SEER Summary Stage

Timeline

2015
- AJCC collected from CoC facilities and large hospitals for NPCR
- Consolidation not required
- Directly coded SS 2000 required for NPCR
- CSV2 in use

2016
- Directly coded AJCC (7th Ed) for NPCR
- Directly coded SS 2000 for NPCR
- CSV2 no longer accepted

2017
- Directly coded AJCC (8th Ed) for NPCR
- Directly coded SS 2000 for NPCR
- When a manual is available for SS2016 and training can be completed NPCR will switch to SS2016

SEER Summary Stage 2000

What is SEER Summary Staging?

- Most basic method of staging
- Describes how far cancer has spread from its point of origin
- Uses all information in medical record
  - Combination of clinical and pathological documentation

Finding the Information

- Pathology Reports
- Scopes and Manipulative Procedures
- Cytology Reports
- X-rays and Imaging Studies
- Bone Marrow Biopsies
- Laboratory Reports
- History and Physical
- Operative Reports
- Autopsy Reports
- Treatment
- Consult Reports
- Cancer Conferences
- Discharge Summary
- Physician office's records/letters
- Admitting Notes

SEER Summary Staging

- Five general categories
  - In situ
  - Local
  - Regional
  - Distant
  - Unknown
- Applies to all sites and histologies
  - Unless otherwise noted
Stage Definitions

In Situ (code = 0)

- Has not penetrated basement membrane
- No invasion present
- Can only be diagnosed microscopically
- Term “micro-invasion” is considered localized

In Situ Synonyms

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adenocarcinoma in an adenomatous polyp with no invasion of stalk</td>
<td>Lobular neoplasm, grade III (LN3) Lobular, non-infiltrating</td>
</tr>
<tr>
<td>Bowen’s disease</td>
<td>Non-infiltrating</td>
</tr>
<tr>
<td>Clark’s level 1 for melanoma (limited to epithelium)</td>
<td>Noninvasive No stromal involvement</td>
</tr>
<tr>
<td>Comedo carcinoma, non-infiltrating</td>
<td>Papillary (non-infiltrating or intraductal)</td>
</tr>
<tr>
<td>Confined to epithelium</td>
<td>Precancerous melanosis</td>
</tr>
<tr>
<td>Hutchinson’s melanotic freckle, NOS</td>
<td>Pre-invasive</td>
</tr>
<tr>
<td>Intracytic, noninfiltrating</td>
<td>Queyrat’s erythroplasia</td>
</tr>
<tr>
<td>Intraductal</td>
<td>Stage 0</td>
</tr>
<tr>
<td>Intraepidermal, NOS</td>
<td>Vaginal epithelial neoplasm, grade 3 (VIN III)</td>
</tr>
<tr>
<td>Involvement up to but not including the basement membrane</td>
<td>Vulvar epithelial neoplasm, grade 3 (VIN III)</td>
</tr>
<tr>
<td>Lentigo maligna</td>
<td></td>
</tr>
</tbody>
</table>
**Localized (code = 1)**
- Limited to the organ of origin
- Infiltration past basement membrane
- Terms that mean “local”
  - Microinvasion
  - Lymphatic invasion
  - Vascular invasion
  - Multifocal

**Regional (code = 2-5)**
- Extension beyond the limits of the organ of origin
- 2 – Direct extension
  - Invasion through entire wall of organ and/or adjacent tissues
- 3 – Regional lymph nodes
  - Invasion through walls of lymphatics
  - Cells can travel to nearby lymph nodes
- 4 – Both direct extension and lymph node involvement
- 5 – Regional, NOS

**Regional Lymph Nodes**

Appendix III – Lymph Node Synonyms

3 Ipsilateral regional lymph node(s) involved only

REGIONAL Lymph Nodes

Axillary, NOS
- Level I (low) (superficial), NOS (adjacent to tail of breast);
- Extremity (superficial)
- Level I (abdominal, NOS
- Level II (mammary), NOS
- Inguinal (Kuttler’s)
- Level III (axillary, NOS
- Axillary (subclavian)
- Inferior (subclavian)
- Internal mammary (porescent)
- Intramammary
- Nodal(s) in axillary fat

Regional lymph node(s), NOS
Regional Lymph Nodes

<table>
<thead>
<tr>
<th>TUMOR</th>
<th>INVOLVEMENT</th>
<th>TUMOR</th>
<th>NO INVOLVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOLID TUMORS</td>
<td>• Fixed</td>
<td>ANY TUMOR</td>
<td>• Palpable</td>
</tr>
<tr>
<td>• Matted</td>
<td></td>
<td>(except lung)</td>
<td></td>
</tr>
<tr>
<td>• Mass in mediastinum, retroperitoneum, and/or mesentery</td>
<td></td>
<td>• Visible</td>
<td></td>
</tr>
<tr>
<td>LUNG</td>
<td>• Enlarged</td>
<td>ANY TUMOR</td>
<td>• Swelling</td>
</tr>
<tr>
<td>• Lymphadenopathy</td>
<td></td>
<td>(except lung)</td>
<td></td>
</tr>
<tr>
<td>LYMHPOMAS</td>
<td>Any mention of lymph nodes</td>
<td>ANY TUMOR</td>
<td>• Shotty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(except lung)</td>
<td>• without clinical or path statement</td>
</tr>
</tbody>
</table>

Homolateral = ipsilateral
Unidentified nodes resected with primary site = Regional Lymph Nodes, NOS

Inaccessible Lymph Nodes

- Stomach
- Bladder
- Lung
- Ovary
- Corpus Uteri
- Prostate
- Liver
- Kidney
- Esophagus

Distant (code = 7)

- Tumor cells have broken away from primary tumor
  - Travel to other parts of the body
  - Begin to grow in new location
- Other terms: remote, diffuse, disseminated, metastatic, secondary disease
- No continuous trail of tumor cells between primary and distant site

- Inaccessible Lymph Nodes

- Regional Lymph Nodes

- Distant (code = 7)
Methods of Distant Spread

- Extension from primary organ beyond adjacent tissue into the next organ
  - Ex. Lung ➔ pleura ➔ bone/nerve
- Distant lymph nodes
  - Travel through lymph channels beyond regional drainage area

Methods of Distant Spread

- Blood-borne metastasis
  - Invasion of blood vessels within primary tumor
- Implantation metastasis
  - Spread through fluids in a body cavity

Unknown (code = 9)

- Sufficient evidence unavailable to assign stage
  - Patient expires before work up is completed
  - Patient refuses diagnostic/treatment procedure
  - Limited workup due to patient’s age
- Primary site is unknown
- Use sparingly
Not Applicable (code = 8)

- Added in 2003
- Benign brain and CNS tumors only
  - Never used for malignant disease
- Not in SS2000 Manual

General Guidelines

Timing Rule

All information through completion of surgery (first course of treatment)

OR

Within four months of diagnosis in the absence of disease progression
Timing Rule Example

Would you use all this information to determine stage?

NO

2/10/15 Prostate biopsy – consistent with adenocarcinoma grade 3
3/1/15 Bone scan – negative
3/15/15 Radiation to prostate
7/1/15 Patient complaining of hip pain
7/4/15 Bone scan – metastatic disease from prostate cancer

General Guidelines

1. Based on combined clinical and pathological assessment
2. Include all information available through completion of surgeries
   - See timing rule
3. Radiotherapy, chemo, hormonal therapy, or immunotherapy can be included
   - As long as within the specified time frame

General Guidelines

4. Exclude metastasis after diagnosis
5. Clinical information can change the stage
   - Unless operative/pathology information disproves clinical information
6. All schemes apply to all histologies
   - Exception – lymphomas and Kaposi sarcoma
7. Use autopsy reports
General Guidelines

8. Unknown primary = code 9
9. TNM characteristics can be used
   - Described only in terms of TNM
   - Documentation in medical record takes priority
10. Site specific guidelines take precedence over general guidelines

Consider Involvement

<table>
<thead>
<tr>
<th>adherent</th>
<th>extension to</th>
<th>induration</th>
<th>overstep</th>
</tr>
</thead>
<tbody>
<tr>
<td>apparent</td>
<td>features of</td>
<td>infringe</td>
<td>presumed</td>
</tr>
<tr>
<td>appears to</td>
<td>fixation</td>
<td>into</td>
<td>probable</td>
</tr>
<tr>
<td>comparable with</td>
<td>fixed</td>
<td>intrude</td>
<td>protruding</td>
</tr>
<tr>
<td>compatible with</td>
<td>impending</td>
<td>invasion to, into, onto, onto ex</td>
<td>suspected</td>
</tr>
<tr>
<td>consistent with</td>
<td>impinging</td>
<td>matted (LN only)</td>
<td>suspicious</td>
</tr>
<tr>
<td>contiguous/</td>
<td>imposing on</td>
<td>most likely</td>
<td>to</td>
</tr>
<tr>
<td>continuous with</td>
<td>incipient</td>
<td>onto</td>
<td>up to</td>
</tr>
</tbody>
</table>

Do Not Consider Involvement

<table>
<thead>
<tr>
<th>abuts</th>
<th>entrapped</th>
<th>rule out</th>
</tr>
</thead>
<tbody>
<tr>
<td>approaching</td>
<td>equivocal</td>
<td>suggests</td>
</tr>
<tr>
<td>approximates</td>
<td>extension to without invasion/involvement</td>
<td>very close to</td>
</tr>
<tr>
<td>attached</td>
<td>kissing</td>
<td>worrisome</td>
</tr>
<tr>
<td>cannot be excluded/ruled out</td>
<td>matted (except LN)</td>
<td></td>
</tr>
<tr>
<td>effacing</td>
<td>possible</td>
<td></td>
</tr>
<tr>
<td>encased</td>
<td>questionable</td>
<td></td>
</tr>
<tr>
<td>encompassed</td>
<td>reaching</td>
<td></td>
</tr>
</tbody>
</table>
Elimination of Categories

In Situ

• Carcinomas and melanomas
  Anything else cannot be in situ
• **NOT** in situ
  • Evidence of invasion, nodal involvement, metastatic spread
  • Even if pathologist states “in situ”
  • In situ **with microinvasion ≠ in situ**

Distant

• Hematopoietic diseases considered distant at time of diagnosis
• Key terms on operative report
  • Seeding
  • Implants
  • Liver nodules
  • Other indications of metastases
**Localized**

- Cancer located within organ of origin
- Does not extend beyond outer limits of organ
- No evidence of metastases
- Lymphatic and blood vessel invasion
  - Potential for malignant cells to metastasize
  - Do not necessarily indicate spread beyond primary organ
  - Must be definite evidence of tumor at distant sites

**Regional**

- Ruled out in situ, local, and distant categories
- Carcinomas
  - Lymph node involvement = regional
- Assume ipsilateral unless stated to be bilateral or contralateral
  - All tissues, structures, and lymph nodes

**Is there:**
- Invasion or microinvasion?
- Nodal involvement?
- Metastatic spread?

**Is it:**
- Carcinoma or melanoma?
- Confirmed by pathology?

**Is there evidence of metastatic disease?**
- Ex. seeding, implants, liver nodules
- Is it a hematopoietic disease?

**Is there:**
- No extension outside organ of origin?
- No evidence of metastatic disease?
Unknown

- When to assign:
  - Not enough information in record
  - Primary site is unknown
- Examine all available information before assigning
- Unknown stages may be eliminated from analysis studies

Assigning Summary Stage

1. Where did the cancer start?
2. Where did the cancer go?
3. How did the cancer get to the other organ or structure?
4. What are the stage and correct code for this cancer?
Things to Remember

- Read the first section carefully
- Use the anatomy illustrations
- Pathology has precedence over operative report
  - When there are disagreements concerning excised tissue
- Operative/pathology report has precedence over clinical information
  - When operative or pathology report disproves clinical information
- Ambiguous terms – p.15
  - Print out or save a copy

Staging Exercises

Case Scenario 1

<table>
<thead>
<tr>
<th>PE</th>
<th>Lungs clear. Heart regular. Abdomen soft, nontender, w/ no evidence of masses. DRE within normal limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/25 chest x-ray</td>
<td>normal</td>
</tr>
<tr>
<td>6/27 colonoscopy</td>
<td>fungating lesion involving 75% circumference of bowel, mid-transverse colon</td>
</tr>
<tr>
<td>6/30 transverse colectomy</td>
<td>mod differentiated mucinous adenocarcinoma with transmural extension to serosa and mets 3/10 mesocolic LNs. Lymphovascular invasion present. Tumor size 4.5 cm. Liver biopsy benign</td>
</tr>
</tbody>
</table>

4 – Regional by BOTH direct extension AND regional lymph nodes involved
**Case Scenario 2**

**CT abdomen:** pleural based mass in low left chest
CT chest: 4.0 cm pleural based mass anteriorly in left lung base. Second 2 cm mass in rt upper lobe.

**Surgery**
- Pulmonary status insufficient to withstand any open procedure

**9/4**
- CT guided needle biopsy left lower lobe: consistent with mixed adenocarcinoma and undifferentiated small cell carcinoma

**7 - Distant site(s)/nodes involved**

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**Case Scenario 3**

**PE**
- 2 x 1.5 cm hard mass in right breast. Matted axillary lymph nodes approximately 3 cm in diameter. No lymphadenopathy

**6/15**
- Chest x-ray: normal
- Bone scan: no evidence of metastases

**6/22**
- Multiple core bx: ductal carcinoma in UOQ only; right axillary – metastatic ductal carcinoma

**10/03**
- Simple mastectomy and axillary dissection: 0.8 x 1.0 cm mod diff ductal carcinoma UOQ right breast. 5 mm residual metastatic ductal carcinoma in fibrous scarring, right axilla

**3 - Ipsilateral regional lymph nodes involved only**

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**Case Scenario 4**

**PE**
- Rectal exam: prostate 3+ enlarged, nontender. No nodularity or induration

**7/1**
- Chest x-ray: unremarkable

**7/10**
- Cystoscopy and transurethreal resection of prostate: Grade II (Gleason 2 + 2 = 4) adenocarcinoma present in 5 of 20 chips from TURP specimen

**1 - Localized**

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Questions?

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