GYN Neoplasms

2014/2015 FCDS Educational Webcast Series
September 18, 2014
Steven Peace, CTR

2014 Update includes; CSv02.05, AJCC TNM 7th ed
FIGO IGCS, SS2000, and Cancer-Related SSFs
Plus...NCCN 2015 Tx Guidelines
Presentation Outline

- Anatomy of the Female Reproductive System
- Overview of Major GYN Cancer Characteristics
- Multiple Primary and Histology Coding Rules
- FIGO IGCS, AJCC TNM 7th ed. and Summary Stage 2000
- Collaborative Stage Data Collection System (CSv02.05)
- C.S. Site Specific Factors for GYN Cancers
- NCCN/FIGO 2015 Treatment Guidelines
Presentation Outline

- **Cervix, Vagina, Vulva – In Situ and HPV-Related Neoplasms**
  - Reporting Requirements - CIN III, VAIN III, VIN III, AIN III and SIN III
- **Cervix, Vagina, Vulva – Invasive Cancers (SCC, melanoma)**

- **Corpus Uteri – Epithelial (adenocarcinoma)**
- **Corpus Uteri – Mesenchymal (pure sarcoma)**
- **Corpus Uteri – Mixed Tumors (adeno-sarcoma)**

- **Ovary/Fallopian Tube – Epithelial and Stromal Tumors**
- **Ovary/Fallopian Tube – Borderline Malignancy**
- **Ovary/Fallopian Tube – Germ Cell Tumors**

- **Female Primary Peritoneal Malignancy**
Female Reproductive System

Lesser Omentum

Source: http://medquarterly.com/mq88/MQIMAGES
Female Reproductive System

Source: http://www.anatomypic.com
Female Reproductive System

Source: http://www.ceai.com/femaleanatomy
Female Reproductive System

Source: http://www.novartis.com
Female Reproductive System

Source: http://www.cancer.org
Overview – Cervix, Vagina, Vulva

- Incidence and Mortality
- Causes & Risk Factors
- Signs and Symptoms
- WHO Classification
- MP/H Coding Rules
- Stage - CSv02.05/FIGO/TNM/SS2000
- Site-Specific Factors – stage/prognosis/tx
- NCCN/FIGO Treatment Guidelines
Incidence and Mortality

- **Cervix - 2014 estimates**
  - U.S. New - 12,360
  - U.S. Deaths - 4,020

- **Vulva - 2014 estimates**
  - U.S. New - 4,850
  - U.S. Deaths - 1,030

- **Vagina - 2014 estimates**
  - U.S. New - 3,170
  - U.S. Deaths - 880

Source: 2014 Cancer Facts & Figures - American Cancer Society
Cervical Cancer - Global

Acme: Age-Adjusted Cervical Cancer Incidence Rates

Sources: Global Cancer Facts & Figures 2008 and mchandaids.org
Causes and Risk Factors

Environmental
- HPV Infection
- Chlamydia Co-Infection
- HIV Immunosuppression
- Do Not Get Screened
- Oral Contraceptive Use
- Smoking Cigarettes

Genetic
- 80% in women > 50yrs
- Personal History
- DES Exposure
- Family History

---

![Viral Image]

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Americans affected</th>
<th>Cancer risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B virus (HBV)</td>
<td>Transmitted through sexual contact and intravenous drug use</td>
<td>About 1 million</td>
<td>Liver cancer</td>
</tr>
<tr>
<td>Hepatitis C virus (HCV)</td>
<td>Transmitted through illegal intravenous drug use</td>
<td>More than 3 million</td>
<td>Liver cancer</td>
</tr>
<tr>
<td>Human papilloma virus</td>
<td>Sexually transmitted</td>
<td>About 20 million</td>
<td>Cervical cancer in women</td>
</tr>
<tr>
<td>Xi and gamma radiation</td>
<td>Xenon and gamma radiation from natural sources like radon</td>
<td>Millions</td>
<td>Many types of cancer</td>
</tr>
<tr>
<td>Intrauterine device</td>
<td>Prompts from known radiation that penetrates the Earth's atmosphere</td>
<td>Millions</td>
<td>Same as other raditions</td>
</tr>
</tbody>
</table>
April 2014 the FDA Approved the First HPV DNA Test for Primary Cervical Cancer Screening for women age 25+ that examines 14 high-risk strains of HPV

Test developed by Roche called “cobas”

Clinical Trials suggest “cobas” is better for screening than pap test because it can identify women at risk for pre-cancerous lesions earlier than pap smear

May eventually replace pap smear
Signs and Symptoms

- Tumor Mass
- Wart-like bump
- Abnormal color
- Abnormal texture
- Itching or Burning
- Unusual vaginal discharge
- Bleeding between periods
- Bleeding after menopause
- Bleeding or pain during sex

http://www.inovio.com
### Gynecologic Cancer Symptoms

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Cervical Cancer</th>
<th>Ovarian Cancer</th>
<th>Uterine Cancer</th>
<th>Vaginal Cancer</th>
<th>Vulvar Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal vaginal bleeding or discharge</td>
<td>👉</td>
<td>🟢</td>
<td>🟢</td>
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</tr>
<tr>
<td>Pelvic pain or pressure</td>
<td>🟢</td>
<td>🟢</td>
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<td>🟢</td>
</tr>
<tr>
<td>Abdominal or back pain</td>
<td>🟢</td>
<td>🟢</td>
<td>🟢</td>
<td>🟢</td>
<td></td>
</tr>
<tr>
<td>Bloating</td>
<td>🟢</td>
<td>🟢</td>
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</tr>
<tr>
<td>Changes in bathroom habits</td>
<td>🟢</td>
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</tr>
<tr>
<td>Itching or burning of the vulva</td>
<td>🟢</td>
<td></td>
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<td>🟢</td>
<td></td>
</tr>
<tr>
<td>Changes in vulva color or skin, such as a rash, sores, or warts</td>
<td>🟢</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

[link](http://www.cdc.gov/cancer/gynecologic/images/GYN_Symptoms)
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 and HPV DNA Screening are for “Prevention”
- PAP Screening detects >90% of cancers
- HPV DNA Screening may replace PAP Screen
- Annual PAP No Longer Routine
- Post-Menopausal Risk
- Other GYN cancers and HPV – vulva, vagina, anus

Source: 2014 Cancer Facts & Figures - American Cancer Society
HPV Vaccine for Prevention of HPV not Treatment
WHO Histologic Classification

- Squamous cell carcinoma
- Adenocarcinoma
- Adeno-squamous carcinoma
- Malignant Melanoma
Other Characteristics

- **Reportable** Non-invasive carcinoma
  - Anus - AIN III
  - Vulva - VIN III
  - Vaginal - VAIN III

- **Not Reportable** Non-invasive carcinoma
  - Cervix - CIS (carcinoma in-situ)
  - Cervix - CIN III
Overview – Corpus Uteri

- Incidence and Mortality
- Causes & Risk Factors
- Signs and Symptoms
- WHO Classification
- MP/H Coding Rules
- Stage - CSv02.05/FIGO/TNM/SS2000
- Site-Specific Factors – stage/prognosis/tx
- NCCN/FIGO Treatment Guidelines
Incidence and Mortality

- **Uterine Corpus - 2014 estimates**
  - U.S. New Cases - 47,130
  - U.S. Deaths - 8,010
  - FL. New Cases - 3,410
  - FL. Deaths - 579
  - S.C. New Cases - 750
  - S.C. Deaths - 128

Source: 2014 Cancer Facts & Figures - American Cancer Society
Causes and Risk Factors

Environmental
- Oral Contraceptive Use
- Obesity and Diabetes
- Early age at menarche
- Late menopause
- Null parity – NO Children
- Hormone Manipulation
  - Estrogen Replacement
  - Tamoxifen Therapy
- Recurrent Bladder Infections
- History of Radiation Therapy

Genetic
- Older age (> 55 years)
- Race – Uterine Sarcoma
- Retinoblastoma Gene
- Lynch syndrome

Signs and Symptoms

- Unusual vaginal discharge
- Bleeding between periods
- Bleeding after menopause
- Bleeding or pain during sex
- Pelvic pain
- Pain during intercourse
- Pain or difficulty when emptying the bladder

Source: 2014 Cancer Facts & Figures - American Cancer Society
WHO Histologic Classification

- **Carcinoma and Carcinosarcoma**
  - 8000-8790, 8980-8981, 9700-9701

- **Adenosarcoma**
  - 8380

- **Sarcoma (pure sarcoma)**
  - 8890-8898, 8930-8931
ICD-O-3 term “stromal endometriosis” [8931/3] – This Condition IS Reportable

Source: http://fertilitydocs.com/gif/endodiag.gif
Overview – Ovary

- U.S. Incidence and Mortality
- Causes & Risk Factors
- Signs and Symptoms
- WHO Classification
- MP/H Coding Rules
- Stage - CSv02.05/FIGO/TNM/SS2000
- Site-Specific Factors - stage/prognosis/tx
- NCCN/FIGO Treatment Guidelines
Ovary – 2014 estimates

- U.S. New - 21,980
- FL New - 1446
- S.C. New - 354
- U.S. Deaths - 14,270
- FL Deaths - 940
- S.C. Deaths - 230

Primary Peritoneal New Cases - ??
Primary Peritoneal Deaths - ??

Impact on Change in Classification - ??

Source: 2014 Cancer Facts & Figures - American Cancer Society
Causes and Risk Factors

Environmental
- Hormone manipulation
  - Estrogen Replacement
  - Fertility Drug – Clomid
- Obesity
- Oophorectomy reduces risk of ovarian and fallopian tube cancer but may increase risk for primary peritoneal cancer after prophylactic salpingo-oophorectomy

Genetic
- Age > 40
- Family history
- BRCA1 and BRCA2
- Lynch syndrome
- HNPCC syndrome (hereditary non-polyposis colorectal cancer)
- Fallopian Tube-NCCN suggested that these cancers may be the origin of some ovarian and primary peritoneal cancers

Source: 2014 Cancer Facts & Figures - American Cancer Society
Pelvic mass detected on abdominal/pelvic exam

Ascites – malignant fluid in the peritoneal cavity
  > Causes abdominal distention and bloating

Pelvic or abdominal pain

Difficulty eating or feeling full quickly – early satiety

Urinary symptoms (urgency or frequency) without other obvious source of malignancy

http://www.cdc.gov/cancer/gynecologic/images/GYN_Symptoms

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</tr>
</tbody>
</table>
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 Neoplasm**
WHO Histologic Classification

Source: http://www.clearityfoundation.org/images
### Borderline Neoplasm of Ovary

<table>
<thead>
<tr>
<th>Year Range</th>
<th>Reportability</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973 – 1989</td>
<td>Not Reportable</td>
<td>ICD-O</td>
</tr>
<tr>
<td>2001 –</td>
<td>Not Reportable</td>
<td>ICD-O-3</td>
</tr>
<tr>
<td>???</td>
<td>???</td>
<td>ICD-O-4</td>
</tr>
</tbody>
</table>
Other Characteristics

- **Epithelial Neoplasms – Ovary/Peritoneum**
  - Bulky Disease at First Presentation
  - Common Sites for Seeding
    - Peritoneum
    - Diaphragm
    - Liver Surface
  - Pulmonary Involvement Common
  - Pleural Involvement Common
  - Elevated CA-125 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
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 extra-ovarian.

Mucinous neoplasms metastatic to ovary are often misclassified as ovarian primaries.
Germ Cell & Sex Cord Stromal Tumor

<table>
<thead>
<tr>
<th>SEX CORD-STROMAL TUMORS - WHO HISTOLOGIC CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex cord-stromal tumors are a heterogeneous group of very rare tumors from benign to aggressive, and each histology has a range of often well-differentiated to undifferentiated. Therefore, it should be determined whether a patient has a malignant or benign sex cord-stromal tumor. Treatment decisions and the decision whether to preserve fertility must be individualized based on the patient's specific tumor features.</td>
</tr>
</tbody>
</table>

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

1Adapted from Tavassoeli FA, Devilee P (Eds): WHO Classification of Tumours, Pathology and Genetics: Tumours of the Breast and Female Genital Organs. IARC, Lyon, 2003.

Source: http://www.nccn.org/ovary
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.
### 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

<table>
<thead>
<tr>
<th>Column 1: Required Histology</th>
<th>Column 2: Combined with Histology</th>
<th>Column 3: Combination Term</th>
<th>Column 4: Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2 continued</td>
<td>Clear cell</td>
<td>Mixed cell adenocarcinoma</td>
<td>8323</td>
</tr>
<tr>
<td>Gyn malignancies with two or more of the histologies in column 2</td>
<td>Endometroid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mucinous</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Papillary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Serous</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Squamous</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transitional (Brenner)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Multiple Primary Rules**

**M7**

Are there bilateral epithelial tumors (8000-8799) of the ovary within 60 days of diagnosis?

- **YES**: SINGLE Primary
- **NO**: 

**M8**

Are there tumors in both the left and right sides of a paired site (Table 1)?

- **YES**: MULTIPLE Primaries
- **NO**: TABLE 1 - Paired Organs and Sites with Laterality

**M9**

Is the diagnosis adenocarcinoma in adenomatous polyposis coli (familial polyposis) with one or more malignant polyps?

- **YES**: SINGLE Primary
- **NO**: Tumors may be present in a single or multiple segments of the colon, rectosigmoid, rectum.
Multiple Primary Rules

M10

Are there tumors diagnosed more than one (1) year apart?

YES → MULTIPLE Primaries*

NO →

M15

Is there an **invasive** tumor following an **in situ** tumor more than 60 days after diagnosis?

YES → MULTIPLE Primary**

NO →  

1. The purpose of this rule is to ensure that the case is counted 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.
Histology Coding Rules

H13

Is there cancer/malignant neoplasm, NOS (8000) and a more specific histology?

YES

Is there carcinoma, NOS (8010) and a more specific carcinoma?

NO

Is there squamous cell carcinoma, NOS (8070) and a more specific squamous cell carcinoma?

YES

Code the most specific histologic term.

NO

Is there adenocarcinoma, NOS (8140) and a more specific adenocarcinoma?

YES

NO

Is there melanoma, NOS (8720) and a more specific melanoma?

YES

NO

Is there sarcoma, NOS (8800) and a more specific sarcoma?

YES

NO

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 mucin. 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

Fédération Internationale de Gynécologie et d'Obstétrique (FIGO)
FIGO and AJCC TNM and CS Ext

- FIGO, TNM, and CS criteria for stage are nearly identical.

- SS2000 has not been updated to current FIGO criteria.

- Use the FIGO stage stated in the medical record.

- When both FIGO Stage (or AJCC Stage) and CS Ext detail are available, record the code with extension detail in preference to a statement of FIGO stage.

<table>
<thead>
<tr>
<th>FIGO</th>
<th>TNM</th>
<th>CS Ext</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>IA2</td>
<td>1A2</td>
<td>112</td>
</tr>
<tr>
<td>IIB</td>
<td>2B</td>
<td>220</td>
</tr>
<tr>
<td>IIIC</td>
<td>3C</td>
<td>330</td>
</tr>
<tr>
<td>IIIC1</td>
<td>3C1</td>
<td>331</td>
</tr>
<tr>
<td>IVA</td>
<td>4A</td>
<td>410</td>
</tr>
</tbody>
</table>
CS Schema and TNM Chapter Name

- Adnexa Uterine Other
- Cervix
- Corpus Adenosarcoma
- Corpus Carcinoma
- Corpus Sarcoma
- Fallopian Tube
- Genital Female Other
- Merkel Cell Vulva
- Ovary
- Peritoneum Female Gen
- Placenta
- Vagina
- Vulva
### Staging

**Table 1**

<table>
<thead>
<tr>
<th>Primary Tumor (T)</th>
<th>TNM</th>
<th>FIGO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1a</td>
<td>I</td>
<td>IA</td>
<td>Tumor limited to one ovary; capsule intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings</td>
</tr>
<tr>
<td>T1b</td>
<td>IB</td>
<td></td>
<td>Tumor limited to both ovaries; capsules intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings</td>
</tr>
<tr>
<td>T1c</td>
<td>IC</td>
<td></td>
<td>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</td>
</tr>
<tr>
<td>T2</td>
<td>II</td>
<td></td>
<td>Tumor involves one or both ovaries with pelvic extension</td>
</tr>
<tr>
<td>T2a</td>
<td>IIA</td>
<td></td>
<td>Extension and/or implants on uterus and/or tube(s). No malignant cells in ascites or peritoneal washings</td>
</tr>
<tr>
<td>T2b</td>
<td>IIB</td>
<td></td>
<td>Extension to and/or implants on other pelvic tissues. No malignant cells in ascites or peritoneal washings</td>
</tr>
<tr>
<td>T2c</td>
<td>IIC</td>
<td></td>
<td>Pelvic extension and/or implants (T2a or T2b) with malignant cells in ascites or peritoneal washings</td>
</tr>
<tr>
<td>T3</td>
<td>III</td>
<td></td>
<td>Tumor involves one or both ovaries with microscopically confirmed peritoneal metastasis outside the pelvis</td>
</tr>
<tr>
<td>T3a</td>
<td>IIIA</td>
<td></td>
<td>Microscopic peritoneal metastasis beyond pelvis (no macroscopic tumor)</td>
</tr>
<tr>
<td>T3b</td>
<td>IIIB</td>
<td></td>
<td>Macroscopic peritoneal metastasis beyond pelvis 2 cm or less in greatest dimension</td>
</tr>
<tr>
<td>T3c</td>
<td>IIIC</td>
<td></td>
<td>Peritoneal metastasis beyond pelvis more than 2 cm in greatest dimension and/or regional lymph node metastasis</td>
</tr>
</tbody>
</table>

**Regional Lymph Nodes (N)**

- NX: Regional lymph nodes cannot be assessed
- N0: No regional lymph node metastasis
- N1: Regional lymph node metastasis

**Distant Metastasis (M)**

- M0: No distant metastasis
- M1: 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.
<table>
<thead>
<tr>
<th>Stage Grouping</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IA</td>
<td>T1a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IB</td>
<td>T1b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IC</td>
<td>T1c</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage II</td>
<td>T2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIA</td>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIB</td>
<td>T2b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIC</td>
<td>T2c</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage III</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>T3a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>T3b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIC</td>
<td>T3c</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IV</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

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.
SS2000 last updated in 2000
SS2000 is NOT consistent with 2010 FIGO Stage

Regional Stages
A. Direct extension
B. To regional lymph nodes
C. Combination of A and B

Source: SEER Summary Staging Manual 2000
SS2000 last updated in 2000
SS2000 is NOT consistent with 2010 FIGO Stage

Therefore, FIGO Stage noted in SS2000 may not meet same criteria as FIGO 2010

DO NOT USE 2010 FIGO to assign SS2000

DO Apply SS2000 Anatomic Stage Criteria as Described in the SS2000 Manual
Vulva, Vagina, Cervix

Cervix & Vagina FIGO is Based on Clinical Evaluation

Vulva FIGO is Based on Pathologic Evaluation

TNM based on FIGO stage
  - T: Depth of Invasion
  - N and M: Standard

Multiple CS Schema
  - Vulva – Melanoma – Use Melanoma, Skin Schema
  - Vulva – Merkel Cell Carcinoma Schema – NO FIGO
  - Vulva – Epithelial Carcinoma – SCC, AdenoCA
  - Vagina – all histology except lymphoid neoplasm
  - Cervix – all histology except lymphoid neoplasm
## Vulva – FIGO (unless have more info)

<table>
<thead>
<tr>
<th>Code</th>
<th>FIGO Stage</th>
<th>T1b</th>
<th>T2</th>
<th>T3</th>
<th>RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>450</td>
<td>FIGO Stage IA</td>
<td>^</td>
<td></td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>460</td>
<td>FIGO Stage IB</td>
<td>T1b</td>
<td>*</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>470</td>
<td>FIGO Stage I [NOS]</td>
<td>^</td>
<td>*</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>600</td>
<td>OBsolete DATA RETAINED V0200</td>
<td>ERROR</td>
<td>T3</td>
<td>RE</td>
<td>RE</td>
</tr>
<tr>
<td>605</td>
<td>Anus, Perianal skin, Urethra (See code 750 for upper urethral mucosa), Vagina, FIGO Stage III</td>
<td>T2</td>
<td>T3</td>
<td>RE</td>
<td>RE</td>
</tr>
<tr>
<td>610</td>
<td>Vagina (lower/distal 1/3 vagina)</td>
<td>T2</td>
<td>T3</td>
<td>RE</td>
<td>RE</td>
</tr>
<tr>
<td>612</td>
<td>Vagina NOS</td>
<td>T2</td>
<td>T3</td>
<td>RE</td>
<td>RE</td>
</tr>
<tr>
<td>615</td>
<td>FIGO Stage II</td>
<td>T2</td>
<td>T2</td>
<td>RE</td>
<td>RE</td>
</tr>
<tr>
<td>618</td>
<td>Vagina: Upper/proximal two-thirds</td>
<td>T3</td>
<td>T3</td>
<td>RE</td>
<td>RE</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>Vulva only: Stromal invasion less than or equal to 1 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>Vulva only: Stromal invasion greater than 1 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>Vulva only: Stromal invasion but level of invasion in mm not stated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>Submucosa</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>Confined to vulva, NOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300</td>
<td>Localized, NOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 400  | OBSOLETE DATA CONVERTED V0203  
See code 430  
Vulva and perineum, level of invasion in mm not stated |
| 410  | Vulva and perineum, stromal invasion less than or equal to 1 mm |
# Vagina - FIGO (unless have more info)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>D</th>
<th>RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>Cul de sac (rectouterine pouch)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>510</td>
<td><strong>FIGO Stage II</strong></td>
<td>T2</td>
<td>T2</td>
<td>RE</td>
<td>RE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>520</td>
<td>Extension to bladder wall or bladder, NOS excluding mucosa</td>
<td>T3</td>
<td>T3</td>
<td>D</td>
<td>RE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>600</td>
<td>Extension to pelvic wall</td>
<td>T3</td>
<td>T3</td>
<td>D</td>
<td>RE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>620</td>
<td>Extension to pelvic wall</td>
<td>T3</td>
<td>T3</td>
<td>D</td>
<td>RE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>650</td>
<td><strong>FIGO Stage III based on tumor extension</strong></td>
<td>T3</td>
<td>T3</td>
<td>D</td>
<td>RE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>700</td>
<td>Extension to bladder mucosa (excluding bullous edema) or rectal mucosa</td>
<td>T4</td>
<td>T4</td>
<td>D</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td>Extension beyond true pelvis</td>
<td>T4</td>
<td>T4</td>
<td>D</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>850</td>
<td><strong>FIGO Stage IVA</strong></td>
<td>T4</td>
<td>T4</td>
<td>D</td>
<td>D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Cervix - FIGO (unless have more info)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>TNM 7 Map</th>
<th>TNM 6 Map</th>
<th>SS77 Map</th>
<th>SS2000 Map</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>In situ, intraepithelial, noninvasive, preinvasive; Cancer in situ WITH endocervical gland involvement (See Note 3)</td>
<td>Tis</td>
<td>Tis</td>
<td>IS</td>
<td>IS</td>
</tr>
<tr>
<td>010</td>
<td>Cervical intraepithelial neoplasia (CIN) Grade III</td>
<td>Tis</td>
<td>Tis</td>
<td>IS</td>
<td>IS</td>
</tr>
<tr>
<td>110</td>
<td>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</td>
<td>T1a1</td>
<td>T1a1</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>FIGO Stage IA1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>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</td>
<td>T1a2</td>
<td>T1a2</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>FIGO Stage IA2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>135</td>
<td>Invasive carcinoma confined to cervix, microscopic size of stromal invasion and horizontal spread not specified</td>
<td>T1aNOS</td>
<td>T1aNOS</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>140</td>
<td>FIGO Stage IA [NOS]</td>
<td>T1aNOS</td>
<td>T1aNOS</td>
<td>L</td>
<td>L</td>
</tr>
</tbody>
</table>
NCCN Guidelines Version 1.2015
Cervical Cancer

WORKUP

- H&P
- Complete blood count (CBC) (including platelets)
- Cervical biopsy, pathologic review
- Cone biopsy as indicated
- LFT/renal function studies
- Imaging
- (optional for ≤ stage IB1):
  - Chest x-ray
  - CT or PET-CT scan
  - MRI as indicated
  - Smoking cessation and counseling intervention if indicated
- Consider HIV testing (category 3)
  Optional:
  - EUA cystoscopy/rectoscopy (≥ stage IB2)

CLINICAL STAGE

Stage IA1

Stage IA2
Stage IB1

Stage IIA1

Stage IB2 Stage IIA2

Stage IIB Stage IIIA, IIIB
Stage IVA

Incidental finding of invasive cancer at simple hysterectomy

See Primary Treatment (Fertility Sparring) (CERV-2)

See Primary Treatment (Non-Fertility Sparing) (CERV-3)

See Primary Treatment (Fertility Sparring) (CERV-2)

See Primary Treatment (Non-Fertility Sparing) (CERV-3) and (CERV-4)

See Primary Treatment (Non-Fertility Sparring) (CERV-3) and (CERV-4)

See Primary Treatment (Non-Fertility Sparring) (CERV-4)

See Primary Treatment (CERV-4) and (CERV-6)

See Primary Treatment (CERV-6)

See Treatment (CERV-9)

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

NCCN Guidelines Version 1.2015
Cervical Cancer

CLINICAL STAGE

PRIMARY TREATMENT (NON-FERTILITY SPARING)

Stage IB1 and Stage IIA1

See Surgical Findings (CERV-5)
See Surveillance (CERV-10)
See Surveillance (CERV-10)
See Surgical Findings (CERV-5)
See Surveillance (CERV-10)

Stage IB2 and Stage IIA2 (also see CERV-6 for alternative recommendations for these patients)

See Principles of Evaluation and Surgical Staging (CERV-A)
See Principles of Radiation Therapy for Cervical Cancer (CERV-B)

1 Radiation can be an option for medically inoperable patients or those who refuse surgery.
2 For SLN mapping (category 2B), the best detection rates and mapping results are in tumors < 2 cm.
Corpus Uteri - Endometrium - Uterus

FIGO Stage is Based on Surgical Evaluation

TNM based on FIGO
  - T: Depth of Invasion
  - N and M: Standard

3 Different CS Schema

- **Sarcoma**: leiomyosarcoma, stromal sarcoma
  - 8890-8898, 8930-8931

- **Carcinoma**: carcinoma and carcinosarcoma
  - 8000-8790, 8980-8981, 9700-9701

- **Adenosarcoma**: adenosarcoma
  - 8933
## Staging Uterine Sarcoma

### Table 2

<table>
<thead>
<tr>
<th>Primary Tumor (T)</th>
<th>Regional Lymph Nodes (N)</th>
<th>Distant Metastasis (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TNM Categories</td>
<td>FIGO Categories</td>
<td>Stages</td>
</tr>
<tr>
<td>TX</td>
<td>NX</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td>N0</td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>N1</td>
<td></td>
</tr>
<tr>
<td>T1a</td>
<td>N1</td>
<td></td>
</tr>
<tr>
<td>T1b</td>
<td>N1</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>N1</td>
<td></td>
</tr>
<tr>
<td>T2a</td>
<td>N1</td>
<td></td>
</tr>
<tr>
<td>T2b</td>
<td>N1</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>N1</td>
<td></td>
</tr>
<tr>
<td>T3a</td>
<td>N1</td>
<td></td>
</tr>
<tr>
<td>T3b</td>
<td>N1</td>
<td></td>
</tr>
<tr>
<td>T4</td>
<td>N1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

*Carinosarcoma 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.*

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### Staging-Endometrial Carcinoma

**Table 1**

<table>
<thead>
<tr>
<th>Primary Tumor (T)</th>
<th>TNM Categories</th>
<th>FIGO* Stages</th>
<th>Surgical-Pathologic Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>TX</td>
<td></td>
<td>Primary tumor cannot be assessed</td>
</tr>
<tr>
<td>T2</td>
<td>T0</td>
<td></td>
<td>No evidence of primary tumor</td>
</tr>
<tr>
<td>T3</td>
<td>T1</td>
<td>IA</td>
<td>Carcinoma in situ (preinvasive carcinoma)</td>
</tr>
<tr>
<td></td>
<td>T1a</td>
<td>IB</td>
<td>Tumor confined to the corpus uteri</td>
</tr>
<tr>
<td></td>
<td>T1b</td>
<td></td>
<td>Tumor limited to endometrium or invades less than one-half of the myometrium</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>II</td>
<td>Tumor invades one-half or more of the myometrium</td>
</tr>
<tr>
<td></td>
<td>T3a</td>
<td>IIIA</td>
<td>Tumor involves serosa and/or adnexa (direct extension or metastasis)</td>
</tr>
<tr>
<td></td>
<td>T3b</td>
<td>IIIB</td>
<td>Vaginal involvement (direct extension or metastasis) or parametral involvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Metastases to pelvic and/or para-aortic lymph nodes</td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>IV</td>
<td>Tumor invades bladder and/or bowel mucosa, and/or distant metastases</td>
</tr>
<tr>
<td></td>
<td></td>
<td>V</td>
<td>Tumor invades bladder mucosa and/or bowel (bullous edema is not sufficient to classify a tumor as T4)</td>
</tr>
</tbody>
</table>

*Either G1, G2, or G3
**Note: FIGO no longer includes Stage 0 (Tis).

### Regional Lymph Nodes (N)

- **N1**: IIC1
- **N2**: IIC2

### Surgical-Pathologic Findings

- Regional lymph nodes cannot be assessed
- No regional lymph node metastasis
- Regional lymph node metastasis to pelvic lymph nodes (positive pelvic nodes)
- Regional lymph node metastasis to para-aortic lymph nodes, with or without positive pelvic lymph nodes

### Distant Metastasis (M)

- **M0**
- **M1**: IVB

**Surgical-Pathologic Findings**

- No distant metastasis
- 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
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>FIGO Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>115</td>
<td>FIGO Stage IA</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>Tumor invades less than one-half of myometrium</td>
<td>T1a</td>
</tr>
<tr>
<td>123</td>
<td>Invasion of less than one-half of myometrium WITH involvement of endocervix</td>
<td>T1b</td>
</tr>
<tr>
<td>125</td>
<td>FIGO Stage IB</td>
<td>T1b</td>
</tr>
<tr>
<td>130</td>
<td>Tumor invades one-half or more of myometrium</td>
<td>T1c</td>
</tr>
<tr>
<td>133</td>
<td>Invasion of one-half or more of myometrium WITH involvement of endocervix</td>
<td>T1c</td>
</tr>
<tr>
<td>135</td>
<td>FIGO Stage IC</td>
<td>T1c</td>
</tr>
<tr>
<td>140</td>
<td>Invasion of myometrium, NOS</td>
<td>T1NOS</td>
</tr>
<tr>
<td>143</td>
<td>Invasion of myometrium, NOS WITH involvement of endocervix</td>
<td>T1NOS</td>
</tr>
<tr>
<td>160</td>
<td>Tunica serosa of the visceral peritoneum (serosa covering the corpus)</td>
<td>T1NOS</td>
</tr>
<tr>
<td>170</td>
<td>FIGO Stage I [NOS]</td>
<td>T1NOS</td>
</tr>
<tr>
<td>400</td>
<td>Localized, NOS</td>
<td>T1NOS</td>
</tr>
</tbody>
</table>
- **Ovary**
  - Based on Combined Clinical/Surgical Evaluation
  - T: based on bilaterality, positive ascites, other sites
  - N and M: standard

- **Fallopian Tube**
  - Based on Combined Clinical/Surgical Evaluation
  - T: based on bilaterality, positive ascites, other sites
  - N and M: standard
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 are coded in M1
- Implants (discontinuous metastases) seeding, salting, or studding
- Determine whether implants are
  - T2 within the Pelvis
  - T3 outside the pelvis
- M1
- Implants outside the pelvis must be microscopically confirmed.

5. Post Cytoreduction (debulking) - Residual Tumor Status
Surgical Staging Should Include:

- Removal of para-aortic lymph nodes
- Removal pelvic lymph nodes
- Removal primary tumor
- Uterus
- Cervix
- Vagina
- Peritoneal washings
- Removal of omentum
- Liver examination with biopsy as indicated
- Scraping of area under the right diaphragm

Source: http://www.kkh.com.sg/Health/PublishingImages
# Staging Ovarian

## Staging

### Primary Tumor (T)

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

### Regional Lymph Nodes (N)

<table>
<thead>
<tr>
<th>TNM</th>
<th>FIGO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
<td>Regional lymph nodes cannot be assessed</td>
<td></td>
</tr>
<tr>
<td>N0</td>
<td>No regional lymph node metastasis</td>
<td></td>
</tr>
<tr>
<td>N1</td>
<td>IIC</td>
<td>Regional lymph node metastasis</td>
</tr>
</tbody>
</table>

### Distant Metastasis (M)

<table>
<thead>
<tr>
<th>TNM</th>
<th>FIGO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0</td>
<td>No distant metastasis</td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>IV</td>
<td>Distant metastasis (excludes peritoneal metastasis)</td>
</tr>
</tbody>
</table>

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

- Based on Combined Clinical/Surgical Evaluation
- T: based on positive ascites and other involvement
- N and M: standard
- MUST Use SSF25 (Discriminator) to assign “female” to site
- Why? So we can identify and group ovary/peritoneal cases
- Why? So we can separate out the mesothelioma cases
- What other cancers occur in peritoneum?
  - Males:
    - Sarcoma – various types
    - Germ Cell Tumors
    - Mesothelioma
    - Mixed Tumors
  - Females:
    - Includes Same Histologies as Ovary
    - Mesothelioma
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 are coded in M1
- Implants (discontinuous metastases) seeding, salting, or studding
- Determine whether implants are
  - T2 within the Pelvis
  - T3 outside the pelvis
  - M1
- Implants outside the pelvis must be microscopically confirmed.

5. Post Cytoreduction (debulking) - Residual Tumor Status
### FCDS Required GYN Site Specific Factors

<table>
<thead>
<tr>
<th>Schema Name</th>
<th>2014 FCDS Required</th>
<th>Additional CoC Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>AdnexaUterineOther</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Cervix</td>
<td>None</td>
<td>1</td>
</tr>
<tr>
<td>CorpusAdenosarcoma</td>
<td>2</td>
<td>1,3,4,5,6</td>
</tr>
<tr>
<td>CorpusCarcinoma</td>
<td>2</td>
<td>1,3,4,5,6</td>
</tr>
<tr>
<td>CorpusSarcoma</td>
<td>2</td>
<td>1,3,4,5,6</td>
</tr>
<tr>
<td>FallopianTube</td>
<td>None</td>
<td>1,4,5,6,7</td>
</tr>
<tr>
<td>GenitalFemaleOther</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>MerkelCellVulva</td>
<td>3,11</td>
<td>1,16,17,18,22</td>
</tr>
<tr>
<td>Ovary</td>
<td>None</td>
<td>1,2,3</td>
</tr>
<tr>
<td>PeritoneumFemaleGen</td>
<td>25</td>
<td>1,2,3</td>
</tr>
<tr>
<td>Placenta</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Vagina</td>
<td>None</td>
<td>1,2,3,4,5,6,7</td>
</tr>
<tr>
<td>Vulva</td>
<td>11</td>
<td>10</td>
</tr>
</tbody>
</table>
1. **Go to Training Menu**
2. **Select Practical Application Tests**
   › Scroll to Bottom of Page
3. **Select Type of Practical Application**
   › Case Coding – CSv0205
   › Heme 2014 Cases
   › TNM 7th Edition
4. **Select Cancer Site – 10+ cases/site**
5. **Select Case**
6. **Start Test**
# Practice Cases

## Test Information and Instruction — Ovary 05

<table>
<thead>
<tr>
<th>Name:</th>
<th>Ovary 05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series:</td>
<td>Practical Application &gt; Case Coding - CSV0205 &gt; Ovary</td>
</tr>
</tbody>
</table>

### Description:

A case scenario is a summary of the patient’s cancer story as documented in the available medical record. The scenario is used by the cancer registrar to support codes selected for tumor, staging and treatment related data items. While we believe we have recorded the best answer for all fields, we recognize that others might believe a different answer is a better choice. We will track the responses for all data items. For data items with less than 85% agreement with the preferred answer, the CTR panel will review the case scenario again. When necessary, the panel will also contact the appropriate standard setter and request that existing documentation be clarified to improve coding consistency.

The case scenarios used in the CSV02.05 coding exercises were created from de-identified abstracts. For the purpose of coding this case, assume that the information in the scenario represents the complete information available at the time the case was abstracted. In addition to the abstracted text, the scenarios include the full text of de-identified and modified pathology reports.

### Resources:

The coding form you are about to use has look-ups that contain descriptions for every data item. The collaborative stage data items display the codes and notes for CSV02.05.

The cases have been coded using SEER guidelines; therefore, you may want to have the SEER Multiple Primary and Histology Coding Rules, SEER Program Coding and Staging Manual for 2014 and SEER Summary Staging Manual 2000 available.

- 2014 SEER manual

- 2007 Multiple Primary and Histology Coding Rules


### Instructions:

PTA is a standard abbreviation for prior to admission. This abbreviation is used throughout the scenarios.
### Practice Cases

#### Test Information and Instruction — Ovary OS

**Coding Form**

Click [here](#) to open the case scenario required for the test in a new window.

**Instructions**

<table>
<thead>
<tr>
<th>Patient Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
</tr>
<tr>
<td>Race 1</td>
</tr>
<tr>
<td>Race 2</td>
</tr>
<tr>
<td>Hispanic</td>
</tr>
<tr>
<td>Birth State</td>
</tr>
<tr>
<td>Birth Country</td>
</tr>
<tr>
<td>Vital Status</td>
</tr>
<tr>
<td>Last Contact Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis Date</td>
</tr>
<tr>
<td>Primary Site</td>
</tr>
<tr>
<td>Grade</td>
</tr>
<tr>
<td>Marital Status at DX</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staging</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS Size</td>
</tr>
<tr>
<td>CS Extension</td>
</tr>
<tr>
<td>CS Size/Ext Eval</td>
</tr>
<tr>
<td>CS LN</td>
</tr>
<tr>
<td>CS LN Eval</td>
</tr>
<tr>
<td>Reg LN Pos</td>
</tr>
<tr>
<td>Reg LN Exam</td>
</tr>
<tr>
<td>CS Mets</td>
</tr>
<tr>
<td>CS Mets Eval</td>
</tr>
<tr>
<td>CS Mets - Bone</td>
</tr>
<tr>
<td>CS Mets - Brain</td>
</tr>
<tr>
<td>CS Mets - Liver</td>
</tr>
<tr>
<td>CS Mets - Lung</td>
</tr>
</tbody>
</table>

**Site Specific Factors & Summary Staging**

- Note: will display after site and histology are entered
- SS 2000

**Summary Treatment (First Course of Therapy)**

- **Surgery**
  - Reason No Surgery
  - Surgery Date
  - Surgery of Primary Site
  - Scope Reg LN Surgery
  - Surgery Other Reg Distant

- **Radiation**
  - Radiation
  - Radiation Date
  - Radiation/Surgery Sequence

- **Systemic**
  - Systemic/Surgery Sequence
  - Rx Date—Systemic
Ovary 05 Scenario

Abstracted Text

For the purpose of coding this case, assume that the information in the scenario represents the complete information available at the time the case was abstracted.

Social History
Asian female born and raised in Vietnam, moved to area ~ 2 years ago with husband. Insurance: Medicaid.

Physical Exam
04/12/2014 - cc: Rt ovarian mass with omental caking. HPI: Has had lower abd pain for last few months, ~1 week ago developed severe lower pelvic pain resulting in visit to outside hospital ER. Had PTA CT scan 04/06/2014 that showed omental mass in upper abd, 4.9 x 4.0 x 4.8 cm adjacent to T-colon, also a large pelvic mass measuring 24 x 14 x 18 cm, enlarged node in Rt pelvis, and multiple small pulmonary nodules c/w mets. Here for further eval. PE: Pelvis: Mass palp in posterior cul-de-sac. Cervix difficult to visualize secondary to mass. Uterus/adnexa difficult to palpate secondary to mass. IMP: Findings c/w ovarian carcinoma w/omental and pelvic sidewall mets and pulmonary mets. Plan: Pt has extensive cardiac history, discussed with cardiologist about whether she could undergo surgery now or if neoadjuvant chemo would be best. Cannot start chemo until sure of diagnosis, which will require bx. Then ultimate goal would be to take her to surgery.

Scans
05/21/2014 - CT Abd/Pelvis: Interval reduction in size and number of pulmonary nodules. Interval reduction solid component of pelvic mass and size of omental nodules. Lt ovary normal, rt ovary not separate from mass. Cirrhotic liver w/nodular margins.

Labs
04/08/2014 - CA-125: 1408 U/mL (0.35 U/mL normal)

Operative Reports
04/19/2014 - U/S Soft tissue guided core biopsy of omental mass: U/S reveals solid omental mass lesion, 5.2 x 3.0 x 4.3 cm in RUQ.
08/20/2014 - Expl lap, supracervical hysterectomy, BSO, appendectomy, lysis of adhesions, argon beam ablation, cystoscopy: Large rt pelvic mass, adherent to appendix. Numerous bowel adhesions, omental nodularity. Cytoreduction with no gross residual disease at completion of case. Cystoscopy revealed nml bladder mucosa, normal trigone.

Chemo Text
04/26/2014 - Started Carboplatin and Paclitaxel.
06/20/2014 - Started Gemcitabine with Carboplatin. Chemo changed due to severe nausea, diarrhea, altered liver function after 1st cycle chemo.
08/20/2014 - Path Report #2

Clinical Diagnosis/History:
History of advanced Mullerian adenocarcinoma, status post neoadjuvant chemo with excellent response (decreased disease on CT, exam, CA-125) - 183.0.

Final Diagnosis:
A - C, E and F) Right tube and ovary and appendix, resection; Uterus, left tube and ovaries, resection; Pelvic lymph node, excision and multiple biopsies as designated:

1. Right ovary replaced by cystic mass with extensive necrosis and characteristics suggestive of treated neoplasm. No definitive fallopian tube identified in specimen. Appendix uninvolved by neoplasm.
2. Microcalcifications and foreign body type giant cells on uterine serosa and myometrium and in multiple biopsies (small bowel adhesions, implants and diaphragm) consistent with treated neoplasm; no viable neoplasm identified.
3. One pelvic lymph node with foamy macrophages consistent with treated neoplasm; no viable neoplasm identified.
4. Inactive endometrium, left fallopian tube with paratubal cysts, and inactive left ovary with no neoplasm identified.

D) Small bowel nodule, biopsy: Fibromuscular tissue with mesothelial cyst and no definitive neoplasm identified.

G) Diaphragmatic adhesion, biopsy: Organizing hematoma.

H) Omentum, resection: Omental tissue with no neoplasm identified.

Gross Description:
Specimen A: Received in a container of formalin labeled "right tube and ovary, and appendix" is a 601 g, 24.0 x 13.0 x 10.0 cm irregular multinodular mass with attached 9.0 x 0.5 cm tubular structure. The specimen is covered in a glistening tan-pink to focally bright red serosa. The largest mass is predominantly cystic and consists of a large amount of yellow liquefied material and some salmon-pink liquefied material. One of the nodules is filled with slightly more-solid yellow to tan partially liquefied material. A small silver, measuring approximately 3.0 cm x 0.2 cm in diameter is identified and thought represent a fallopian tube. Representative sections are submitted as follows:
A1 - tubular structure (putative appendix)
A2 - entire putative fallopian tube
A3 - main cystic mass
A4-A7 - Additional cystic mass

Specimen B: Received fresh in a bag labeled "uterus, left tube and ovary" is a 50 g uterus with left tube and ovary attached. The uterus measures 6.0 cm SI x 5.0 cm laterally x 2.5 cm AP. The tube is 3.0 x 0.5 cm. The ovary is 3.0 x 1.5 x 1.0 cm and it has multiple semilucent cysts ranging in size from 0.5 cm to 1.0 cm. This is a supracervical hysterectomy specimen. The
Practice Cases

Click here to open the case scenario required for the test in a new window.

Instructions

Patient Demographics
- Sex
- Race
- Birth State

Diagnosis
- Diagnosis Date
- Primary Site
- Grade

Staging
- CS Size
- Reg LN Pos
- CS Mets - Bone
- CS Mets - Brain

Site Specific Factors & Summary Staging
- Carbohydrate Antigen 125 (CA-125)
- FIGO Stage
- Residual Tumor Status and Size

Summary Treatment (First Course of Therapy)

Help Features

Ovary
### Practice Cases

#### Test Information and Instruction — Ovary 05

**Coding Form**

**Results**

Click [here](#) to open the case scenario required for the test in a new window.

<table>
<thead>
<tr>
<th>Critical score</th>
<th>Noncritical score</th>
<th>Total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.00 / 37.00 (38%)</td>
<td>11.00 / 35.50 (31%)</td>
<td>25.00 / 72.50 (34%)</td>
</tr>
</tbody>
</table>

**CORRECT**

**Critical** (2.00/2.00)

<table>
<thead>
<tr>
<th>Data Item</th>
<th>Response</th>
<th>Correct Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**Rationale:**

The Social History indicates the patient is female. Apply code 2 when the patient is female.

(2014 SEER Manual, Sex.)

---

**CORRECT**

**Critical** (2.00/2.00)

<table>
<thead>
<tr>
<th>Data Item</th>
<th>Response</th>
<th>Correct Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race 1</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

---

**Scores**

**Rationale**
Practice Cases

CORRECT

Data Item: Laterality
Response: 1
Correct Answer: 1

Rationale:
The 04/12/2014 physical exam note documented the patient had a right ovarian mass. The 05/21/2014 CT scan noted the left ovary was normal. The resection pathology report, though negative for residual malignancy, showed the right ovary was replaced by a cystic mass while the left ovary showed no definitive neoplasm. The clinical and pathological information indicates the carcinoma involved the right ovary only. Per the SEER Manual, ovary is a paired site. Apply code 1 when the right side of a paired site is involved.
[2014 SEER Manual, Laterality.]

INCORRECT

Data Item: Histology
Response: 8140
Correct Answer: 8010

Rationale:
The MP/H Rules (general rules) state to code the histology from a metastatic site when there is no pathology/cytology specimen from the primary site. The pathology report from the omentum mass biopsy was positive for carcinoma, NOS. The clinical diagnosis on the cytoreductive surgery pathology report was Mullerian adenocarcinoma. However, no residual malignancy was identified per the cytoreductive surgery pathology report. The patient only had histologic confirmation of carcinoma, NOS from a metastatic site (omentum). A pathologic diagnosis has priority over a clinical diagnosis. Code the histology as 8010 (carcinoma, NOS).
[2007 Multiple Primary and Histology Coding Rules]
NCCN/FIGO Treatment Guidelines
Cervix, Vulva, Vagina

CANCER
IT’S PERSONAL
THE RIGHT PATIENT. THE RIGHT TREATMENT.
Choosing the Most Appropriate Type of Surgery Based on Clinical Stage

NCCN Guidelines – Cervical Cancer – Version 1.2015
External radiation therapy with high-energy beam

Intracavitary radiation therapy
  › Low-dose brachytherapy
  › High-dose brachytherapy

Interstitial radiation therapy
  › Needles containing radioactive material are placed directly into the cancer and surrounding tissue(s)

Combinations of above

http://radonc.ucla.edu/Gyn-CTDosimetry
Early Stage Chemotherapy/Immunotherapy Options

Fluorouracil (5FU) - Topical Chemotherapy applied directly to skin
Imiquimod - Topical Immunotherapy applied directly to effected skin

Targeted Therapies - Cetuximab, Erlotinib or Pazopanib + or - Chemo
FIGO

INITIAL EVALUATION

- H&P
- CBC (including platelets)
- Endometrial biopsy
- Chest imaging

Optional:
- Liver function test (LFT)/renal function tests/chemistry profile
- Consider genetic counseling/testing for patients (<50 y) and those with a significant family history of endometrial and/or colorectal cancer (See Lynch syndrome/HNPCC in NCCN Guidelines for Colorectal Cancer Screening)

INITIAL CLINICAL FINDINGS

Disease limited to uterus
- Suspected or gross cervical involvement
- Suspected extrauterine disease

- Pure endometrioid carcinoma
- Malignant epithelial carcinoma
- Serous adenocarcinoma or Clear cell adenocarcinoma
- Stromal/mesenchymal tumors
  - Endometrial stromal sarcoma (ESS)
  - High-grade (undifferentiated) endometrial sarcoma
  - Uterine leiomyosarcoma (uLMS)
- Carcinosarcoma

- Expert pathology review

See Primary Treatment
- ENDO-1
- ENDO-2
- ENDO-3
- See Treatment for Serous or Clear Cell Adenocarcinoma or Carcinosarcoma of the Endometrium (ENDO-11)
- See Primary Treatment (UTSARC-1)
Endometrial Carcinoma
Primary Surgery

HYSTERECTOMY AND PATHOLOGIC EVALUATION

TH/BSC: Total hysterectomy + bilateral salpingo-oophorectomy
RH: Radical hysterectomy

Pathologic assessment to include:
• 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 with IHC and MSI for inherited mismatch repair gene
  mutations in patients <50 y and those with a significant family history of
  endometrial and/or colorectal cancer and/or selected pathologic risk features to
  identify familial cancer syndromes, such as Lynch syndrome/HNPCC
  (See NCCN Guidelines for Colorectal Cancer Screening)
• Fallopian tubes/ovaries
• Peritoneal cytology
• Nodes (when resected)
  › Level of nodal involvement (ie, pelvic, common iliac, para-aortic)
Endometrial Carcinoma
Post-Surgical Adjuvant TX

CLINICAL FINDINGS

- Stage IIIB
- Stage IIIC1
- Stage IIIC2
- Stage IVA, IVB

ADJUVANT TREATMENT

- Chemotherapy and/or tumor-directed RT
- Chemotherapy and/or tumor-directed RT
- Chemotherapy ± RT

Surgically staged:

- Stage IIIB, IIIC, IV

Pelvic node positive
Para-aortic node positive ± pelvic node positive
Debulked and with no gross residual disease or microscopic abdominal disease

All staging in guideline is based on updated 2010 FIGO staging. (See ST-1)
Treatment for Carcinosarcoma, Serous, or Clear Cell Adenocarcinoma

**SEROUS OR CLEAR CELL ADENOCARCINOMA OR CARCINOSARCOMA OF THE ENDOMETRIUM**

**ADDITIONAL WORKUP**
- Biopsy: Serous adenocarcinoma or Clear cell adenocarcinoma or Carcinosarcoma
- CA-125 (optional) 
- MRI/CT/PET, as clinically indicated

**PRIMARY TREATMENT**
- Includes surgical staging, as with ovarian cancer
- TH/BSO and surgical staging
- Consider maximal tumor debulking for gross disease

**ADJUVANT TREATMENT**
- Stage IA (no myometrial invasion)
  - Observe
  - Chemotherapy ± vaginal brachytherapy or Tumor-directed RT
- Stage IA, (with myometrial invasion) 
  - Stage IB, II
  - Chemotherapy ± tumor-directed RT
- Stage III, IV
### Endometrial Carcinoma
Special Considerations

#### CLINICAL FINDINGS

<table>
<thead>
<tr>
<th>Stage IA (&lt;50% myometrial invasion)</th>
<th>Stage IB (≥50% myometrial invasion)</th>
</tr>
</thead>
</table>

#### Adverse Risk Factors

- Adverse risk factors not present
- Adverse risk factors present

#### Histologic Grade/Adjuvant Treatment

<table>
<thead>
<tr>
<th>G1</th>
<th>G2</th>
<th>G3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observe</td>
<td>Observe or Vaginal brachytherapy</td>
<td>Observe or Vaginal brachytherapy</td>
</tr>
<tr>
<td>Observe or Vaginal brachytherapy</td>
<td>Observe or Vaginal brachytherapy and/or pelvic RT (category 2B for pelvic RT)</td>
<td>Observe or Vaginal brachytherapy and/or Pelvic RT</td>
</tr>
<tr>
<td>Observe or Vaginal brachytherapy</td>
<td>Observe or Vaginal brachytherapy</td>
<td>Vaginal brachytherapy and/or Pelvic RT or Observe (category 2B for observation)</td>
</tr>
<tr>
<td>Observe or Vaginal brachytherapy and/or Pelvic RT</td>
<td>Observe or Vaginal brachytherapy and/or Pelvic RT</td>
<td>Pelvic RT and/or Vaginal brachytherapy ± chemotherapy (category 2B for chemotherapy)</td>
</tr>
</tbody>
</table>

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

PRINCIPLES OF RADIATION THERAPY

- Tumor-directed RT refers to RT directed at sites of known or suspected tumor involvement, and may include external beam RT (EBRT) and/or brachytherapy. Diagnostic imaging is often used to assess locoregional extent and to rule out distant metastases before administration of RT. In general, tumor-directed 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 to 50 Gy. Multiple conformal fields based on CT-treatment planning should be utilized.

- Initiate brachytherapy as soon as the vaginal cuff is healed, preferably no later than 12 weeks after surgery. 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 to 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.

- Evidence supports the use of combined modality radiation and chemotherapy as adjuvant treatment for patients with extrauterine disease.
Endometrial Carcinoma Systemic Therapies

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

HORMONE THERAPY\(^1\)
- Progestational agents
- Tamoxifen
- Aromatase inhibitors
- Megestrol/tamoxifen (alternating)

CHEMOTHERAPY REGIMENS\(^2,3\)
- Multi-agent chemotherapy regimens preferred, if tolerated
  - Carboplatin/paclitaxel\(^4\)
  - Cisplatin/doxorubicin\(^5\)
  - Cisplatin/doxorubicin/paclitaxel\(^5,6\)
- Single agents
  - Cisplatin
  - Carboplatin
  - Doxorubicin
  - Liposomal doxorubicin
  - Paclitaxel
  - Topotecan
  - Bevacizumab\(^9\)
  - Temsirolimus\(^10\)
  - Docetaxel\(^7\) (category 2B)
  - Ifosfamide (for carcinosarcoma)
PRINCIPLES OF RADIATION THERAPY

- Tumor-directed RT refers to RT directed at sites of known or suspected tumor involvement, and may include external beam RT (EBRT) and/or brachytherapy. Diagnostic imaging is often used to assess locoregional extent and to rule out distant metastases before administration of RT. In general, tumor-directed 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 to 50 Gy. Multiple conformal fields based on CT-treatment planning should be utilized.

- Initiate brachytherapy as soon as the vaginal cuff is healed, preferably no later than 12 weeks after surgery. Brachytherapy doses for definitive therapy are individualized based on the clinical situation. For preoperative therapy in patients with gross stage IB disease, in general, a total dose of 75 to 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.

- Evidence supports the use of combined modality radiation and chemotherapy as adjuvant treatment for patients with extrauterine disease.¹
**SYSTEMIC THERAPY FOR UTERINE SARCOMA**

**CHEMOTHERAPY REGIMENS**¹
(Clinical trials strongly recommended)

- **Combination regimens:**
  - Docetaxel/gemcitabine
    - (preferred for leiomyosarcoma)
  - Doxorubicin/ifosfamide
  - Doxorubicin/dacarbazine
  - Gemcitabine/dacarbazine
  - Gemcitabine/vinorelbine

- **Single-agent options:**
  - Dacarbazine
  - Doxorubicin
  - Epirubicin
  - Gemcitabine
  - Ifosfamide
  - Liposomal doxorubicin
  - Pazopanib
  - Temozolomide
  - Vinorelbine (category 2B)
  - Docetaxel (category 3B)

**HORMONE THERAPY (ESS only)**

- Medroxyprogesterone acetate
- Megestrol acetate
- Aromatase inhibitors²
- GnRH analogs (category 2B)
NCCN/FIGO Treatment Guidelines
Ovary / Primary Peritoneum

CANCER
IT'S PERSONAL
THE RIGHT PATIENT. THE RIGHT TREATMENT.
PRINCIPLES OF PRIMARY SURGERY (1 of 3)\textsuperscript{1,2}

- In general, a vertical midline abdominal incision should be used in patients with a suspected malignant ovarian neoplasm.\textsuperscript{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.

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.

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

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.

continued on OV-A 2 of 3

OVA
1 of 3

Ovary, Primary Peritoneum Surgery

- **Primary Surgery**
  - Radical pelvic dissection
  - Bowel resection
  - Diaphragm or other peritoneal surface stripping
  - Omentectomy
  - Splenectomy
  - Partial hepatectomy
  - Cholecystectomy
  - Partial cystectomy
  - Ureteroenocystomy
  - Distal pancreatectomy

- **Ancillary/Palliative Surgery**
  - Paracentesis
  - 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 Peritoneum Treatment by FIGO Stage & Grade

Ovary, Primary Peritoneum Primary/Adjuvant Chemotherapy

### PATHOLOGIC STAGING

**Stage IA or IB**
- Grade 1<sup>h</sup> → Observe
- Grade 2<sup>h</sup> → Observe or Intravenous (IV) taxane/carboplatin<sup>g</sup> for 3-6 cycles
- Grade 3 → IV taxane/carboplatin<sup>g</sup> for 3-6 cycles

**Stage IC**
- Grade 1, 2, or 3 → IV taxane/carboplatin<sup>g</sup> for 3-6 cycles

**Stage II**
- Stage III
- Stage IV

### PRIMARY CHEMOTHERAPY/PRIMARY ADJUVANT THERAPY<sup>k</sup>

- See Monitoring/Follow-Up (OV-5)

- See Secondary Adjuvant (OV-4)

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<sup>h</sup>All 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.

<sup>f</sup>See Principles of Primary Surgery (OV-A).

<sup>g</sup>See Principles of Chemotherapy (OV-B) and Management of Drug Reactions (OV-C).

<sup>h</sup>Clear cell pathology is Grade 3.

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PRIMARY CHEMOTHERAPY/PRIMAR Y ADJUVANT THERAPY REGIMENS FOR STAGE II-IV

- Intraperitoneal (IP)/Intravenous (IV) Regimen
  - Paclitaxel 135 mg/m² IV continuous infusion over 3 or 24 h² Day 1; cisplatin 75-100 mg/m² IP, Day 2 after IV paclitaxel; paclitaxel 80 mg/m² IP Day 8. Repeat every 3 weeks x 6 cycles. (category 1)

- Intravenous (IV) Regimens
  - Paclitaxel 175 mg/m² IV over 3 hours followed by carboplatin⁴ AUC 5-7.5 IV over 1 hour Day 1. Repeat every 3 weeks x 6 cycles. (category 1)
  - Dose-dense paclitaxel 80 mg/m² IV over 1 hour Days 1, 8, and 15 and carboplatin⁴ AUC 6 IV over 1 hour Day 1. Repeat every 3 weeks x 6 cycles. (category 1)
  - Docetaxel 60-75 mg/m² IV over 1 hour followed by carboplatin⁴ AUC 5-6 IV over 1 hour Day 1. Repeat every 3 weeks x 6 cycles. (category 1)
  - Bevacizumab-containing regimens per ICON-7 and GOG-218:
    - Paclitaxel 175 mg/m² IV over 3 hours, carboplatin⁴ AUC 5-6 IV over 1 hour, and bevacizumab 7.5 mg/kg IV over 30-60 minutes Day 1. Repeat every 3 weeks x 5-6 cycles. Continue bevacizumab for up to 12 additional cycles. (category 3)
    - or
    - Paclitaxel 175 mg/m² IV over 3 hours and carboplatin⁴ AUC 6 IV over 1 hour Day 1. Repeat every 3 weeks x 6 cycles. Starting Day 1 of cycle 2, give bevacizumab 15 mg/kg IV over 30-60 minutes every 3 weeks for up to 22 cycles. (category 3)
# Ovary, Primary Peritoneum Chemotherapy for Recurrence

## Acceptable Recurrence Therapies (1 of 2)\(^a\)

<table>
<thead>
<tr>
<th>Preferred Single Agents or Combinations</th>
<th>Cytotoxic Therapy (In alphabetical order)</th>
<th>Hormonal Therapy</th>
<th>Targeted Therapy</th>
<th>Radiation Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Platinum-Sensitive Disease</strong>(^{b,c})</td>
<td>Carboplatin(^1) &lt;br&gt; Carboplatin/docetaxel(^{2,3}) &lt;br&gt; Carboplatin/gemcitabine(^1) &lt;br&gt; Carboplatin/gemcitabine/bevacizumab(^{d,e}) (category 2B)(^4) &lt;br&gt; Carboplatin/liposomal doxorubicin(^5) &lt;br&gt; Carboplatin/paclitaxel (category 1)(^6) &lt;br&gt; Carboplatin/paclitaxel (weekly)(^7) &lt;br&gt; Cisplatin(^6) &lt;br&gt; Cisplatin/gemcitabine(^8)</td>
<td>Bevacizumab(^{d,e,17,18})</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Platinum-Resistant Disease</strong></td>
<td>Docetaxel(^9) &lt;br&gt; Etoposide, oral(^{10}) &lt;br&gt; Gemcitabine(^{11,12}) &lt;br&gt; Liposomal doxorubicin(^{11,12}) &lt;br&gt; Liposomal doxorubicin/bevacizumab(^{d,e,13}) &lt;br&gt; Paclitaxel (weekly)(^{14}) &lt;br&gt; Paclitaxel (weekly)/bevacizumab(^{d,e,13}) &lt;br&gt; Topotecan(^{15,16}) &lt;br&gt; Topotecan/bevacizumab(^{d,e,13})</td>
<td></td>
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<tr>
<td><strong>Other Potentially Active Agents</strong></td>
<td>Allretamine(^9) &lt;br&gt; Capecitabine</td>
<td>Anastrozole &lt;br&gt; Letrozole &lt;br&gt; Leuprolide acetate &lt;br&gt; Megestrol acetate &lt;br&gt; Tamoxifen</td>
<td>Palliative localized radiation therapy</td>
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<tr>
<td></td>
<td>Cyclophosphamide</td>
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<td></td>
<td>Doxorubicin</td>
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<tr>
<td></td>
<td>Ifosfamide</td>
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<td></td>
<td>Irinotecan</td>
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<tr>
<td></td>
<td>Mitomycin</td>
<td>Mephalan &lt;br&gt; Oxaliplatin &lt;br&gt; Paclitaxel</td>
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<tr>
<td></td>
<td>Paclitaxel, albumin bound (nab-paclitaxel)</td>
<td>Pemetrexed &lt;br&gt; Vinorelbine</td>
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</tr>
</tbody>
</table>

\(^a\) Source: NCCN Guidelines – Ovary - Version 3.2014
## Germ Cell & Sex Cord Stromal Tumor

**SEX CORD-STROMAL TUMORS - WHO HISTOLOGIC CLASSIFICATION**

- Sex cord-stromal tumors are a heterogeneous group of very rare tumors from benign to aggressive, and each histology has a range of often well differentiated to undifferentiated. Therefore, it should be determined whether a patient has a malignant or benign sex cord-stromal tumor. Treatment decisions and the decision whether to preserve fertility must be individualized based on the patient's specific tumor features.

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

1 Adapted from Tavassoel FA, Devilee P (Eds): WHO Classification of Tumours, Pathology and Genetics: Tumours of the Breast and Female Genital Organs. IARC, Lyon, 2003.

Source: [http://www.nccn.org/ovary](http://www.nccn.org/ovary)
Germ Cell & Sex Cord Stromal Tumor

- Surgery
- Chemotherapy Regimens
  - RIP – paclitaxel, ifosfamide, cisplatin
  - VeIP – vinblastine, ifosfamide, cisplatin
  - VIP – etoposide (VP-16), ifosfamide, cisplatin
- Add Bleomycin for Stromal Tumors

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—may be directed to treat cancer or to treat the patient
- Palliative care procedures that remove tumor or treat neoplasm are included in the abstract and coded as treatment
- 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
Additional Resources

- SEER Training for Cancer Registry Professionals
- SEER Educate for Practice Cases and Other Training
- 2003 WHO Classification of Tumours of Female Genital Organs, World Health Organization, Lyon, France, 2003
- NCI Physician Data Query for Healthcare Professionals
- CDC Information about GYN Cancers
- American Cancer Society
- 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, 2015
Questions

Be brave. Ask questions.
Get the facts about gynecologic cancer.

http://www.cdc.gov/cancer/gynecologic