinant HPV Quadrivalent Vaccine)
Recombinant Human Papillomavirus (HPV) Quadrivalent Vaccine
Bleomoxane (Bleomycin)
Bleomycin
Cisplatin
Hycamtin (Topotecan Hydrochloride)
Platinol (Cisplatin)
Platinol-AQ (Cisplatin)
Topotecan Hydrochloride

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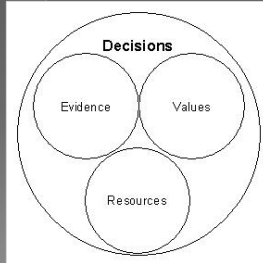
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# NCCN Treatment Guidelines Corpus Uteri – Endometrium Uterus




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# NCCN Treatment Guidelines Uterine Neoplasms

NCCN National Comprehensive Cancer Network® NCCN Guidelines Version 3.2012 Uterine Neoplasms

INITIAL EVALUATION:

- H&P
- CBC
- Endometrial biopsy (including platelets)
- Chest x-ray
- Current cervical cytology consistent with NCCN Cervical Cancer Screening Guidelines

OUTPATIENT:

- LP Tumor function/biochemistry profile
- Consider genetic counseling/testing for young patients (< 55 y) and those with a significant family history of endometrial and/or colorectal cancer\* (See Lynch syndrome/HNPCC in NCCN Colorectal Cancer Screening Guidelines)

INITIAL CLINICAL FINDINGS:

- Pure endometrioid
  - Disease limited to uterus → See Primary Treatment (ENDO-1)
  - Suspected or gross cervical involvement → See Primary Treatment (ENDO-2)
  - Suspected extruterine disease → See Primary Treatment (ENDO-3)
- Papillary serous or clear cell carcinoma → See Treatment for Papillary Serous or Clear Cell Carcinomas of the Endometrium or Carcinomas (ENDO-4)
- Carcinosarcoma\* → See Primary Treatment (UT/ANC-1)
- Stromal/mesenchymal tumors
  - Endometrial sarcoma (ESR)
    - Disease limited to uterus → See Primary Treatment (UT/ANC-1)
    - Known or suspected extruterine disease → See Primary Treatment (UT/ANC-1)
  - Undifferentiated sarcoma
  - L leiomyosarcoma (LMS)

All staging in guideline is based on updated 2010 FIGO staging. (See ST-1 and ST-2.)

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# Endometrial Carcinoma – Primary Surgery

NCCN National Comprehensive Cancer Network® NCCN Guidelines Version 3.2012 Endometrial Carcinoma

**HYSTERECTOMY<sup>1</sup>**

THBSO: Total hysterectomy + bilateral salpingo-oophorectomy  
RH: Radical hysterectomy

Pathologic assessment to include:

- Nodes
  - Level of nodal involvement (pelvic, common iliac, para-aortic)
- Peritoneal cytology<sup>2</sup>
- Uterus
  - Ratio of depth of myometrial/stromal invasion to myometrial thickness
  - Cervical stromal or glandular involvement
  - Tumor size
  - Tumor location (fundus vs lower uterine segment/cervix)
  - Histologic subtype with grade
  - Lymphovascular space invasion
  - Consider screening for inherited mismatch repair disease to identify familial cancer syndromes, such as Lynch syndrome/HNPCC in young patients (< 55 y) with a significant family history and/or selected pathologic risk features (See NCCN Colorectal Cancer Screening Guidelines)
- Fallopian tubes/ovaries

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# Endometrial Carcinoma – Primary Surgery

National Comprehensive Cancer Network<sup>®</sup> **NCCN Guidelines Version 3.2012 Endometrial Carcinoma** NCCN Guidelines Index | Uterine Neoplasms | Discussion

All staging in guideline is based on updated 2010 FIGO staging. (See 3.1.1)

**CLINICAL FINDINGS** | **ADJUVANT TREATMENT<sup>1,2,3,4</sup>**

Completely surgically staged: Stage IIB, IIC, IVC

- Stage IIB → Chemotherapy and/or tumor-directed RT
- Stage IBC1 → Pelvic node positive → Chemotherapy and/or tumor-directed RT
- Stage IBC2 → Para-aortic node positive & pelvic node positive → Chemotherapy and/or tumor-directed RT
- Stage IVA, IVB → Debulked<sup>5</sup> and with no gross residual disease or microscopic abdominal disease → Chemotherapy & RT

1. See Principles of Radiation Therapy (JRN4).  
2. The surgical goal is to have no macroscopic residual disease.  
3. Adjuvant therapy determinations are made on the basis of pathologic findings.  
4. Side Systemic Therapy for Recurrent, Metastatic, or High-Risk Disease (JRN5) is also available.  
5. See Surveillance (BN00-8).

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# Endometrial Carcinoma – Post-Surgical Evaluation

National Comprehensive Cancer Network<sup>®</sup> **NCCN Guidelines Version 3.2012 Endometrial Carcinoma** NCCN Guidelines Index | Uterine Neoplasms | Discussion

PAPILLARY SEROUS OR CLEAR CELL CARCINOMA OF THE ENDOMETRIUM OR CARCINOSARCOMA<sup>1</sup>

**ADDITIONAL WORKUP** | **PRIMARY TREATMENT** | **ADJUVANT TREATMENT**

Biopsy: Papillary serous carcinoma or Clear cell carcinoma or Carcinosarcoma<sup>1</sup>

• CA-125 (optional)  
• MR/CT, as clinically indicated

Includes surgical staging, as with ovarian cancer

- TBEO, pelvic and para-aortic lymph node dissection, cytologic confirmation, biopsies of peritoneal surfaces (including underside of diaphragm)
- Maximal tumor debulking

Stage IA (no myometrial invasion) → Observe or Chemotherapy<sup>2</sup> or Tumor-directed RT<sup>3</sup>

Stage IB, II (with myometrial invasion) → Chemotherapy<sup>2</sup> & tumor-directed RT<sup>3</sup> or Whole abdominopelvic RT (category 2) & vaginal brachytherapy (category 2)

Stage III, IV (adequately debulked) → Chemotherapy<sup>2</sup> & tumor-directed RT<sup>3</sup>

Stage III, IV (inadequately debulked) → Chemotherapy<sup>2</sup>

All staging in guideline is based on updated 2010 FIGO staging. (See 3.1.1)

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# Endometrial Carcinoma – Radiation

**PRINCIPLES OF RADIATION THERAPY**

- Tumor-directed RT refers to RT directed at sites of known or suspected tumor involvement, and may include external beam and/or brachytherapy. In general, tumor-directed external-beam RT (EBRT) is directed to the pelvis with or without the para-aortic region. Brachytherapy can be delivered: 1) to an intact uterus, either preoperatively or definitively; or 2) more commonly, to the vagina after hysterectomy. For the purposes of these guidelines, whole abdominal radiotherapy is not considered to be tumor-directed RT.
- Pelvic radiotherapy should target the gross disease (if present), the lower common iliacs, external iliacs, internal iliacs, parametria, upper vagina/para-vaginal tissue, and presacral lymph nodes (in patients with cervical involvement). Extended-field radiotherapy should include the pelvic volume and also target the entire common iliac chain and para-aortic lymph node region. The upper border of the extended field depends on the clinical situation but should at least be to the level of the renal vessels. External-beam doses for microscopic disease should be 45-50 Gy. Multiple conformal fields based on CT-treatment planning should be utilized.
- Brachytherapy doses for definitive therapy are individualized based on the clinical situation. For preoperative therapy in patients with gross stage IIB disease, in general, a total dose of 75-80 Gy low-dose rate equivalent to the tumor volume is recommended. For vaginal brachytherapy, the dose should be prescribed to the vaginal surface or at a depth of 0.5 cm from the vaginal surface; the dose depends on the use of EBRT.
  - The target for vaginal brachytherapy after hysterectomy should be limited to the upper vagina.
  - For high-dose rate brachytherapy, when used as a boost to EBRT, doses of 4-6 Gy X 2-3 fractions prescribed to the vaginal mucosa are commonly used.
  - For high-dose rate vaginal brachytherapy alone, commonly used regimens include 7 Gy X 3 prescribed at a depth of 0.5 cm from the vaginal surface or 6 Gy X 5 fractions prescribed to the vaginal surface.

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# Endometrial Carcinoma – Chemo

NCCN National Comprehensive Cancer Network® NCCN Guidelines Version 3.2012 Endometrial Carcinoma

SYSTEMIC THERAPY FOR RECURRENT, METASTATIC OR HIGH-RISK DISEASE<sup>1</sup> (STRONGLY ENCOURAGE PARTICIPATION IN CLINICAL TRIALS)

**HORMONE THERAPY<sup>2</sup>**

- Progestational agents
- Tamoxifen
- Arimidex substitute

**CHEMOTHERAPY REGIMENS<sup>3</sup>**

Multi-agent chemotherapy regimens preferred, if tolerated

- Cisplatin/doxorubicin (category 1)
- Ifosfamide plus paclitaxel (category 1 for carcinosarcoma)
- Carboplatin/paclitaxel
- Carboplatin/docetaxel<sup>4</sup>
- Cisplatin
- Carboplatin
- Doxorubicin
- Liposomal doxorubicin
- Paclitaxel
- Docetaxel<sup>4</sup> (category 2B)
- Docetaxel<sup>4</sup>/irinotecan (category 2B)
- Docetaxel<sup>4</sup>/irinotecan (category 2B)
- Docetaxel<sup>4</sup>/irinotecan (category 2B)
- Docetaxel<sup>4</sup>/irinotecan (category 2B)
- Docetaxel<sup>4</sup>/irinotecan (category 2B)

<sup>1</sup>Cisplatin, carboplatin, liposomal doxorubicin, paclitaxel, and docetaxel may cause drug reactions.  
<sup>2</sup>See NCCN Disease-Specific Guidelines (Management of Breast Neoplasms).  
<sup>3</sup>Hormonal therapy is for endometrial histologies only (ie, not for papillary serous carcinoma, clear cell carcinoma, or carcinosarcoma).  
<sup>4</sup>Chemotherapy regimens are for endometrial histologies, papillary serous carcinoma, or clear cell carcinoma. A few of the agents can also be used for carcinosarcoma, as indicated.  
<sup>5</sup>Docetaxel may be considered for patients in whom paclitaxel is contraindicated.  
<sup>6</sup>Irinotecan may be considered for use in patients who have progressed on prior cytotoxic chemotherapy.

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# Uterine Sarcoma – Post Clinical/Surgical Evaluation

NCCN National Comprehensive Cancer Network® NCCN Guidelines Version 3.2012 Uterine Sarcoma

INITIAL CLINICAL FINDINGS

Medically inoperable → Pelvic RT + brachytherapy<sup>a</sup> or Chemotherapy<sup>b</sup> or Hormone therapy<sup>c</sup> → See Surveillance (See UTSARC-6)

Operable → THBSO<sup>d,e</sup> + Additional surgical resection for extracutaneous disease is individualized → Endometrial stromal sarcoma (ESS) (See UTSARC-2) or Undifferentiated sarcoma or Leiomyosarcoma (LMS) (See UTSARC-3)

Known or suspected extracutaneous disease → MRI or CT based on clinical suspicion of metastasis → Consider surgical resection based on: • Symptom • Extent of disease • Resectability → Surgical resection or Resection of metastatic focus → Endometrial stromal sarcoma (ESS) or Undifferentiated sarcoma or Leiomyosarcoma (LMS) (See UTSARC-3)

No surgical resection → Endometrial stromal sarcoma (ESS) or Undifferentiated sarcoma or Leiomyosarcoma (LMS) (See UTSARC-3)

All staging in guideline is based on updated 2010 FIGO staging. (See UTSARC-1)

<sup>a</sup>See Principles of Radiation Therapy (LUNA).  
<sup>b</sup>See Systemic Therapy for Uterine Sarcoma (UTSARC-A).  
<sup>c</sup>Agonostyri may be used for metastatic disease.  
<sup>d</sup>For incidental finding of uterine sarcoma after THBSO. Recommend imaging and consider additional surgical resection on an individual basis.

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# Uterine Sarcoma – Radiation

PRINCIPLES OF RADIATION THERAPY

- Tumor-directed RT refers to RT directed at sites of known or suspected tumor involvement, and may include external beam and/or brachytherapy. In general, tumor-directed external-beam RT (EBRT) is directed to the pelvis with or without the para-aortic region. Brachytherapy can be delivered: 1) to an intact uterus, either preoperatively or definitively; or 2) more commonly, to the vagina after hysterectomy. For the purposes of these guidelines, whole abdominal radiotherapy is not considered to be tumor-directed RT.
- Pelvic radiotherapy should target the gross disease (if present), the lower common iliacs, external iliacs, internal iliacs, parametria, upper vagina/para-vaginal tissue, and presacral lymph nodes (in patients with cervical involvement). Extended-field radiotherapy should include the pelvic volume and also target the entire common iliac chain and para-aortic lymph node region. The upper border of the extended field depends on the clinical situation but should at least be to the level of the renal vessels. External-beam doses for microscopic disease should be 45-50 Gy. Multiple conformal fields based on CT-treatment planning should be utilized.
- Brachytherapy doses for definitive therapy are individualized based on the clinical situation. For preoperative therapy in patients with gross stage IIB disease, in general, a total dose of 75-80 Gy low-dose rate equivalent to the tumor volume is recommended. For vaginal brachytherapy, the dose should be prescribed to the vaginal surface or at a depth of 0.5 cm from the vaginal surface; the dose depends on the use of EBRT.
  - The target for vaginal brachytherapy after hysterectomy should be limited to the upper vagina.
  - For high-dose rate brachytherapy, when used as a boost to EBRT, doses of 4-6 Gy X 2-3 fractions prescribed to the vaginal mucosa are commonly used.
  - For high-dose rate vaginal brachytherapy alone, commonly used regimens include 7 Gy X 3 prescribed at a depth of 0.5 cm from the vaginal surface or 6 Gy X 5 fractions prescribed to the vaginal surface.

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## Uterine Sarcoma – Chemo

NCCN National Comprehensive Cancer Network  
**NCCN Guidelines Version 3.2012**  
**Uterine Sarcoma**

**SYSTEMIC THERAPY FOR UTERINE SARCOMA**  
 (Clinical trials strongly recommended)

**CHEMOTHERAPY REGIMENS\***

- Doxorubicin
- Gemcitabine/docetaxel
- Consider other single-agent options (all agents are category 2B):
  - Carboplatin
  - Docetaxel
  - Epirubicin
  - Gemcitabine
  - Ifosfamide
  - Liposomal doxorubicin
  - Paclitaxel
  - Temozolomide

**HORMONE THERAPY (ES: only)**

- Medroxyprogesterone acetate
- Megestrol acetate
- Aromatase inhibitors (category 2B)
- GnRH analogs (category 2B)
- Tamoxifen (category 2B)

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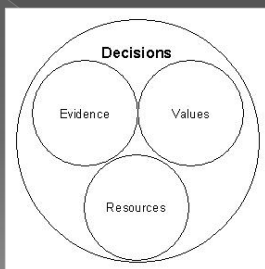
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## NCCN Treatment Guidelines Ovary / Primary Peritoneum



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## Ovary, Primary Peritoneum – Surgery

**PRINCIPLES OF PRIMARY SURGERY (1 of 3)<sup>1,2</sup>**

- In general, a vertical midline abdominal incision should be used in patients with a suspected malignant ovarian neoplasm.<sup>2</sup> Intraoperative pathologic evaluation with frozen sections may assist in management.
- Quantify the extent of initial and residual disease; document in operative notes.

**Ovarian cancer apparently confined to an ovary or to the pelvis**

- The following procedures should be considered part of the surgical management of patients with ovarian cancer apparently confined to an ovary or to the pelvis:
  - On entering the abdomen, aspiration of ascites or peritoneal lavage should be performed for peritoneal cytologic examinations.
  - All peritoneal surfaces should be visualized, and any peritoneal surface or adhesion suspicious for harboring metastasis should be selectively excised or biopsied. In the absence of any suspicious areas, random peritoneal biopsies should be taken from the pelvis, paracolic gutters, and undersurfaces of the diaphragm (diaphragm scraping for Papanicolaou stain is an acceptable alternative).
  - Hysterectomy, bilateral salpingectomy, and bilateral oophorectomy should be performed with every effort made to keep an encapsulated mass intact during removal.
  - Unilateral salpingo-oophorectomy (USO) for patients desiring to preserve fertility may be considered in select patients. (See OVA-2 of 3)
  - Omentectomy should be performed.
  - Aortic lymph node dissection should be performed by stripping the nodal tissue from the vena cava and the aorta bilaterally to at least the level of the inferior mesenteric artery and preferably to the level of the renal vessels.
  - Pelvic lymph nodes should be dissected. Removal of lymph nodes overlying and medial to the external iliac and hypogastric vessels, from the obturator fossa anterior to the obturator nerve, and overlying and anterolateral to the common iliac vessel is preferred.
  - In low malignant potential, although data show upstaging with lymphadenectomy and omentectomy, other data show this surgery does not affect overall survival.

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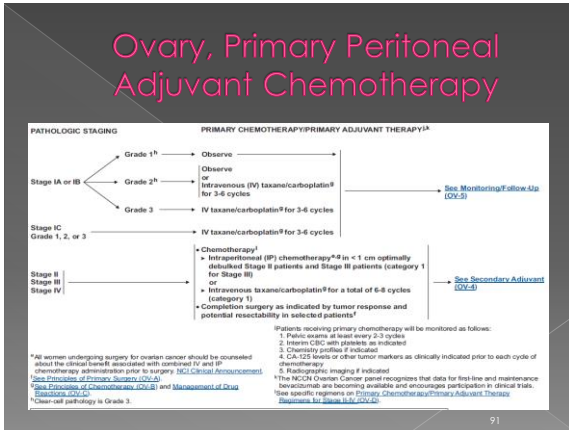
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## Ovary, Primary Peritoneal Adjuvant Chemotherapy




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## Chemotherapy - Ovary

- Drugs Approved for Ovarian Cancer Treatment<sup>1</sup>**
- Adriamycin PFS (Doxorubicin Hydrochloride)
  - Adriamycin RDF (Doxorubicin Hydrochloride)
  - Carboplatin
  - Clafen (Cyclophosphamide)
  - Cisplatin
  - Cyclophosphamide
  - Cytosan (Cyclophosphamide)
  - Doxorubicin Hydrochloride
  - Dox-SL (Doxorubicin Hydrochloride Liposome)
  - DOXI (Doxorubicin Hydrochloride Liposome)
  - Doxorubicin Hydrochloride Liposome
  - Evacet (Doxorubicin Hydrochloride Liposome)
  - Gemcitabine Hydrochloride
  - Gemzar (Gemcitabine Hydrochloride)
  - Hycamlin (Topotecan Hydrochloride)
  - lipoDox (Doxorubicin Hydrochloride Liposome)
  - Neosar (Cyclophosphamide)
  - Paclitaxel
  - Paraplat (Carboplatin)
  - Paraplatin (Carboplatin)
  - Platinol (Cisplatin)
  - Platinol-AQ (Cisplatin)
  - Taxol (Paclitaxel)
  - Topotecan Hydrochloride
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## Ovary/Primary Peritoneal Palliative Care

- Comfort care given to a patient who has a serious or life-threatening disease
  - Addresses the emotional, physical, practical, and spiritual issues of cancer
  - Provided by a specialist who works with a team of other healthcare professionals
  - Palliative Care is different from hospice care – it can begin at time of diagnosis and last throughout the patient's life
  - Hospice Care is end of life care often accompanied by palliative care for pain control and symptom control.
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## Problem Areas for Registrars

- Where did neoplasm originate
  - > Primary Site
  - > Anatomic Proximity of sites
  - > Biopsy of Involved Site or Primary Site
  - > Similar histologic type(s)
  - > Few natural barriers to slow spread
  - > Ovary versus Peritoneum
  - > Inaccessible Sites (corpus uteri, ovary)

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## Problem Areas for Registrars

○ **Question**  
 Primary Site--Ovary/Peritoneum: How should the Primary Site field be coded when no resection is done and it is uncertain whether the primary site is in the ovary or the peritoneum?

**Answer**

Use the best information available to identify the primary site. In this case, it is the physician's clinical assessment. Code the Primary Site to C56.9 [Ovary] for this example because the ovary is indicated to be the primary site according to the physicians involved.

When there is no surgical procedure involving the removal of the ovaries, code the Primary Site based on the clinical assessment of the disease location. If the disease is only noted to be in the peritoneum, code site to peritoneum, NOS. If the disease is seen clinically in both the ovary and the peritoneum, code site to ovary.

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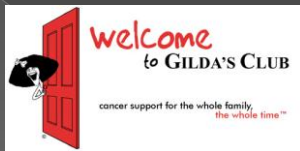
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## Additional Resources

- 2003 WHO Classification of Tumours of Female Genital Organs, World Health Organization, Lyon, France, 2003
- NCI Physician Data Query for Healthcare Professionals
- Multiple Primary and Histology Coding Rules, SEER 2007
- Collaborative Stage Data Collection System, AJCC, 2012
- FIGO Staging Classifications for GYN Cancers, FIGO, 2012
- NCCN Evidence Based Treatment Guidelines, NCCN, 2013

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## Questions



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