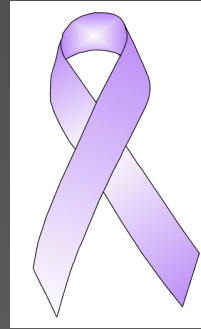


GYN Malignancies



FCDS 2012/2013 Educational Webcast Series

October 18, 2012

Steven Peace, BS, CTR

Mayra Espino, BA, RHIT, CTR

Updated for 2012 Requirements and CSv02.04

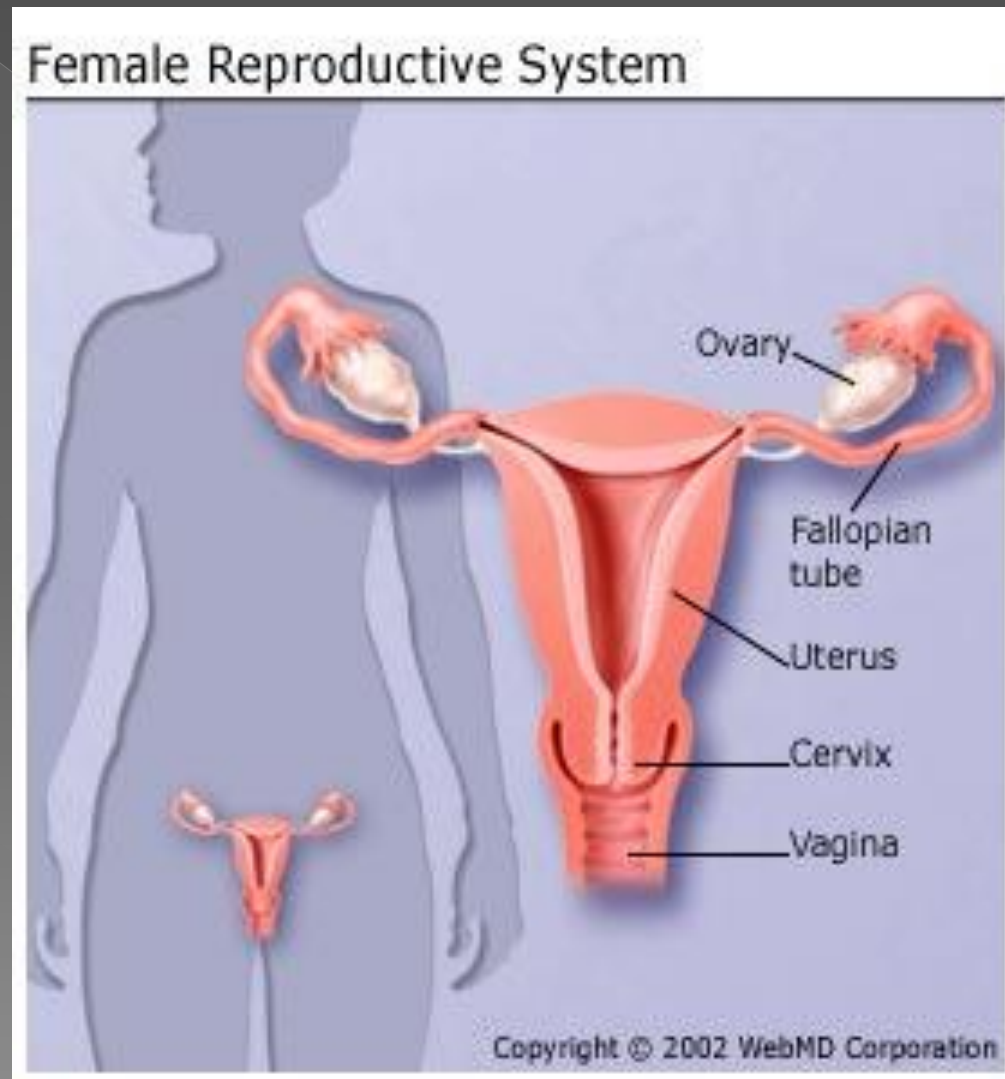
Presentation Outline

- ◉ 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

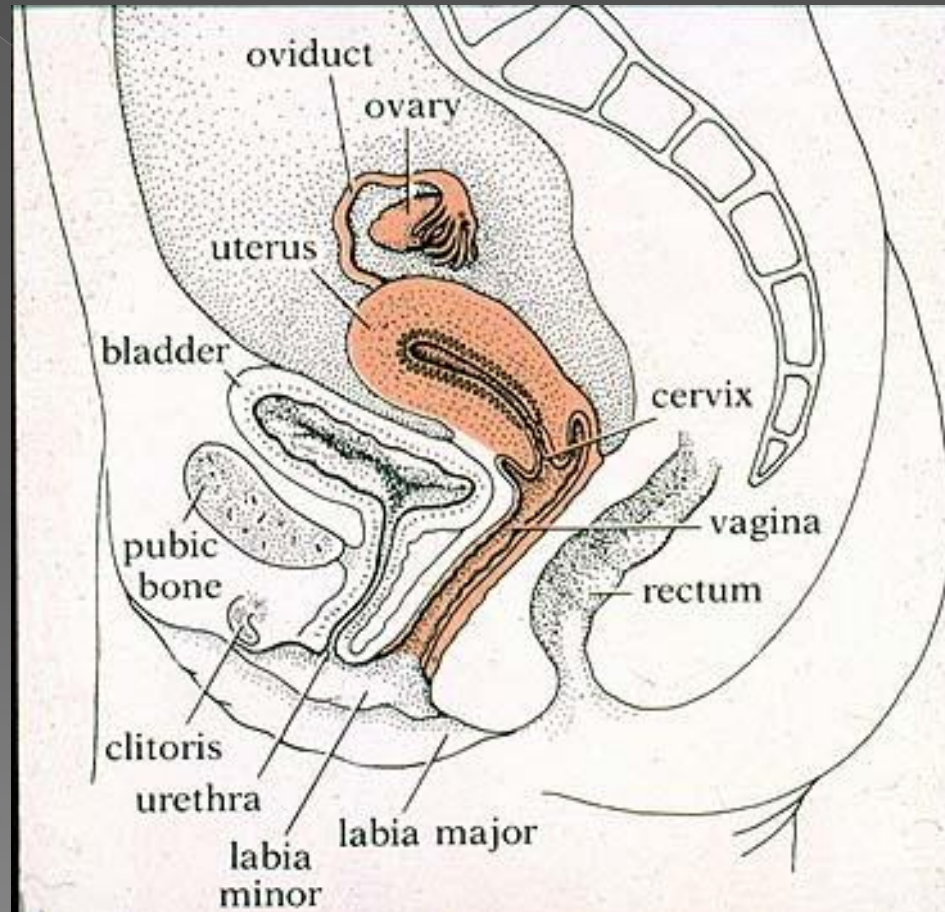
Presentation Outline

- 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

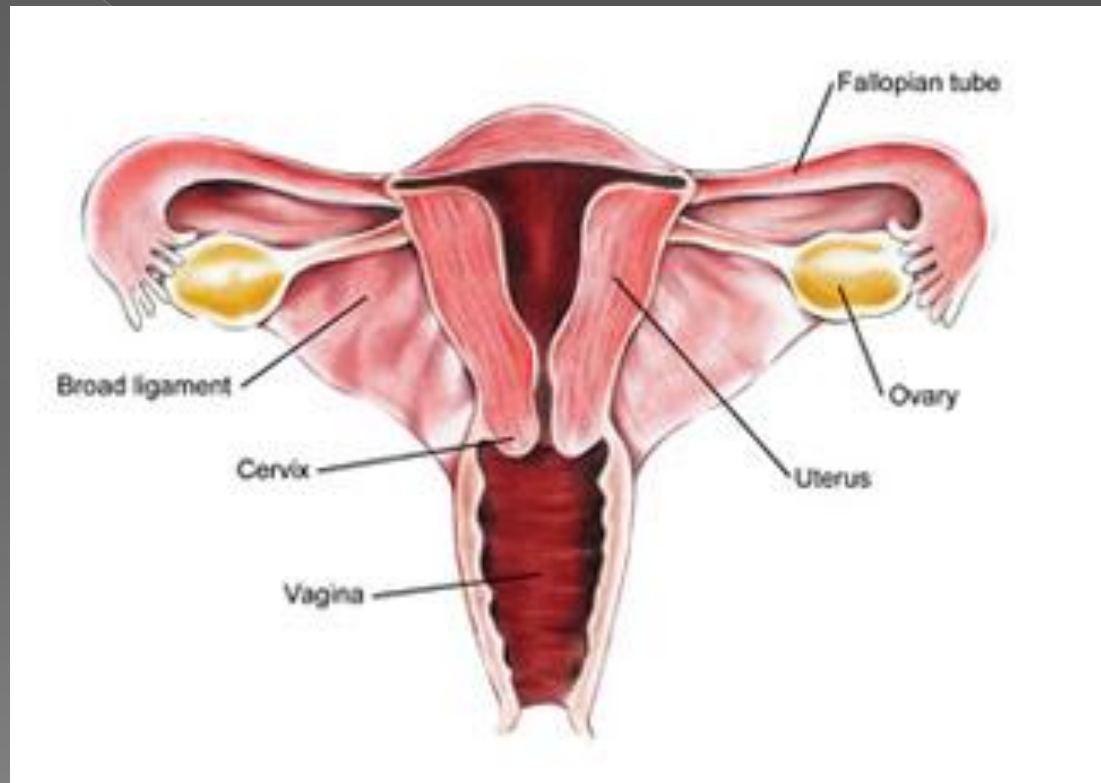
Female Reproductive System



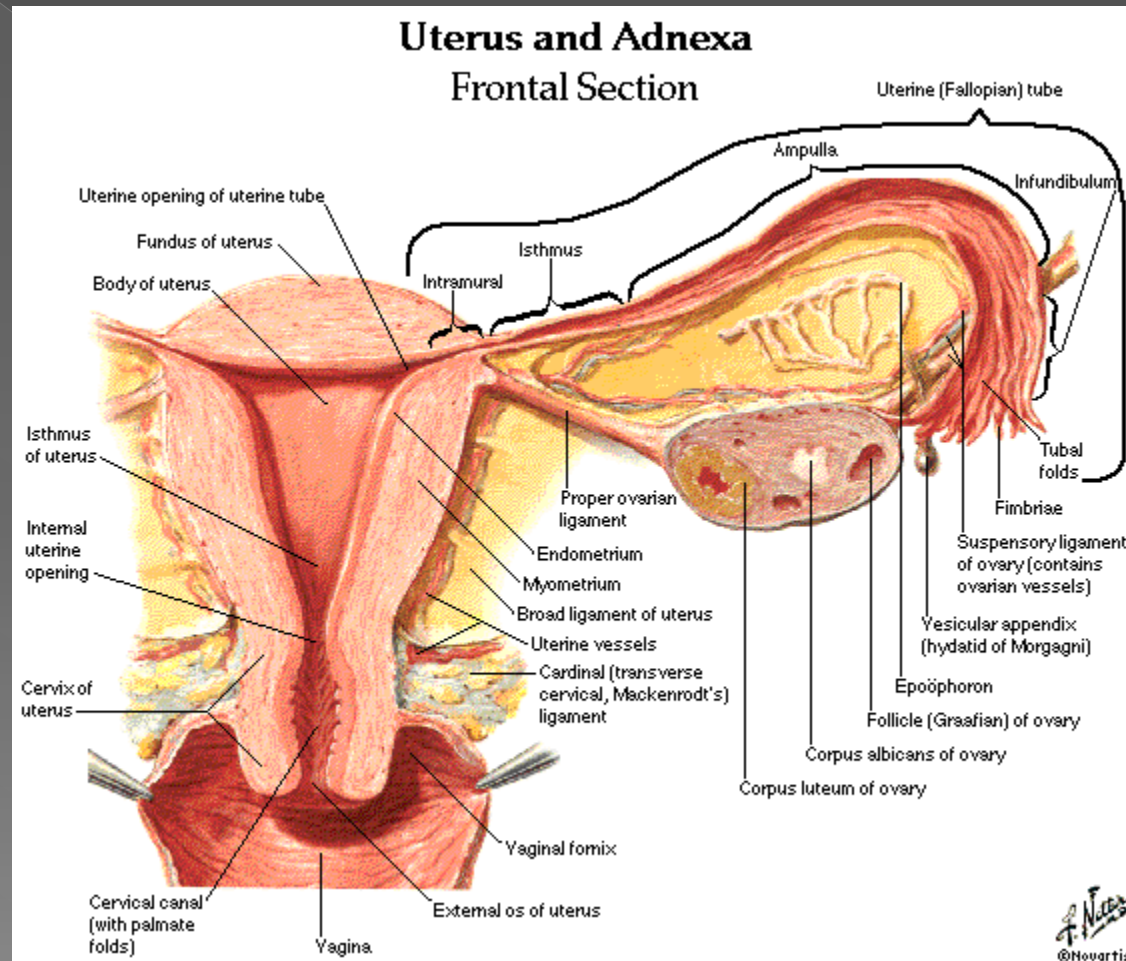
Female Reproductive System



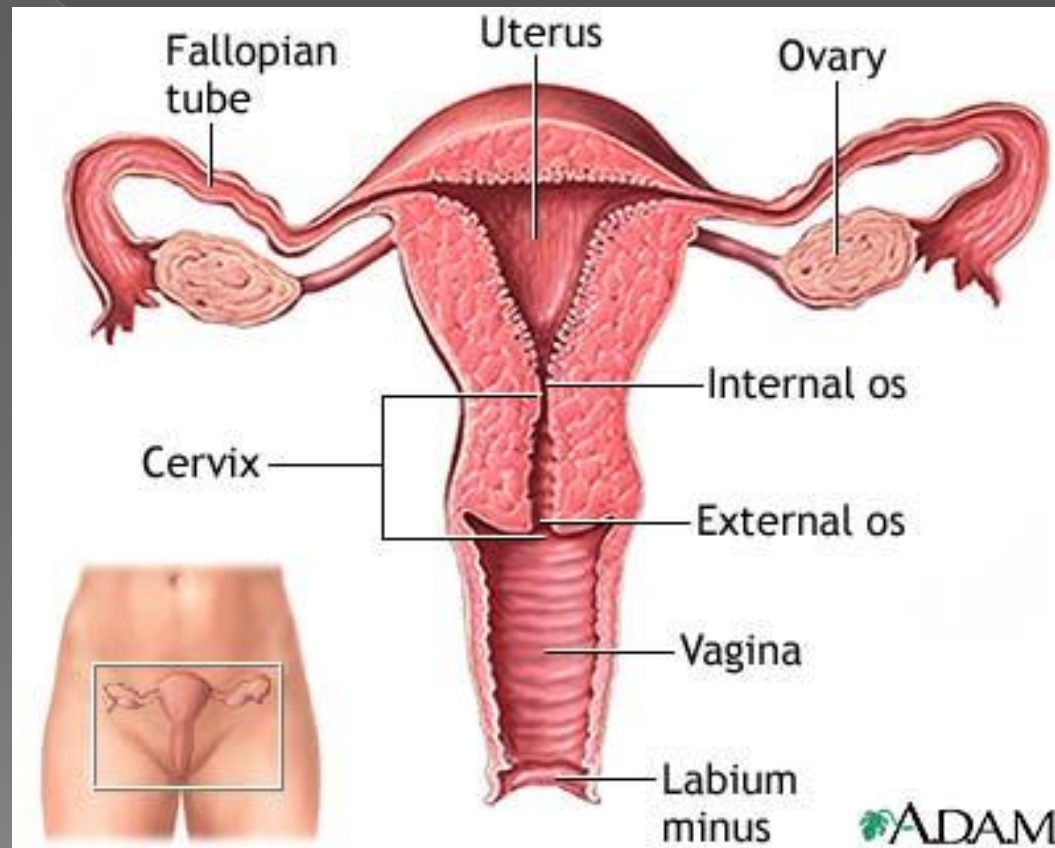
Female Reproductive System



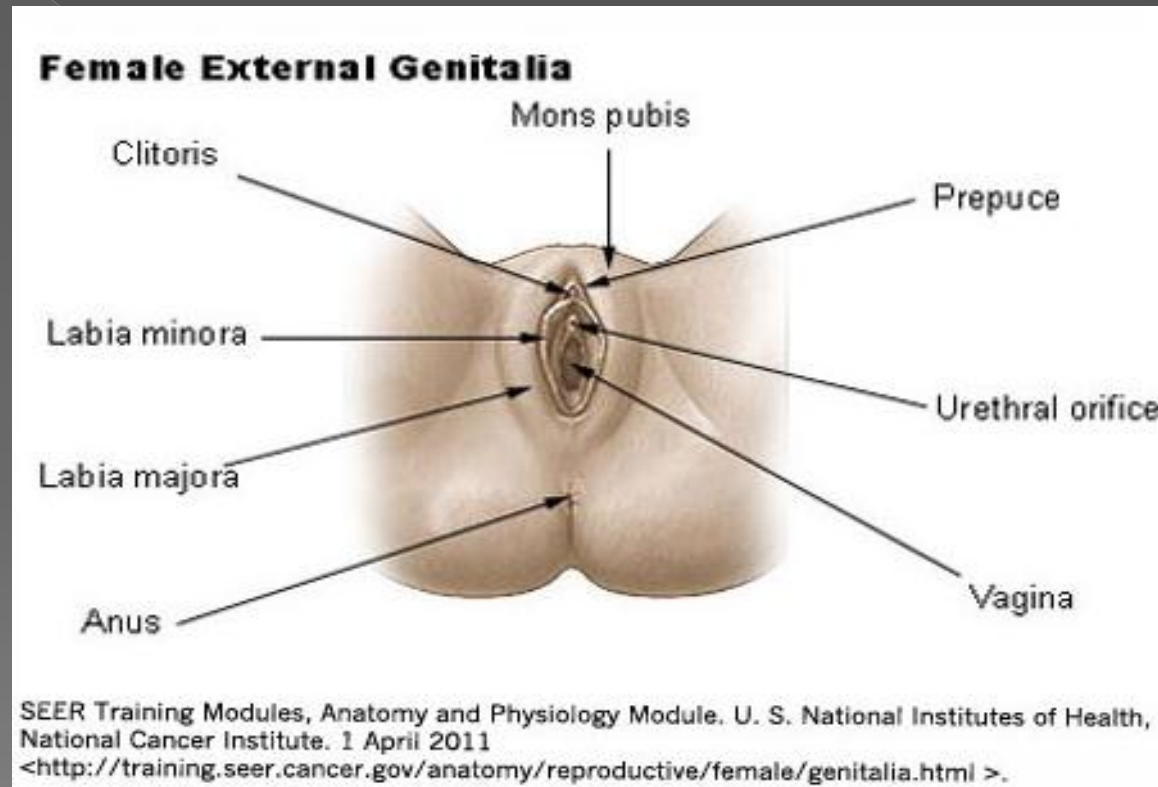
Female Reproductive System



Female Reproductive System



Female Reproductive System

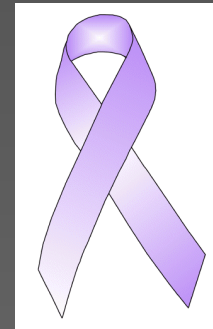


Typical Chain of Events

- 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)

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



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

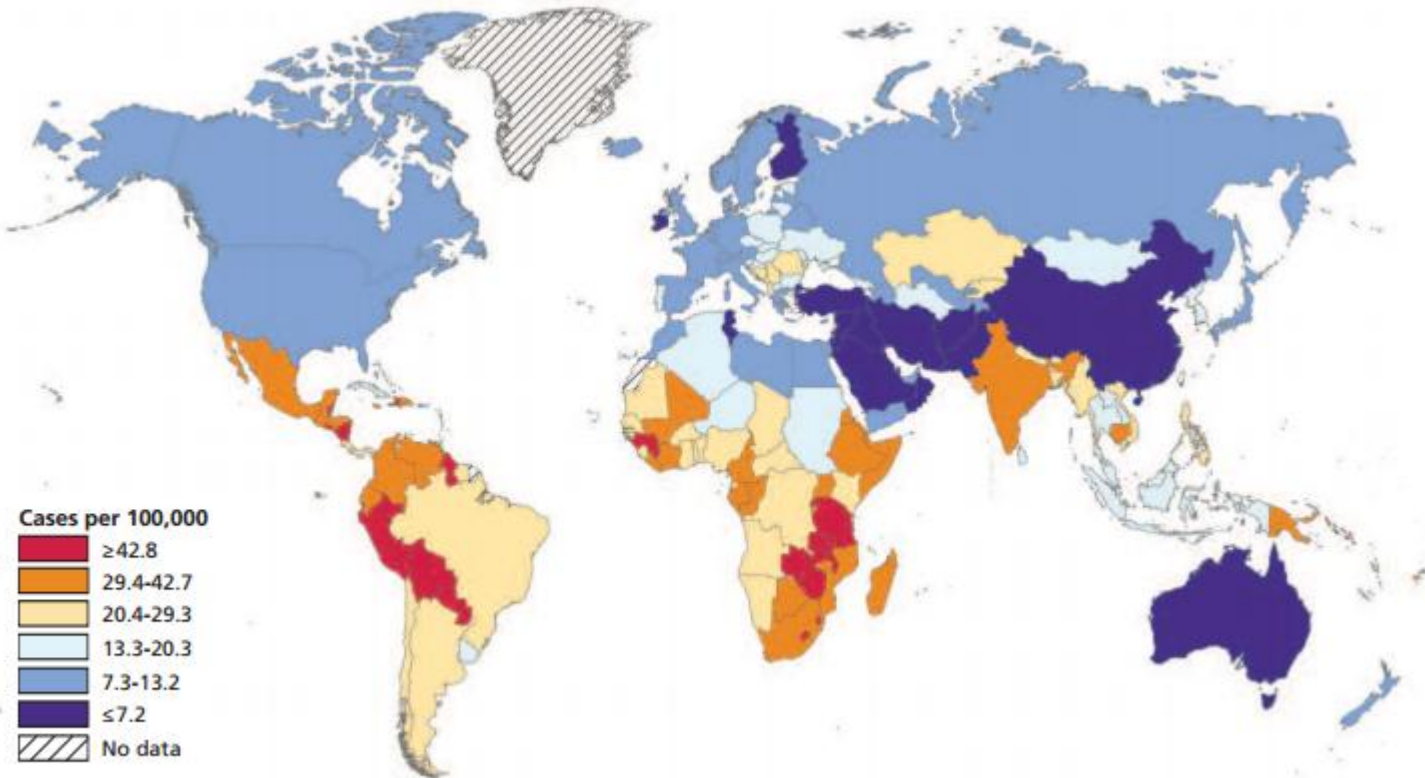
- Vagina – 2012 estimates

- > U.S. New Cases – 2,680
- > U.S. Deaths – 840

FL. New Cases – 187
FL. Deaths – 63

Cervical Cancer - Global

Figure 12. International Variation in Age-Standardized Cervical Cancer Incidence Rates



Source: Globocan 2002.

Source: Global Cancer Facts & Figures 2007

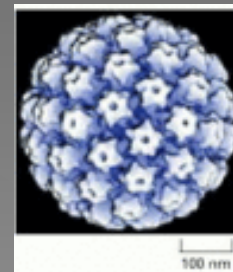
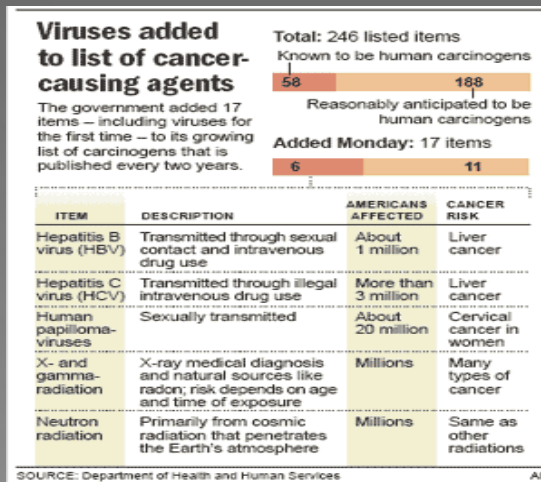
Causes and Risk Factors

Environmental

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

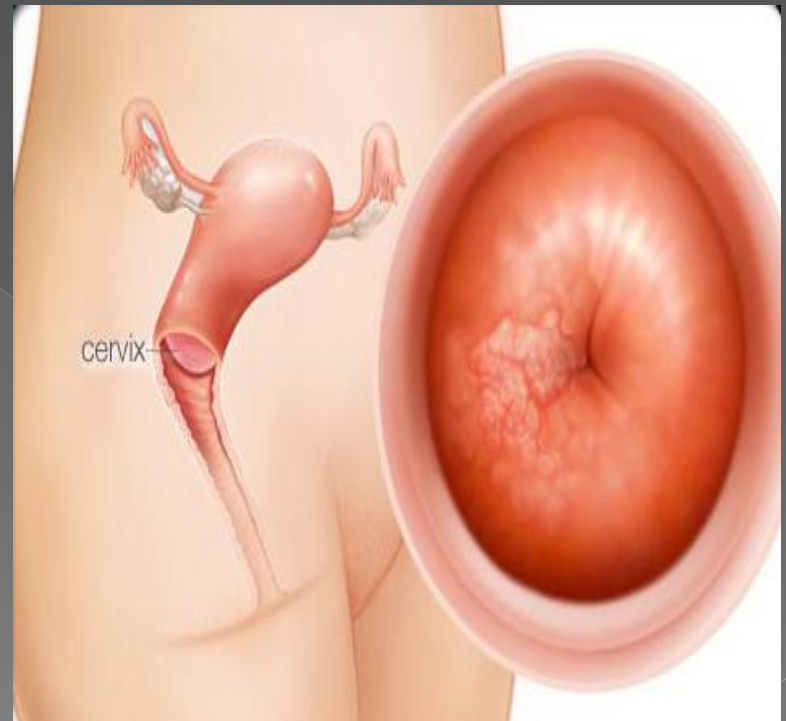
Genetic

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



Signs and Symptoms

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



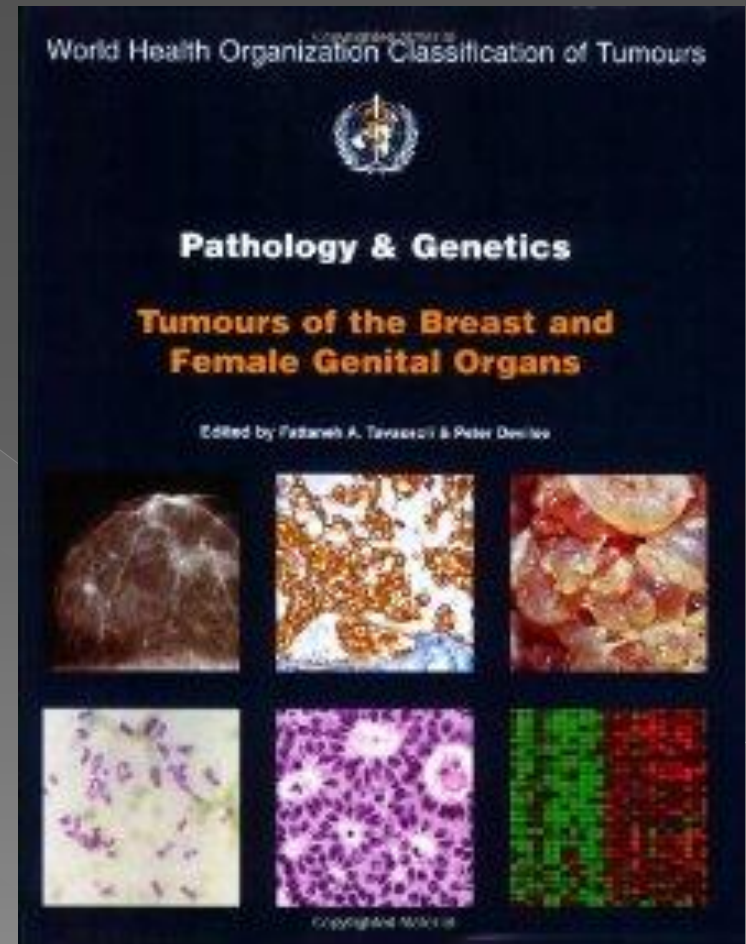
<http://www.medicinenet.com/cervical>

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

WHO Histologic Classification

- Squamous cell carcinoma
- Adenocarcinoma
- Adenosquamous carcinoma

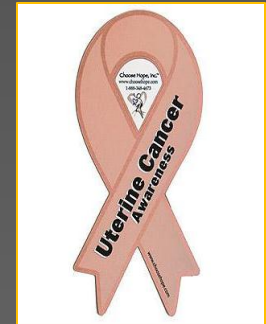


Other Characteristics

- 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

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**



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



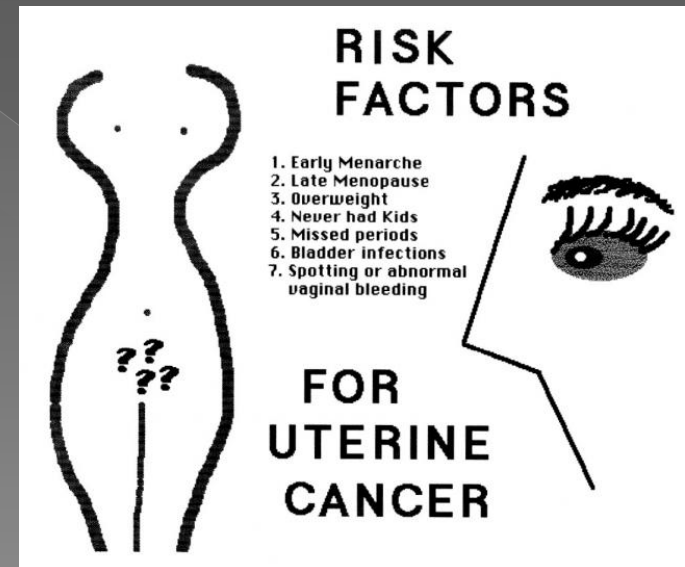
Causes and Risk Factors

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)

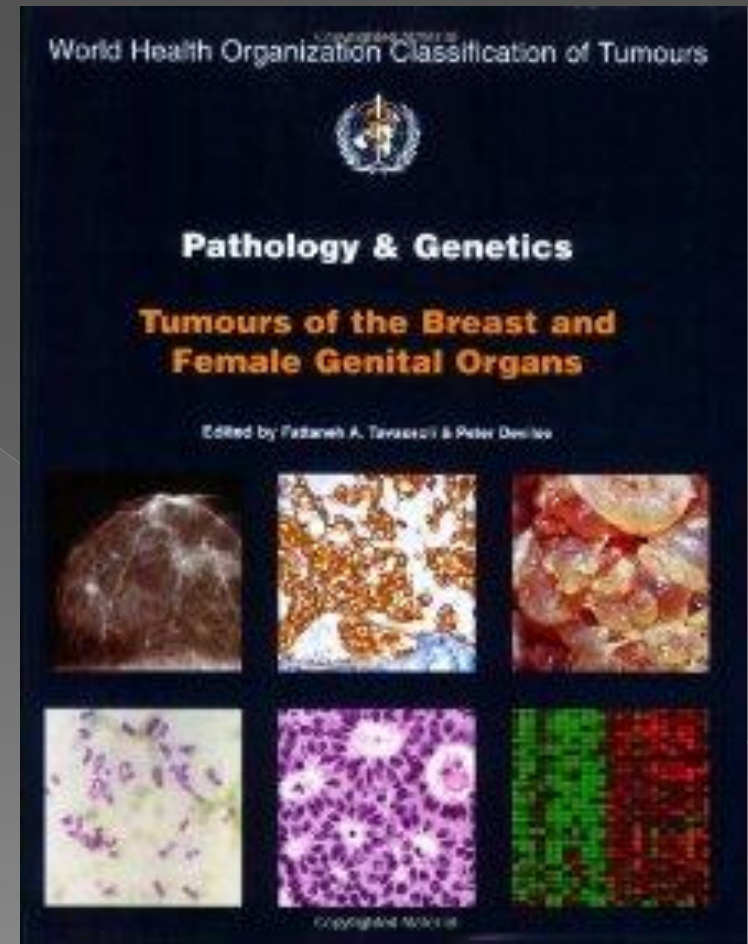


Signs and Symptoms

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

WHO Histologic Classification

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



Other Characteristics

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



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



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 - ??

Causes and Risk Factors

Environmental

- Investigated but not conclusively associated with the development of this neoplasm
- Oophorectomy reduces risk of ovarian and fallopian tube cancer but may increase risk for primary peritoneal cancer after prophylactic salpingo-oophorectomy

Genetic

- Family history
- BRCA1 and BRCA2 mutations
- Lynch syndrome
- HNPCC syndrome (hereditary nonpolyposis colorectal cancer)
- Fallopian Tube-NCCN-suggested that these cancer may be the origin of some ovarian and primary peritoneal cancers

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

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

WHO Histologic Classification

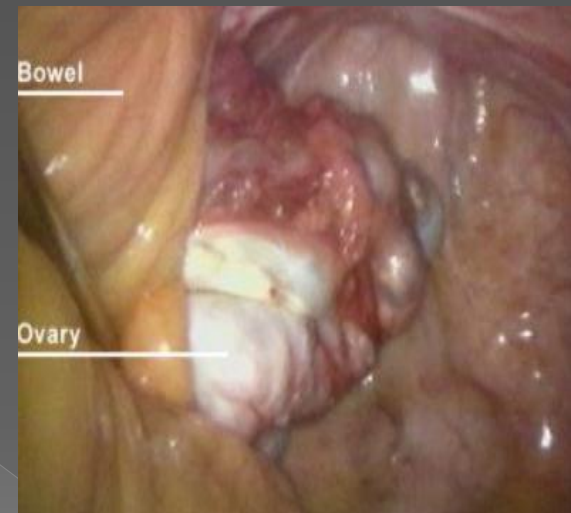
● Ovarian Epithelial

- > 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.gyncancerdoctor.com/womenscancer/cancer-information-in-depth/ovarian-cancer-mainmenu-87/65-ovarian-cancer-what-is-it>

WHO Histologic Classification

<u>WHO Histologic Classification</u>	<u>Pathology</u>
Granulosa cell tumors	
Adult	Malignant
Juvenile	Malignant
Thecoma	
Thecomas typical	Benign
Thecomas, lutenized	Malignant potential
Thecoma with increased mitotic figures	Malignant potential
Fibroma	
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	Benign
Unclassified	Malignant potential
Sertoli-Leydig cell tumors	
Well differentiated	Malignant potential
Intermediate differentiation	Malignant
Poorly differentiated	Malignant
Sertoli-Leydig tumors with heterologous elements	Malignant
Sertoli cell tumors	Malignant potential
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

Other Characteristics

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



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

Other Characteristics

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

Other Characteristics

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

Other Characteristics

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

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

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.**

Multiple Primary and Histology Coding Rules



ALL GYN Sites – See Other Sites

- Terms & Definitions
- Multiple Primary Rules
- Histology Coding Rules



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

Terms and Definitions

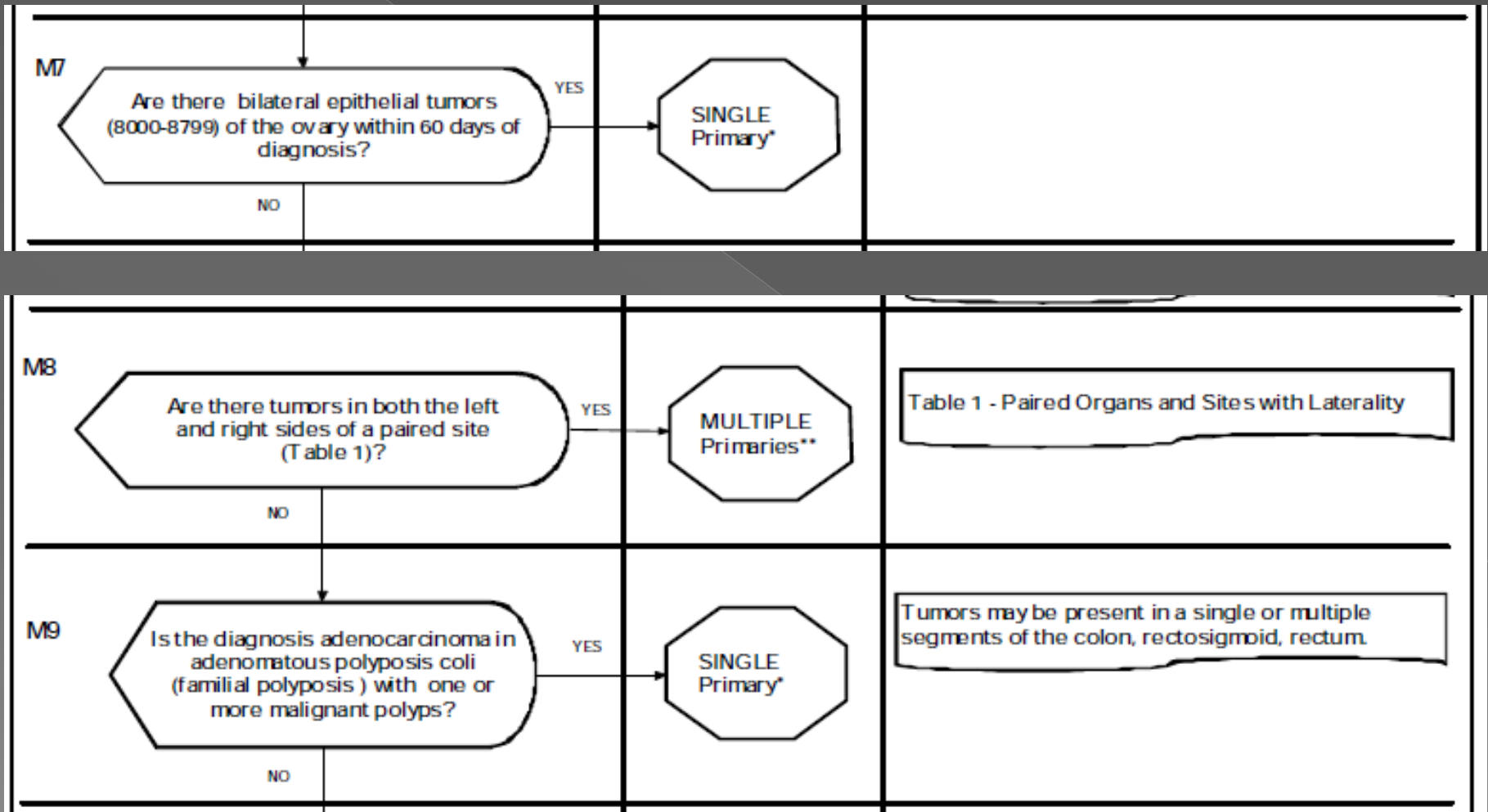
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Other Sites Terms and Definitions

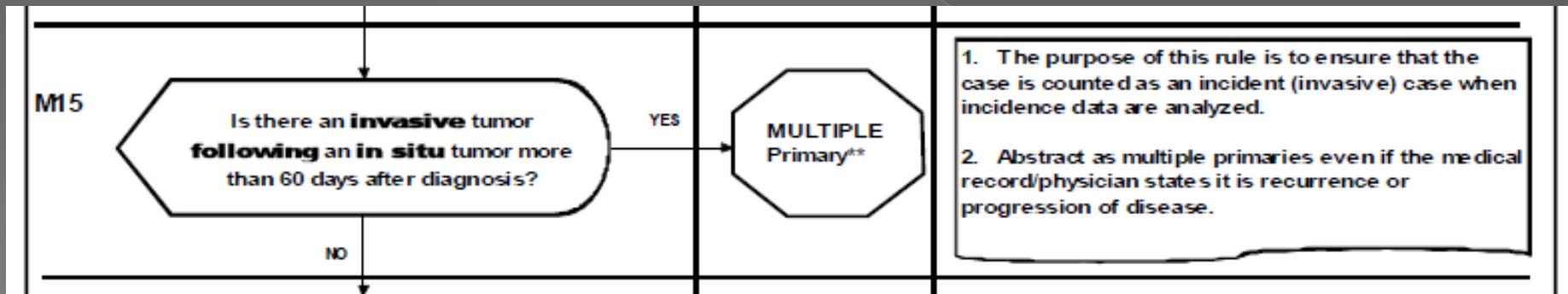
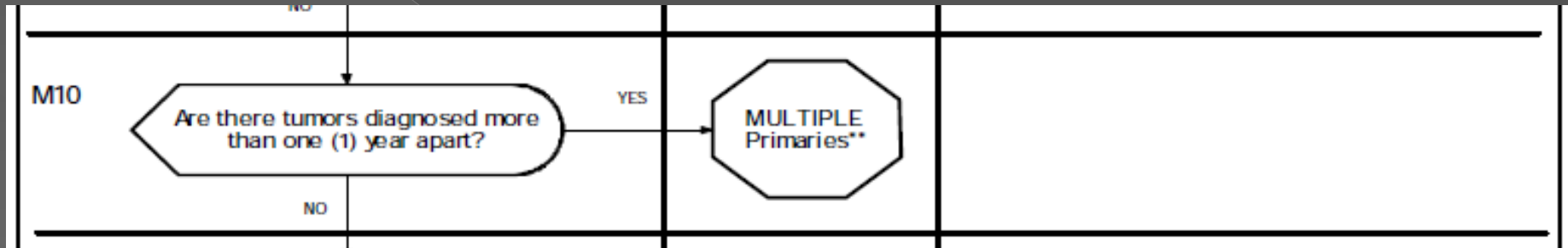
Other Sites Equivalent Terms, Definitions and Tables
Excludes Head and Neck, Colon, Lung, Melanoma of Skin, Breast,
Kidney, Renal Pelvis, Ureter, Bladder, Brain, Lymphoma and Leukemia

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

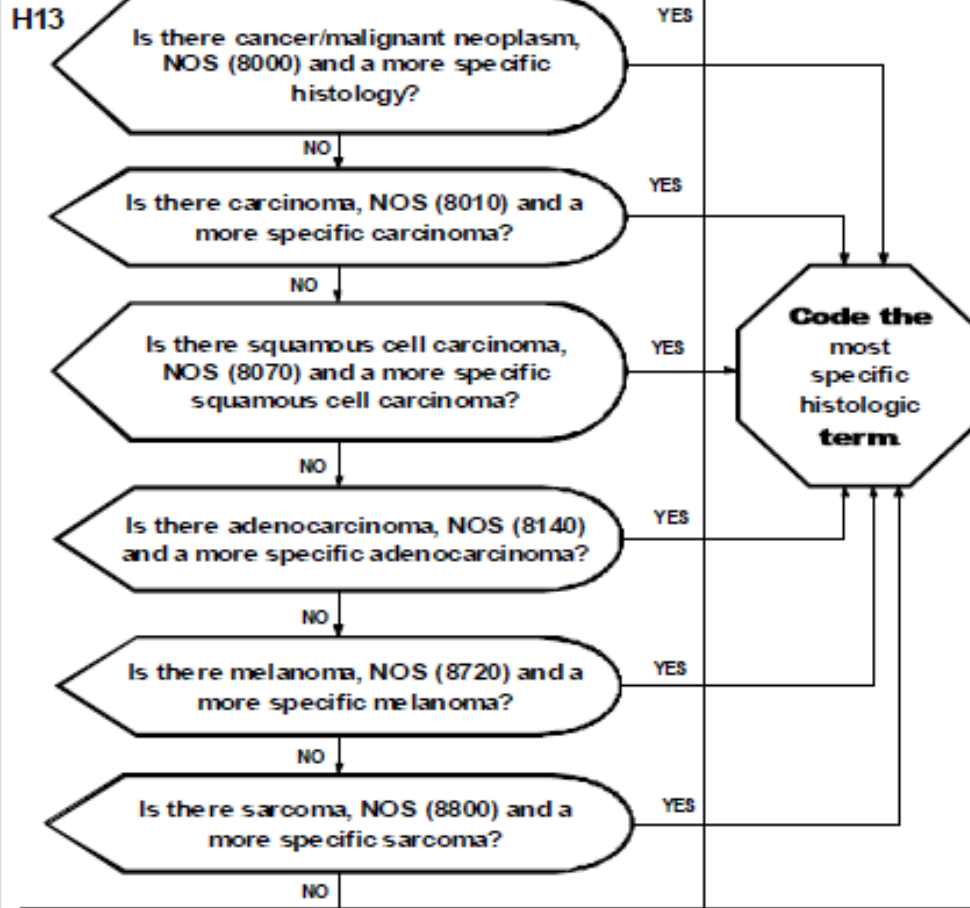
Multiple Primary Rules



Multiple Primary Rules



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 subtypes 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.

Histology Coding Rules

H21

Is the diagnosis in situ squamous **intraepithelial neoplasia grade III** of the vulva (VIN III) vagina (VAIN III), or anus (AIN III)?

YES

Code 8077/2
(squamous intraepithelial neoplasia, grade III).

NO

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

Histology Coding Rules

H16

Does the tumor have **multiple specific histologies** or is there a non-specific histology with **multiple specific histologies**?

YES

Code the appropriate combination/mixed code (Table 2)

NO

The specific histologies may be identified as type, subtype, predominantly, with features of, major, or with _____ differentiation.

Example 1 (*multiple specific histologies*): Mucinous and papillary adenocarcinoma. Code 8255 (adenocarcinoma with mixed subtypes)

Example 2 (*multiple specific histologies*): Combined small cell and squamous cell carcinoma. Code 8045 (combined small cell carcinoma).

Example 3 (*non-specific with multiple specific histologies*): Adenocarcinoma with papillary and clear cell features. Code 8255 (adenocarcinoma with mixed subtypes).

Staging GYN Cancers

**Federation Internationale de
Gynecologie et d'Obstetrique (FIGO)**



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

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	Description
TX		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor limited to ovaries (one or both)
T1a	IA	Tumor limited to one ovary; capsule intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings
T1b	IB	Tumor limited to both ovaries; capsules intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings
T1c	IC	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
T2	II	Tumor involves one or both ovaries with pelvic extension
T2a	IIA	Extension and/or implants on uterus and/or tube(s). No malignant cells in ascites or peritoneal washings
T2b	IIB	Extension to and/or implants on other pelvic tissues. No malignant cells in ascites or peritoneal washings
T2c	IIC	Pelvic extension and/or implants (T2a or T2b) with malignant cells in ascites or peritoneal washings

TNM	FIGO	Description
T3	III	Tumor involves one or both ovaries with microscopically confirmed peritoneal metastasis outside the pelvis
T3a	IIIA	Microscopic peritoneal metastasis beyond pelvis (no macroscopic tumor)
T3b	IIIB	Macroscopic peritoneal metastasis beyond pelvis 2 cm or less in greatest dimension
T3c	IIIC	Peritoneal metastasis beyond pelvis more than 2 cm in greatest dimension and/or regional lymph node metastasis

Regional Lymph Nodes (N)

NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N1	IIIC	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.

[Continued](#)

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

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.



COLLABORATIVE STAGE
DATA COLLECTION SYSTEM

○ Cervix/Vulva/Vagina

- > Based on Clinical Evaluation
- > T: Depth of Invasion (CS Ext)
- > N and M: Standard





COLLABORATIVE STAGE DATA COLLECTION SYSTEM

Code	Description	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

Staging Cervical Cancer

Table 1 AJCC Tumor-Node-Metastases (TNM) and International Federation of Gynecology and Obstetrics (FIGO) Surgical Staging Systems for Carcinoma of the Uterine Cervix

TNM Categories	FIGO Stages	Surgical-Pathologic Findings	TNM Categories	FIGO Stages	Surgical-Pathologic Findings
TX		Primary tumor cannot be assessed	T2a	IIA	Tumor without parametrial invasion
T0		No evidence of primary tumor	T2a1	IIA1	Clinically visible lesion 4.0 cm or less in greatest dimension
Tis*		Carcinoma in situ (preinvasive carcinoma)	T2a2	IIA2	Clinically visible lesion more than 4.0 cm in greatest dimension
T1	I	Cervical carcinoma confined to cervix (extension to corpus should be disregarded)	T2b	IIB	Tumor with parametrial invasion
T1a**	IA	Invasive carcinoma diagnosed only by microscopy. Stromal invasion with a maximum depth of 5.0 mm measured from the base of the epithelium and a horizontal spread of 7.0 mm or less. Vascular space involvement, venous or lymphatic, does not affect classification	T3	III	Tumor extends to pelvic wall and/or involves lower third of vagina and/or causes hydronephrosis or nonfunctioning kidney ^{##}
T1a1	IA1	Measured stromal invasion 3.0 mm or less in depth and 7.0 mm or less in horizontal spread	T3a	IIIA	Tumor involves lower third of vagina, no extension to pelvic wall
T1a2	IA2	Measured stromal invasion more than 3.0mm and not more than 5.0 mm with a horizontal spread 7.0 mm or less	T3b	IIIB	Tumor extends to pelvic wall and/or causes hydronephrosis or nonfunctioning kidney
T1b	IB	Clinically visible lesion confined to the cervix or microscopic lesion greater than T1a/IA2 [#]	T4	IVA	Tumor invades mucosa of bladder or rectum, and/or extends beyond true pelvis (bullous edema is not sufficient to classify a tumor as T4)
T1b1	IB1	Clinically visible lesion 4.0 cm or less in greatest dimension			
T1b2	IB2	Clinically visible lesion more than 4.0 cm in greatest dimension			
T2	II	Cervical carcinoma invades beyond uterus but not to pelvic wall or to lower third of vagina			

*Note: FIGO no longer includes Stage 0 (Tis).

**Note: All macroscopically visible lesions – even with superficial invasion – are T1b/IB.

[#]All macroscopically visible lesions—even with superficial invasion—are allotted to stage IB carcinomas. Invasion is limited to a measured stromal invasion with a maximal depth of 5.00 mm and a horizontal extension of not >7.00 mm. Depth of invasion should not be > 5.00mm taken from the base of the epithelium of the original tissue—superficial or glandular. The depth of invasion should always be reported in mm, even in those cases with “early (minimal) stromal invasion” (~1 mm). The involvement of vascular/lymphatic spaces should not change the stage allotment.

^{##}On rectal examination, there is no cancer-free space between the tumor and the pelvic wall. All cases with hydronephrosis or non-functioning kidney are included, unless they are known to be due to another cause.

Continued...



COLLABORATIVE STAGE DATA COLLECTION SYSTEM

- **Corpus Uteri**
- Based on Surgical Evaluation
- TNM based on FIGO staging
 - > T: Depth of Invasion
 - > N and M: Standard
- 3 Different CS Schema – NEW for 2010, TNM 7th ed.
 - Leiomyosarcoma, endometrial stromal sarcoma
 - 8890-8898, 8930-8931
 - Carcinoma and Carcinosarcoma
 - 8000-8790, 8980-8981, 9700-9701
 - Adenosarcoma
 - 8933

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)		Surgical-Pathologic Findings
TNM Categories	FIGO* Stages	
TX		Primary tumor cannot be assessed
T0		No evidence of primary tumor
Tis**		Carcinoma in situ (preinvasive carcinoma)
T1	I	Tumor confined to the corpus uteri
T1a	IA	Tumor limited to endometrium or invades less than one-half of the myometrium
T1b	IB	Tumor invades one-half or more of the myometrium
T2	II	Tumor invades stromal connective tissue of the cervix but does not extend beyond uterus [#]
T3a	IIIA	Tumor involves serosa and/or adnexa (direct extension or metastasis) ^{##}
T3b	IIIB	Vaginal involvement (direct extension or metastasis) or parametrial involvement ^{##}
	IIIC	Metastases to pelvic and/or para-aortic lymph nodes ^{##}
	IV	Tumor invades bladder and/or bowel mucosa, and/or distant metastases
T4	IVA	Tumor invades bladder mucosa and/or bowel (bullous edema is not sufficient to classify a tumor as T4)

*Either G1, G2, or G3

**Note: FIGO no longer includes Stage 0 (Tis).

[#]Endocervical glandular involvement only should be considered as Stage I and no longer as Stage II.

^{##}Positive cytology has to be reported separately without changing the stage.

Regional Lymph Nodes (N)

TNM Categories	FIGO Stages	Surgical-Pathologic Findings
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N1	IIIC1	Regional lymph node metastasis to pelvic lymph nodes (positive pelvic nodes)
N2	IIIC2	Regional lymph node metastasis to para-aortic lymph nodes, with or without positive pelvic lymph nodes

Distant Metastasis (M)

TNM Categories	FIGO Stages	Surgical-Pathologic Findings
M0		No distant metastasis
M1	IVB	Distant metastasis (includes metastasis to inguinal lymph nodes intra-peritoneal disease, or lung, liver, or bone. It excludes metastasis to para-aortic lymph nodes, vagina, pelvic serosa, or adnexa)

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Continued



COLLABORATIVE STAGE DATA COLLECTION SYSTEM

Code	Description	TNM 7 Map
000	In situ, intraepithelial, noninvasive, preinvasive	Tis
100	Invasive cancer confined to corpus uteri	T1N0S
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)*

Leiomyosarcoma and Endometrial Stromal Sarcoma

Primary Tumor (T)

TNM Categories	FIGO Stages	Definition
TX		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor limited to the uterus
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 issues
T3	III**	Tumor infiltrates abdominal tissues (not just protruding into the abdomen)
T3a	IIIA	One site
T3b	IIIB	More than one site
T4	IVA	Tumor invades bladder or rectum

Note: Simultaneous tumors of the uterine corpus and ovary/pelvis in association with ovarian/pelvic endometriosis should be classified as independent primary tumors.

*Carcinosarcomas should be staged as carcinomas of the endometrium (See ST-1).

**In this stage, lesions must infiltrate abdominal tissues and not just protrude into the abdominal cavity.

Regional Lymph Nodes (N)

TNM Categories	FIGO Stages	Definition
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N1	IIIC	Regional lymph node metastasis

Distant Metastasis (M)

TNM Categories	FIGO Stages	Definition
M0		No distant metastasis
M1	IVB	Distant metastasis (excluding adnexa, pelvic and abdominal tissues)

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.) 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, Prat J. Uterine sarcomas: a review. Int J Gynaecol Obstet 2010;116:131-139. Copyright 2010, with permission from International Federation of Gynecology and Obstetrics.



COLLABORATIVE STAGE
DATA COLLECTION SYSTEM

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



COLLABORATIVE STAGE DATA COLLECTION SYSTEM

- **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



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

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

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	Description
TX		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor limited to ovaries (one or both)
T1a	IA	Tumor limited to one ovary; capsule intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings
T1b	IB	Tumor limited to both ovaries; capsules intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings
T1c	IC	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
T2	II	Tumor involves one or both ovaries with pelvic extension
T2a	IIA	Extension and/or implants on uterus and/or tube(s). No malignant cells in ascites or peritoneal washings
T2b	IIB	Extension to and/or implants on other pelvic tissues. No malignant cells in ascites or peritoneal washings
T2c	IIC	Pelvic extension and/or implants (T2a or T2b) with malignant cells in ascites or peritoneal washings

TNM	FIGO	Description
T3	III	Tumor involves one or both ovaries with microscopically confirmed peritoneal metastasis outside the pelvis
T3a	IIIA	Microscopic peritoneal metastasis beyond pelvis (no macroscopic tumor)
T3b	IIIB	Macroscopic peritoneal metastasis beyond pelvis 2 cm or less in greatest dimension
T3c	IIIC	Peritoneal metastasis beyond pelvis more than 2 cm in greatest dimension and/or regional lymph node metastasis

Regional Lymph Nodes (N)

NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N1	IIIC	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.

[Continued](#)



COLLABORATIVE STAGE
DATA COLLECTION SYSTEM

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



COLLABORATIVE STAGE DATA COLLECTION SYSTEM

- **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



COLLABORATIVE STAGE
DATA COLLECTION SYSTEM

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



**COLLABORATIVE STAGE
DATA COLLECTION SYSTEM**

○ FCDS Required GYN Site Specific Factors

Schema Name	2012 FCDS Required	Additional CoC Required
AdnexaUterineOther	None	None
Cervix	None	1
CorpusAdenosarcoma	2	1,3,4,5,6
CorpusCarcinoma	2	1,3,4,5,6
CorpusSarcoma	2	1,3,4,5,6
FallopianTube	None	1,4,5,6,7
GenitalFemaleOther	None	None
MerkelCellVulva	3,11	1,16,17,18,22
Ovary	None	1,2,3
PeritoneumFemaleGen	25	1,2,3
Placenta	1	2
Vagina	None	1,2,3,4,5,6,7
Vulva	11	10



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



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.



CS Coding Issues

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

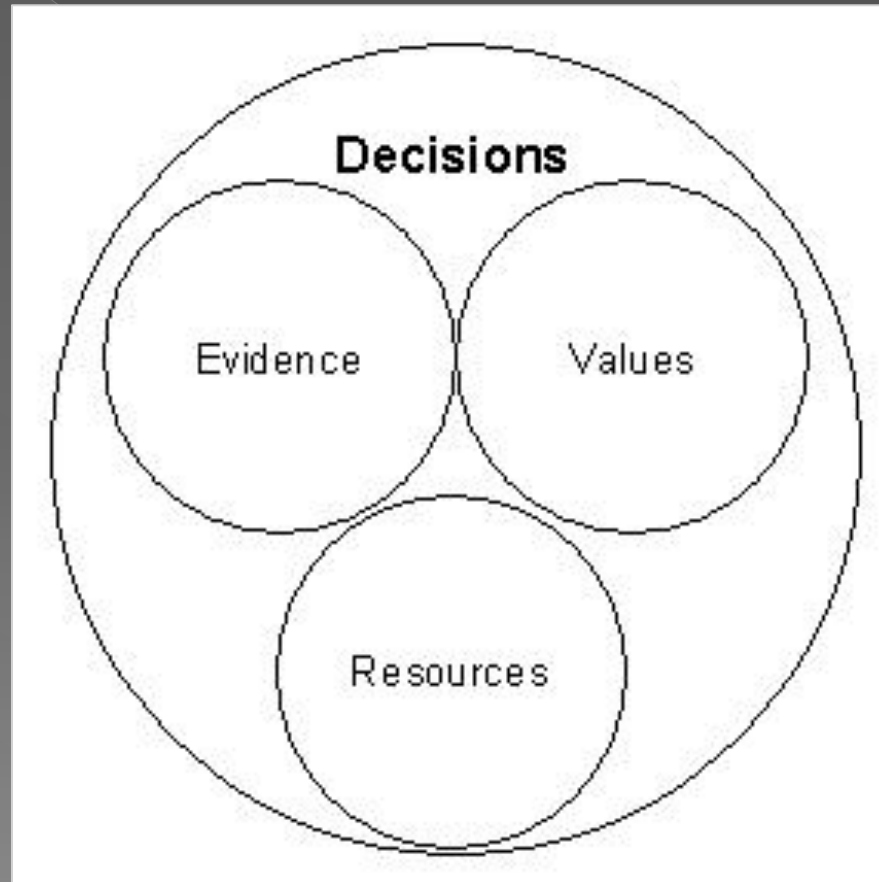
> INACCESSIBLE LYMPH NODES RULE

- 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

Primary Treatment



NCCN Treatment Guidelines Cervix, Vulva, Vagina



Surgery



Radiation Therapy

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



Chemotherapy

CHEMOTHERAPY REGIMENS FOR RECURRENT OR METASTATIC CERVICAL CANCER[†] (Strongly consider clinical trial)

First-line combination therapy

- Cisplatin/paclitaxel^{1,2}
- Carboplatin/paclitaxel³
- Cisplatin/topotecan⁴
- Cisplatin/gemcitabine (category 2B)⁵

Possible first-line single agent therapy

- Cisplatin (preferred as a single agent)²
- Carboplatin⁶
- Paclitaxel⁷

Second-line therapy^{††}

- (Agents listed are category 2B unless otherwise noted)
- Bevacizumab
 - Docetaxel
 - 5-FU (5-fluorouracil)
 - Gemcitabine
 - Ifosfamide
 - Irinotecan
 - Mitomycin
 - Topotecan
 - Pemetrexed (category 3)
 - Vinorelbine (category 3)

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

Blenoxane (Bleomycin)

Bleomycin

Cisplatin

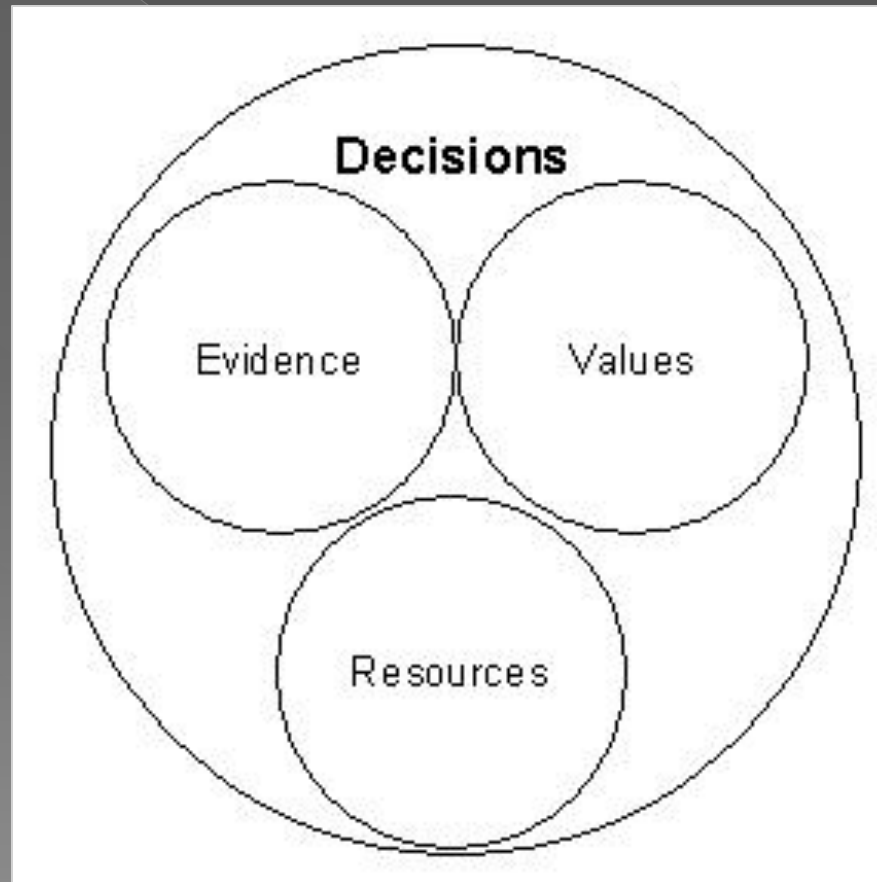
Hycamtin (Topotecan Hydrochloride)

Platinol (Cisplatin)

Platinol-AQ (Cisplatin)

Topotecan Hydrochloride

NCCN Treatment Guidelines Corpus Uteri – Endometrium Uterus



NCCN Treatment Guidelines Uterine Neoplasms



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Uterine Neoplasms

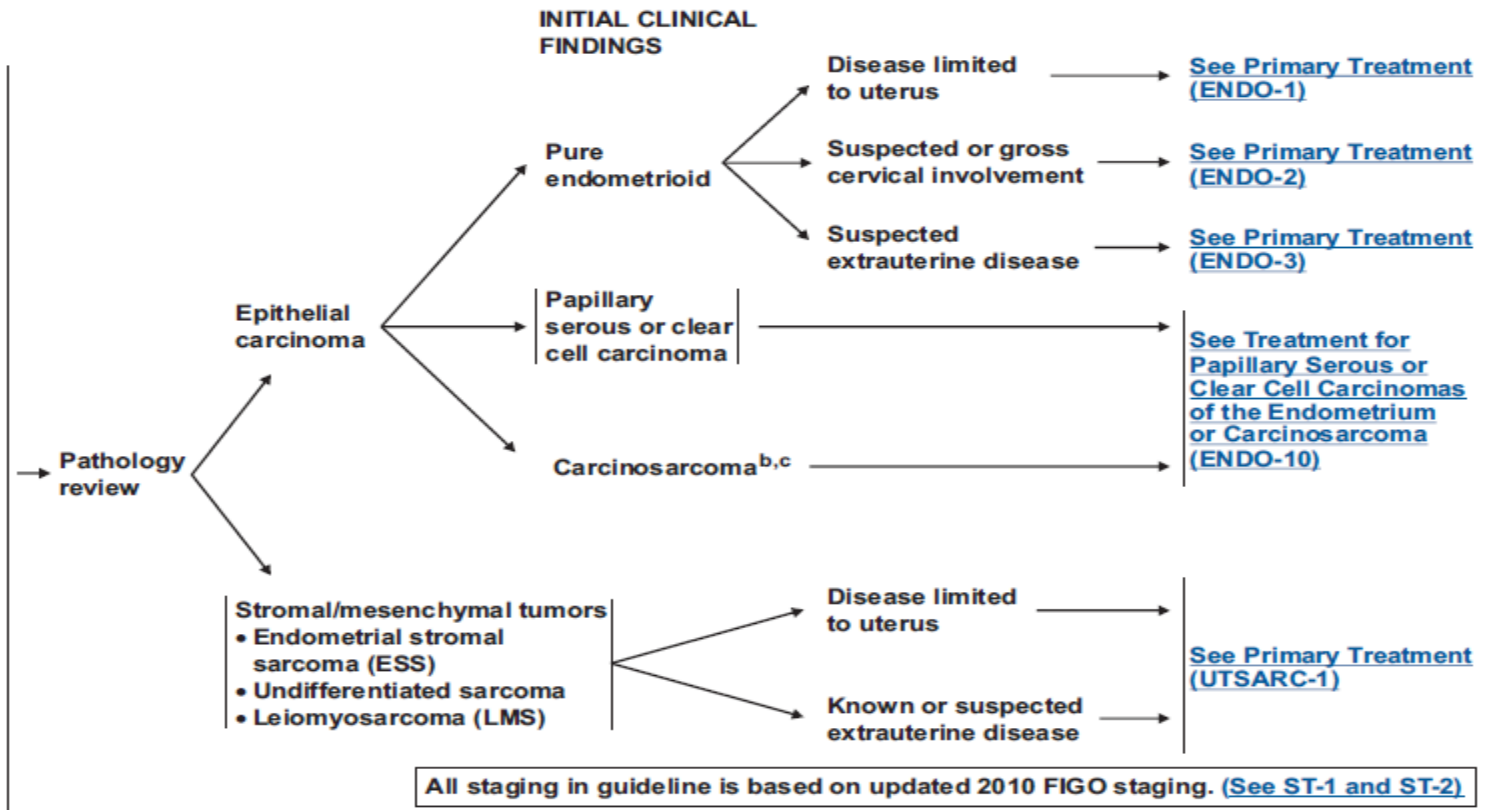
[NCCN Guidelines Index](#)
[Uterine Neoplasms TOC](#)
[Discussion](#)

INITIAL EVALUATION

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

Optional:

- LFT/renal function tests/chemistry profile
- Consider genetic counseling/testing for young patients (< 55 y) and those with a significant family history of endometrial and/or colorectal cancer^a ([See Lynch syndrome/HNPCC in NCCN Colorectal Cancer Screening Guidelines](#))



Endometrial Carcinoma – Primary Surgery

HYSTERECTOMY¹

TH/BSO: Total hysterectomy + bilateral salpingo-oophorectomy

RH: Radical hysterectomy

Pathologic assessment to include:

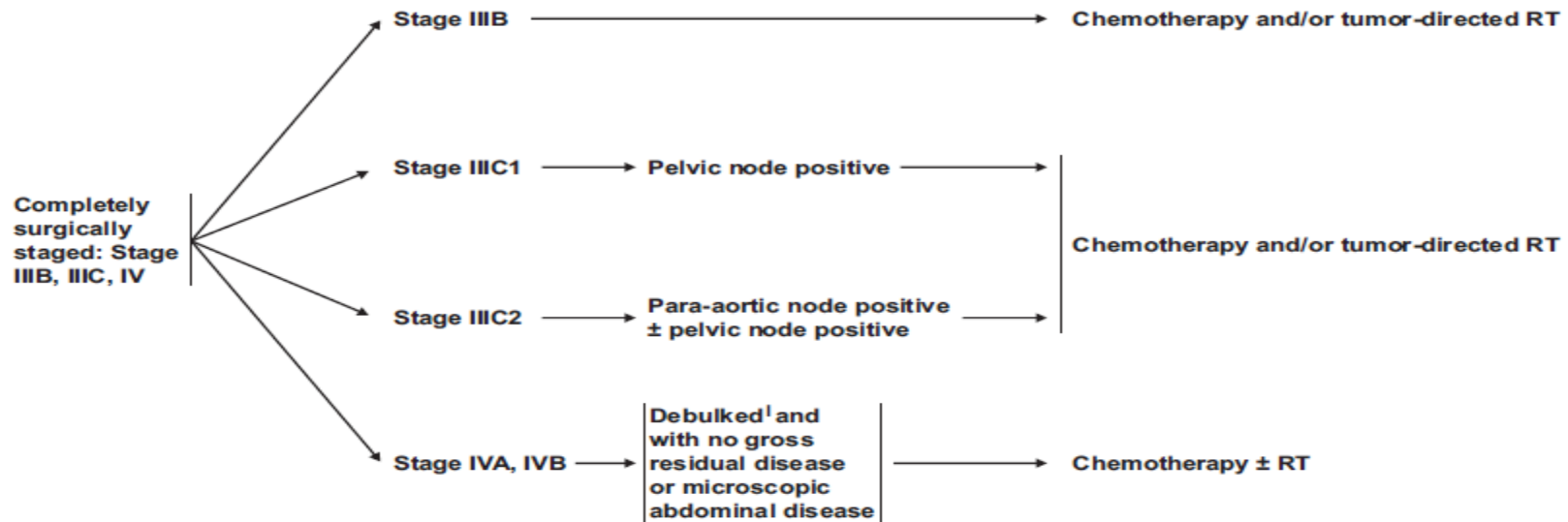
- Nodes
 - Level of nodal involvement (pelvic, common iliac, para-aortic)
- Peritoneal cytology²
- Uterus
 - Ratio of depth of myometrial/stromal invasion to myometrial thickness
 - Cervical stromal or glandular involvement
 - Tumor size
 - Tumor location (fundus vs lower uterine segment/cervix)
 - Histologic 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

Endometrial Carcinoma – Primary Surgery

All staging in guideline is based on updated 2010 FIGO staging. ([See ST-1](#))

CLINICAL FINDINGS

ADJUVANT TREATMENT^{b,n,p}



^bSee Principles of Radiation Therapy (UN-A).

^lThe surgical goal is to have no measurable residual disease.

ⁿAdjuvant therapy determinations are made on the basis of pathologic findings.

^pSee Systemic Therapy for Recurrent, Metastatic, or High-Risk Disease (ENDO-B).

Endometrial Carcinoma – Post-Surgical Evaluation



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NCCN Guidelines Version 3.2012 Endometrial Carcinoma

[NCCN Guidelines Index](#)
[Uterine Neoplasms TOC](#)
[Discussion](#)

PAPILLARY SEROUS OR CLEAR CELL CARCINOMA OF THE ENDOMETRIUM OR CARCINOSARCOMA[†]

ADDITIONAL WORKUP

PRIMARY TREATMENT

ADJUVANT TREATMENT

Biopsy:
Papillary serous carcinoma
or
Clear cell carcinoma
or
Carcinosarcoma[†]

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

- Includes surgical staging, as with ovarian cancer
- TH/BSO, pelvic and para-aortic lymph node dissection, cytology, omentectomy, biopsies of peritoneal surfaces (including underside of diaphragm)
- Maximal tumor debulking

Stage IA
(no myometrial invasion)

Stage IA,
(with myometrial invasion)
Stage IB, II

Stage III, IV
(adequately
debulked)

Stage III, IV
(inadequately
debulked)

Observe
or
Chemotherapy^P
or
Tumor-directed RT^b

Chemotherapy^P
± tumor-directed RT^b
or
Whole abdominopelvic RT
(category 3)
± vaginal brachytherapy
(category 3)

Chemotherapy^P

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

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.**

Endometrial Carcinoma – Chemo

SYSTEMIC THERAPY FOR RECURRENT, METASTATIC OR HIGH-RISK DISEASE¹
(STRONGLY ENCOURAGE PARTICIPATION IN CLINICAL TRIALS)

HORMONE THERAPY²

- Progestational agents
- Tamoxifen
- Aromatase inhibitors

CHEMOTHERAPY REGIMENS³

(Multi-agent chemotherapy regimens preferred, if tolerated)

- Cisplatin/doxorubicin (category 1)
- Cisplatin/doxorubicin/paclitaxel (category 1)
- Ifosfamide plus paclitaxel (category 1 for carcinosarcoma)
- Carboplatin/paclitaxel
- Carboplatin/docetaxel⁴
- Cisplatin
- Carboplatin
- Doxorubicin
- Liposomal doxorubicin
- Paclitaxel
- Docetaxel⁴ (category 2B)
- Bevacizumab⁵ (category 2B)
- Cisplatin/ifosfamide (for carcinosarcoma)
- Ifosfamide (for carcinosarcoma)

¹Cisplatin, carboplatin, liposomal doxorubicin, paclitaxel, and docetaxel may cause drug reactions
(See [NCCN Ovarian Cancer Guidelines—Management of Drug Reactions \[OV-C\]](#))

²Hormonal therapy is for endometrioid histologies only (ie, not for papillary serous carcinoma, clear cell carcinoma, or carcinosarcoma).

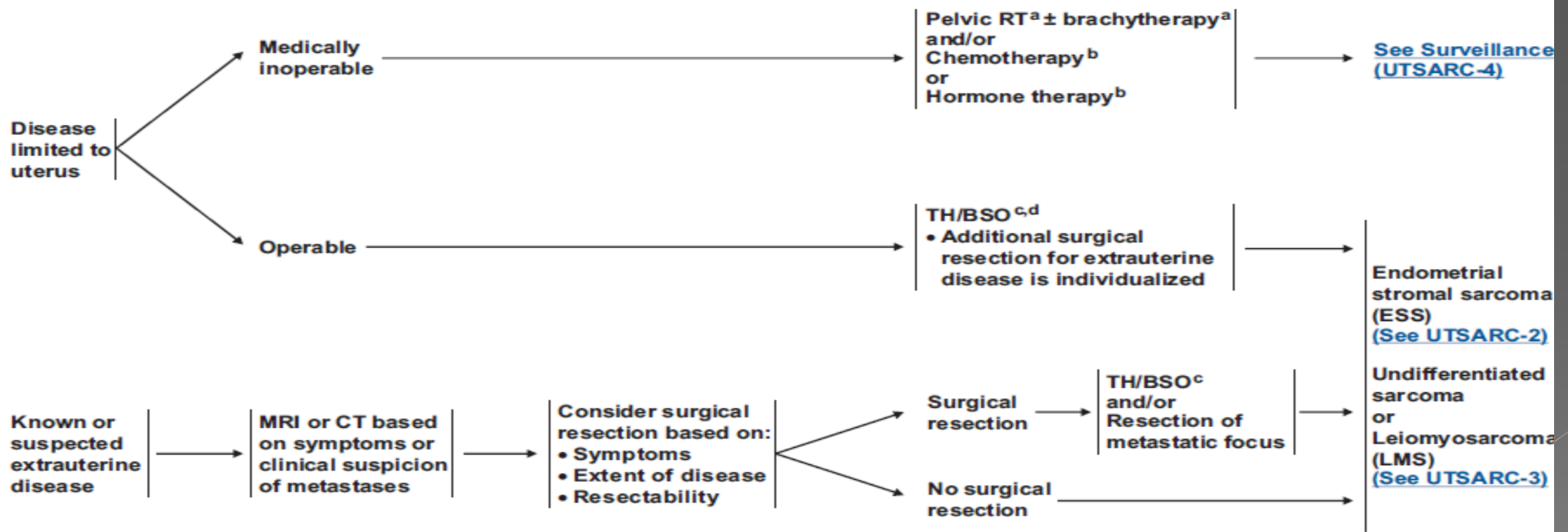
³Chemotherapy regimens are for endometrioid histologies, papillary serous carcinoma, or clear cell carcinoma. A few of the agents can also be used for carcinosarcoma, as indicated.

⁴Docetaxel may be considered for patients in whom paclitaxel is contraindicated.

⁵Bevacizumab may be considered for use in patients who have progressed on prior cytotoxic chemotherapy.

Uterine Sarcoma – Post Clinical/Surgical Evaluation

INITIAL CLINICAL FINDINGS



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

^aSee Principles of Radiation Therapy (UN-A).

^bSee Systemic Therapy for Uterine Sarcoma (UTSARC-A).

^cOophorectomy individualized for reproductive age patients.

^dFor incidental finding of uterine sarcoma after TH/BSO: Recommend imaging and consider additional surgical resection on an individual basis.

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.**
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Uterine Sarcoma – Chemo

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NCCN Guidelines Version 3.2012 Uterine Sarcoma

SYSTEMIC THERAPY FOR UTERINE SARCOMA

CHEMOTHERAPY REGIMENS¹

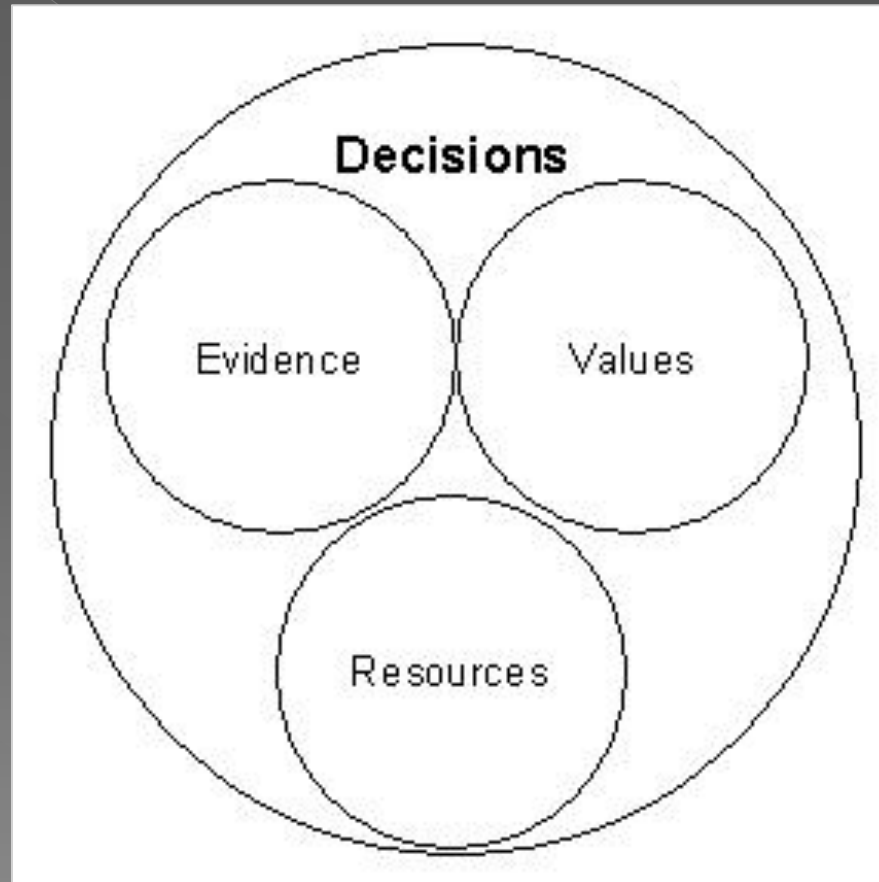
(Clinical trials strongly recommended)

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

HORMONE THERAPY (ESS only)

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

NCCN Treatment Guidelines Ovary / Primary Peritoneum



Ovary, Primary Peritoneum – Surgery

PRINCIPLES OF PRIMARY SURGERY (1 of 3)^{1,2}

- In general, a vertical midline abdominal incision should be used in patients with a suspected malignant ovarian neoplasm.² 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 OV-A 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.

Ovary, Primary Peritoneum – Surgery

Ovarian cancer involving the upper abdomen

- In general, the following procedures should be part of the surgical management of patients with ovarian cancer involving the upper abdomen in an effort to achieve maximal cytoreduction. Residual disease < 1 cm defines optimal cytoreduction; however, maximal effort should be made to remove all gross disease.
 - ▶ Aspiration of ascites or peritoneal lavage should be performed for peritoneal cytologic examinations. For obvious disease beyond ovaries, cytologic assessment of ascites and/or lavage specimens would not alter stage or management.
 - ▶ Hysterectomy, bilateral salpingectomy, and bilateral oophorectomy should be performed.
 - ▶ All involved omentum should be removed.
 - ▶ Suspicious and/or enlarged nodes should be resected, if possible.
 - ▶ Those patients with tumor nodules outside the pelvis ≤ 2 cm (presumed stage IIIB) should have bilateral pelvic and para-aortic lymph node dissection as previously described.

¹Fleming GF, Ronnett BM, Seidman J, et al: Epithelial ovarian cancer. In Barakat RR, Markman M, Randall ME (eds): Principles and Practice of Gynecologic Oncology, 5th ed, Philadelphia, Lippincott Williams & Wilkins, 2009:763-835. Amended by panel.

²It is recommended that a gynecologic oncologist should perform primary surgery (category 1).

[Continued on OV-A 2 of 3](#)

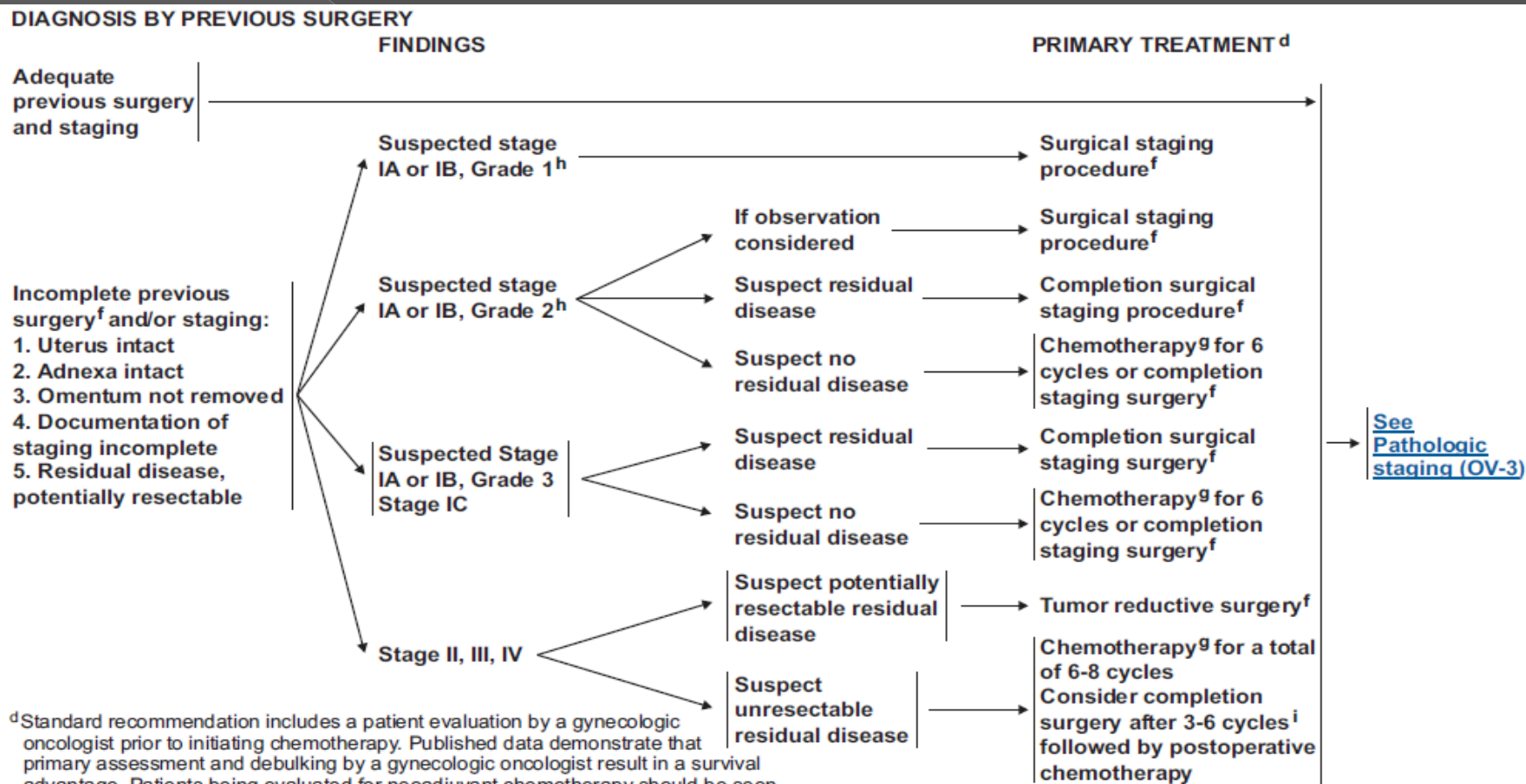
Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.

Ovary, Primary Peritoneum – Surgery

- Primary Surgery
- Radical pelvic dissection
- Bowel resection
- Diaphragm or other peritoneal surface stripping
- Splenectomy
- Partial hepatectomy
- Cholecystectomy
- Partial cystectomy
- Ureteroencystomy
- Distal pancreatectomy
- Ancillary Palliative Surg
- Paraentesis
- Thoracentesis/pleurodesis
- Ureteral stents/nephrostomy
- Surgical relief or intestinal obstruction
- Gastrostomy tube
- Vascular access device
- Indwelling peritoneal or pleural catheter
- Intestinal stents
- Video-assisted thoracoscopy

Ovary, Primary Peritoneal Post Surgical Evaluation



^dStandard recommendation includes a patient evaluation by a gynecologic oncologist prior to initiating chemotherapy. Published data demonstrate that primary assessment and debulking by a gynecologic oncologist result in a survival advantage. Patients being evaluated for neoadjuvant chemotherapy should be seen by a fellowship-trained gynecologic oncologist prior to being considered a nonsurgical candidate.

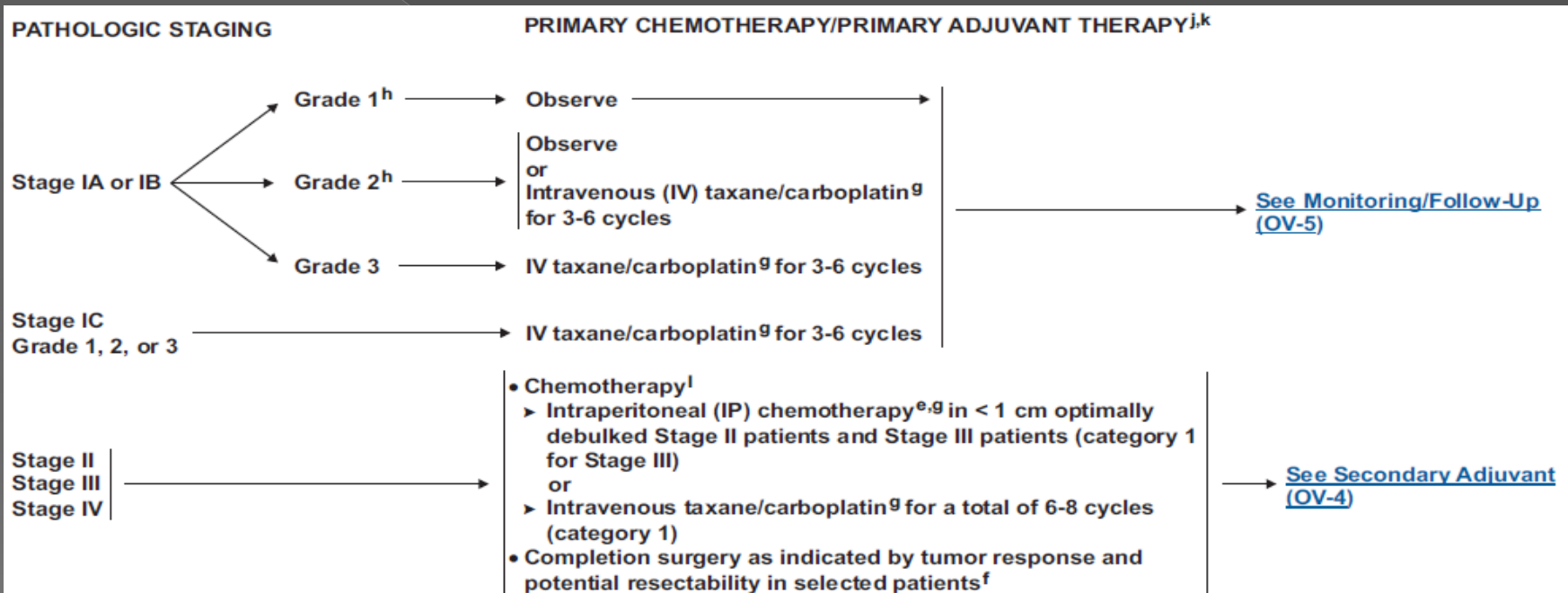
^fSee Principles of Primary Surgery (OV-A).

^gSee Principles of Chemotherapy (OV-B) and Management of Drug Reactions (OV-C).

^hClear-cell pathology is grade 3.

ⁱBased on clinical judgement of gynecologic oncologist, surgery may be performed after 6 cycles.

Ovary, Primary Peritoneal Adjuvant Chemotherapy



^jPatients receiving primary chemotherapy will be monitored as follows:

1. Pelvic exams at least every 2-3 cycles
2. Interim CBC with platelets as indicated
3. Chemistry profiles if indicated
4. CA-125 levels or other tumor markers as clinically indicated prior to each cycle of chemotherapy
5. Radiographic imaging if indicated

^kThe NCCN Ovarian Cancer panel recognizes that data for first-line and maintenance bevacizumab are becoming available and encourages participation in clinical trials.

^lSee specific regimens on [Primary Chemotherapy/Primary Adjuvant Therapy Regimens for Stage II-IV \(OV-D\)](#).

^eAll women undergoing surgery for ovarian cancer should be counseled about the clinical benefit associated with combined IV and IP chemotherapy administration prior to surgery. [NCI Clinical Announcement](#).

^f[See Principles of Primary Surgery \(OV-A\)](#).

^g[See Principles of Chemotherapy \(OV-B\)](#) and [Management of Drug Reactions \(OV-C\)](#).

^hClear-cell pathology is Grade 3.

Chemotherapy - Ovary

Drugs Approved for Ovarian Cancer Treatment

Adriamycin PFS (Doxorubicin Hydrochloride)

Adriamycin RDF (Doxorubicin Hydrochloride)

Carboplatin

Clafen (Cyclophosphamide)

Cisplatin

Cyclophosphamide

Cytoxan (Cyclophosphamide)

Doxorubicin Hydrochloride

Dox-SL (Doxorubicin Hydrochloride Liposome)

DOXIL (Doxorubicin Hydrochloride Liposome)

Doxorubicin Hydrochloride Liposome

Evacet (Doxorubicin Hydrochloride Liposome)

Gemcitabine Hydrochloride

Gemzar (Gemcitabine Hydrochloride)

Hycamtin (Topotecan Hydrochloride)

LipoDox (Doxorubicin Hydrochloride Liposome)

Neosar (Cyclophosphamide)

Paclitaxel

Paraplat (Carboplatin)

Paraplatin (Carboplatin)

Platinol (Cisplatin)

Platinol-AQ (Cisplatin)

Taxol (Paclitaxel)

Topotecan Hydrochloride

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.

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)

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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the whole time™



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

Questions

