General

- Summary Stage is ANATOMICALLY based
- Unlike AJCC, it does not use the following in determining Summary Stage
  - Tumor Size (Example: Breast, Lung)
  - Number of positive regional nodes (example: Colon)
  - Genetic markers (Example: ER, PR, HER2)
  - Grade (Example: Prostate, Soft Tissue, Breast)

General

- Summary Stage designed to be as stable as possible over time (1973 forward)
- AJCC not designed to be stable over time
- AJCC changes based on advances in clinical medicine, treatment and survival analysis

- Note: Due to changes in AJCC (new chapters), some chapters in SS2018 cannot be reviewed over extended periods of time
General

- As a reminder:
  - Summary Stage applies to **ALL** reportable cases

- This is different than AJCC

- Summary Stage uses AJCC to update chapters, histologies, and definitions
SUMMARY STAGE 2018
GENERAL CODING INSTRUCTIONS
APRIL 2018

Effective with cases diagnosed January 1, 2018 and forward

Prepared by:
Data Quality, Analysis and Interpretation Branch
Surveillance Research Program
Division of Cancer Control and Population Sciences
National Cancer Institute
U.S. Department of Health and Human Services
Public Health Service
National Institutes of Health

SEER*RSA can be used to help with Summary Stage assignment
SEER*RSA includes the SAME information that the SS2018 manual has

**General**

- **As a reminder: AJCC does not determine reportability**
  - **Issue 1:** LCIS (8520/3). AJCC considers this a benign condition and no longer includes in the Breast chapter
    - LCIS is STILL reportable
    - Summary Stage is 0
  - **Issue 2:** AJCC no longer stages in situ tumors in the GYN chapters
    - These are STILL reportable
    - Summary Stage is 0
General

- If **only information** is a biopsy, Summary Stage probably unknown (9)
  - Biopsies generally only confirm diagnosis/histology
  - Biopsies generally do not provide staging information

- **Exception:** Positive bone marrow biopsy is always Summary Stage 7 (indicates bone marrow or blood involvement, which is systemic disease)

TIPS

- If you are coding EOD, you can use SEER*RSA to help determine Summary Stage

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Summary Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Non-invasive papillary carcinoma</td>
<td>IS</td>
</tr>
<tr>
<td>050</td>
<td>Carcinoma in situ</td>
<td>IS</td>
</tr>
<tr>
<td>100</td>
<td>Subepithelial connective tissue (lamina propria, submucosa) invaded</td>
<td>L</td>
</tr>
<tr>
<td>200</td>
<td>Muscularis involved</td>
<td>L</td>
</tr>
<tr>
<td>300</td>
<td>Corpus (cervix)</td>
<td>RE</td>
</tr>
<tr>
<td>400</td>
<td>Bladder neck</td>
<td>RE</td>
</tr>
<tr>
<td>700</td>
<td>Adjacent organ(s), NOS</td>
<td>D</td>
</tr>
<tr>
<td>800</td>
<td>No evidence of primary tumor</td>
<td>U</td>
</tr>
<tr>
<td>999</td>
<td>Unknown/extension not stated</td>
<td>U</td>
</tr>
</tbody>
</table>
TIPS

- Use the Summary Stage component from each of the following to determine Summary Stage
  - EOD Primary Tumor
  - EOD Regional Nodes
  - EOD Mets

Example 1

- EOD Extension: L
- EOD Lymph Nodes: None
- EOD Mets: None

- \(L + \text{None} + \text{None} = 1\) (Localized)
Example 2

- EOD Extension: L
- EOD Lymph Nodes: RN
- EOD Mets: None

- L + RN + None = 3 (Localized tumor and regional lymph nodes)

Example 3

- EOD Extension: RE
- EOD Lymph Nodes: RN
- EOD Mets: None

- RE + RN + None = 4 (Regional by direct extension tumor and regional lymph nodes)
Example 4

- EOD Extension: D
- EOD Lymph Nodes: RN
- EOD Mets: None

- D + RN + None = 7 (Distant)

- Remember: You can get a D (distant) from all three EOD fields

TIPS

- REMINDER:
  - Those collecting EOD, will get a DERIVED Summary Stage 2018 based on how the following are coded
    - EOD Extension
    - EOD Regional Nodes
    - EOD Mets
## How SS2018 is calculated based on EOD Calculation

### Summary Stage

<table>
<thead>
<tr>
<th>T</th>
<th>N</th>
<th>M</th>
<th>Summary Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS</td>
<td>NONE, U</td>
<td>NONE, U</td>
<td>0</td>
</tr>
<tr>
<td>IS, I, RE, U</td>
<td>D</td>
<td>&lt;Any value&gt;</td>
<td>7</td>
</tr>
<tr>
<td>IS, I, RE, U</td>
<td>NONE, R, U, NA</td>
<td>D</td>
<td>7</td>
</tr>
<tr>
<td>IS, L, U</td>
<td>RN</td>
<td>NONE, U, NA</td>
<td>3</td>
</tr>
<tr>
<td>L</td>
<td>NONE, U</td>
<td>NONE, U, NA</td>
<td>1</td>
</tr>
<tr>
<td>RE</td>
<td>NONE, U</td>
<td>NONE, U, NA</td>
<td>2</td>
</tr>
<tr>
<td>RE</td>
<td>RN</td>
<td>NONE, U, NA</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>&lt;Any value&gt;</td>
<td>&lt;Any value&gt;</td>
<td>7</td>
</tr>
<tr>
<td>U</td>
<td>NONE, U</td>
<td>NONE, U, NA</td>
<td>9</td>
</tr>
</tbody>
</table>

This table applies to all Summary Stage Chapters
**Behavior**

- Behavior 0 (Benign) and 1 (Borderline)
  - Summary Stage MUST be 8
  - Only applies to Schemas: Brain, CNS, Intracranial Gland
    - *If your facility collects other benign/borderline cases, Summary Stage will be 9*
- Behavior 2 (In situ)
  - Summary Stage MUST be 0
- Behavior 3 (malignant)
  - Summary Stage MUST be 1, 2, 3, 4, 7, 9

**Regional Nodes Positive**

- If 00 (all nodes [regional] examined negative)
  - Summary Stage may not be 3 or 4
  - These two codes indicate regional lymph node involvement
    - *Exception: If LN’s are sampled, but not diagnostic, may still have clinically positive nodes (codes 3 or 4)*
- If 01-90, 95, 97
  - Summary Stage MUST be **at least a 3**
  - Cannot be 0, 1, or 2

*Note: This also applies to Sentinel Nodes Positive (Breast and Melanoma Skin cases only)*
Mets at Dx Fields

- If one of the following fields is coded to 1, SS2018=7
  - Mets at Dx Bone
  - Mets at Dx Brain
  - Mets at Dx Liver
  - Mets at Dx Lung
  - Mets at Dx Distant Lymph Nodes
- If the following field is coded to 1 or 2, SS2018=7
  - Mets at Dx Other

Schema Specific Issues
### Bladder

- **Iliac Nodes**
  - External, internal (hypogastric)
  - Regional lymph nodes in Summary Stage
  - Common
  - Distant lymph nodes in Summary Stage
    - Collected in N category for AJCC 8th edition and EOD Regional Nodes for EOD

  - *If the only information you have is “iliac nodes” involved, default to regional lymph nodes (code 3 or 4) for purposes of Summary Stage 2018*

### Brain

- Midline shift present
  - *Does not impact staging (correction)*
  - “Drop metastasis” within the brain
    - Code to 7 for distant

- Also included with code 7
  - Extra-neural metastasis
  - Metastasis outside the CNS

- **Note:** *Remember that Brain, CNS Other and Intracranial cannot be assigned 3 or 4 (no lymph node involvement)*
Breast

- For AJCC 8th edition, T1-T3 based on size and the following descriptions:
  - Confined to breast tissue and fat including nipple and/or areola
  - Attachment or fixation to pectoral muscle(s) or underlying tumor
  - Subcutaneous tissue
  - Local infiltration of dermal lymphatics adjacent to primary tumor involving skin by direct extension
  - Skin infiltration of primary breast including skin of nipple and/or areola

Breast

- For Summary Stage 2018, these may be L or RE:

<table>
<thead>
<tr>
<th>Localized (code 1)</th>
<th>Regional (code 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confined to breast tissue and fat including nipple and/or areola</td>
<td>Attachment of fixation to pectoral muscle(s) or underlying tumor</td>
</tr>
<tr>
<td>Localized</td>
<td>Deep fixation or invasion of pectoral fascia or muscle(s), subcutaneous tissue</td>
</tr>
<tr>
<td></td>
<td>Local infiltration of dermal lymphatics</td>
</tr>
<tr>
<td></td>
<td>Skin infiltration of primary breast including skin of nipple and/or areola</td>
</tr>
</tbody>
</table>
Breast

- Other Regional descriptions
  - Invasion of (or fixation to)
    - Chest wall
    - Intercostal or serratus anterior muscle(s)
    - Rib(s)
  - Inflammatory cancer
    - Includes: AJCC 8th edition: T4a, T4b, T4c, T4d

Breast

- Isolated Tumor Cells
- Counted as “none” in Summary Stage for Breast
- Corresponds to AJCC 8th edition which has N0+ or N0-
- Regional Lymph Nodes (code 3)
  - Axillary, IPSILATERAL
    - Intramammary
    - Interpectoral
    - Apical
    - Infraclavicular (subclavicular)
Breast

- Distant Lymph Nodes (code 7)
  - Cervical, NOS
  - Contralateral/bilateral AXILLARY
  - Contralateral/bilateral INTERNAL MAMMARY (parasternal)
  - Supraclavicular Lymph Nodes (N3c in AJCC 8th edition)
    - AJCC 8th edition: Assigned in N category
    - EOD: Coded in EOD Regional Nodes

Breast

- Distant Sites (code 7)
  - Skin over
    - Axilla
    - Contralateral (opposite) breast
  - Sternum
    - Upper abdomen
  - Contralateral (opposite) breast-if stated as metastatic
  - Satellite nodule(s) in skin other than primary breast
  - Carcinomatosis
Cervical Lymph Nodes and Unknown Primary Tumor of the Head and Neck

• Need Schema Discriminator 1: **Occult Head and Neck Lymph Nodes**
  • No evidence of primary tumor found
  • Positive cervical lymph nodes
    • Levels I-VII, and other group (head and neck)
    • Physician states head and neck primary tumor
  • Code primary site to C760

Cervical Lymph Nodes and Unknown Primary Tumor of the Head and Neck

• If there is no evidence of metastatic disease
  • Code 3 (Localized/Regional Lymph Nodes)
  • **Note**: Since the extent of the primary tumor is not known, “default” to code 3
    • Code 4 (regional tumor/regional lymph nodes) is not available for this chapter
  • If there is evidence of metastatic disease
    • Code 7 (Distant)

• Notes: Codes 0-2 are also not available for this chapter
Colon

- **Contiguous** involvement of liver is REGIONAL (code 2) for the ascending colon, transverse colon and flexures.

- **Contiguous** involvement of liver is DISTANT (code 7) for all other subsites, including overlapping lesions (C188) and NOS (C189), rectosigmoid junction and rectum.

- **Discontiguous** involvement of liver is DISTANT (code 7) for ALL subsites of colon, rectosigmoid junction and rectum.

Colon

- AJCC 8th Edition T3

<table>
<thead>
<tr>
<th>Localized (code 1)</th>
<th>Regional (code 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extension through wall, NOS</td>
<td>Adjacent (connective) tissues, NOS</td>
</tr>
<tr>
<td>Non-peritonealized pericolic/perirectal tissues invaded</td>
<td>Mesentery (including mesenteric fat, mesocolon)</td>
</tr>
<tr>
<td>Subserosal tissue/(sub) serosal fat invaded</td>
<td>Pericolic/perirectal fat</td>
</tr>
<tr>
<td></td>
<td>Retroperitoneal fat</td>
</tr>
</tbody>
</table>

*Note: All T4a lesions are REGIONAL (code 2)*
Colon

- AJCC 8th Edition T4b

<table>
<thead>
<tr>
<th>Regional (code 2)</th>
<th>Distant (code 7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adherent to other organs or structures</td>
<td>Adrenal (suprarenal gland)</td>
</tr>
<tr>
<td></td>
<td>Gallbladder</td>
</tr>
<tr>
<td>Tumor found in adhesions</td>
<td>Fallopian tube, Ovary (ies), Uterus</td>
</tr>
<tr>
<td>Abdominal wall</td>
<td>Bladder</td>
</tr>
<tr>
<td>Retroperitoneum(exc fat)</td>
<td>Fistula to skin</td>
</tr>
<tr>
<td>Small Intestines</td>
<td>Other segment(s) of colon via serosa</td>
</tr>
</tbody>
</table>

*Note: Need to review Summary Stage carefully for further anatomical information for each individual subsite.*
Corpus Schemas

- Peritoneal Cytology
  - For AJCC 8th edition, invasion of myometrium is T1 (T1a, T1b, T1, NOS)
    - Positive peritoneal cytology does not change the T

Summary Stage
- Positive peritoneal cytology would make this a RE
  - SSDI, Peritoneal Cytology

Esophagus and Stomach

- Need Schema Discriminator 1: EsophagusGEJunction (EGJ)/Stomach to determine correct Summary Stage chapter

- If unable to determine involvement of EsophagusGEJunction, will be directed to the Stomach Chapter
**HemeRetic**

- The following histologies are **ALWAYS 7 (Leukemias, MDS, miscellaneous)**
  - 9724, 9727, 9741-9742, 9762, 9800-9801, 9806-9809, 9811-9818, 9820, 9831-9834, 9837, 9840, 9861, 9863, 9865-9867, 9869-9876, 9891, 9895-9898, 9910, 9911, 9920, 9931, 9940, 9945-9946, 9948, 9950, 9961-9967, 9975, 9980, 9982-9983, 9985-9986, 9989, 9991-9992
  - HemeRetic Summary Stage Chapter
  - 9732 (Plasma Cell Myeloma)
  - Myeloma and Plasma Cell Disorder Chapter

- *Reminder: Hematopoietic neoplasms may be diagnosed via peripheral blood smear (C421), Summary Stage would be 7*

---

**Lung**

- Non-small cell carcinoma (8046)
  - Per ICD-O-3 and Solid Tumor Rules, this is a valid histology
  - If your pathology report states “non-small cell carcinoma” assign 8046
  - This will not be eligible for AJCC staging

- These will now be staged ONLY in Summary Stage
Lung

- Note: Per CAnswer Forum post in AJCC forum, preferred terminology for these cases is Carcinoma, NOS (8010)
- This note is for the pathologists in documenting histology. This is not telling registrars to change the histology
- **Do NOT change the histology to 8010 based on this CAnswer Forum post**
- **Reminder: AJCC does not determine the rules for assigning histology**

Lung

- “Solitary mass contained within the visceral pleura” OR
- “Pleura based mass confined to lung”

- In these statements, and ones similar, the visceral pleura is NOT involved
  - These descriptions (provided no involved regional lymph nodes or metastatic disease) would be LOCALIZED (1)
Lung

- Tumor limited to the carina
- T4 in AJCC-Localized in Summary Stage
- The following are assigned T based on size, D in SS2018
  - Adjacent rib
  - Rib
  - Skeletal muscle
  - Sternum

Lung

- The following are assigned T4, D in SS2018
  - Heart
  - Inferior vena cava
  - Neural foramina
  - Vertebra(e) (vertebral body)
  - Visceral pericardium
Lung

- **Separate Tumor Nodules**
  - Regional
    - Separate tumor nodule(s) in the same lobe as the primary (T3)
  - Distant
    - Separate tumor nodule(s) in a different ipsilateral lobe (T4)
    - Separate tumor nodule(s) in contralateral lung (M1)

Lung

- Lymph Nodes: N3 nodes are DISTANT in SS2018
  - Bronchial (contralateral or bilateral)
  - Cervical, NOS (contralateral or bilateral)
  - Hilar (contralateral or bilateral)
  - Low cervical
  - Mediastinal (contralateral or bilateral)
  - Proximal/Pulmonary root
  - Scalene
  - Sternal notch
  - Supraclavicular
Lung

• Pleural or Pericardial Effusion

  • **Note 8:** Most pleural and pericardial effusions with lung cancer are due to tumor. In a few patients, however, multiple cytopathological examinations of pleural and/or pericardial fluid are negative for tumor, and the fluid is nonbloody and is not an exudate. Where these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging element.

• Can be diagnosed via imaging alone; however, look for a clinician’s statement that the pleural effusion is due to tumor before including it as a staging element

  • **Positive pleural or pericardial effusion is 7 for SS2018**

Lymphoma

- The following note is missing from the Summary Stage Lymphoma Chapter:

  - Any mention of the terms including fixed, matted, mass in the hilum, mediastinum, retroperitoneum, and/or mesentery, palpable, enlarged, shotty, lymphadenopathy are all regarded as involvement for lymphomas when determining appropriate code

- Will be included in the 2019 Update as Note 4 for Summary Stage Lymphoma
Lymphoma

- Code 5 no longer applicable
- For cases previously coded to 5, code to 2
  - Bulky disease present
  - Localized involvement of single extralymphatic organ site WITH involvement of its regional lymph nodes OR lymph nodes on same side of diaphragm
  - For lymph node primaries: two or more lymph node regions involved on same side of diaphragm

Lymphoma

- If primary site is C421: Summary Stage is 7
  - Bone marrow involvement (when primary site is not C421) is always 7
  - Reminder: The following are now ALWAYS staged as lymphomas
    - 9823/3: CLL/SLL
    - 9827/3: Adult T-cell lymphoma/leukemia
      - Remember to use the Heme DB/Manual to assign primary site
  - Note: Previously (prior to 2018) staged as Lymphoma or Leukemia depending on primary site
**Melanoma Skin**

- T based on *depth* of invasion
- Summary Stage based on *extent* of invasion

- Localized in SS2018
  - Papillary dermis invaded (Clark Level II)
  - Papillary-reticular dermal interface invaded (Clark Level III)
  - Reticular dermis invaded (Clark Level IV)
  - Localized, confined to skin/dermis

- Regional in SS2018
  - Subcutaneous tissue (through entire dermis)
  - Clark Level V

- Distant in SS2018
  - Bone
  - Skeletal muscle
  - Underlying cartilage
Melanoma Skin

- The following are counted as positive regional nodes
  - Isolated Tumor Cells
  - In-transit, satellite, and/or microsatellite metastasis WITHOUT involved regional lymph nodes

- Note: An unknown primary melanoma with peripheral (regional) lymph nodes is coded as 3
  - Primary site coded to C449

Merkel Cell Carcinoma

- T based on diameter (size) of tumor
- Summary Stage based on extent of invasion

- Localized in SS2018
  - Confined to site of origin
  - Confined to dermis
  - Subcutaneous tissue (through entire dermis)
Merkel Cell Carcinoma

- Regional in SS2018
  - **DIRECT** (contiguous) extension to the following
    - Bone
    - Cartilage
    - Fascia
    - Skeletal muscle

  - *Note: Indirect extension (non contiguous) is recorded in Distant*

Merkel Cell Carcinoma

- The following are counted as positive regional nodes
  - Isolated Tumor Cells
  - In-transit, satellite, and/or microsatellite metastasis
  - WITHOUT involved regional lymph nodes
Prostate

- Localized cancers (for when no prostatectomy done)
  - Based on DRE (normal, abnormal)
    - Physician’s clinical T category
  - Don’t use imaging UNLESS physician confirms involvement based on imaging
    - Imaging ONLY trumps DRE if physician incorporates the imaging into their T category

- Note: if only information is positive biopsy based on elevated PSA, code 1 for localized (T1c in AJCC)

### Prostate

- AJCC 8th Edition T4

<table>
<thead>
<tr>
<th>Regional (code 2)</th>
<th>Distant (code 7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bladder, NOS</td>
<td>Extension to or fixation to pelvic wall or pelvic bone</td>
</tr>
<tr>
<td>Bladder neck</td>
<td></td>
</tr>
<tr>
<td>External sphincter</td>
<td>Sigmoid colon</td>
</tr>
<tr>
<td>Levator muscles</td>
<td>Soft tissues other than extraprostatic</td>
</tr>
<tr>
<td>Rectum</td>
<td>Further contiguous extension</td>
</tr>
<tr>
<td></td>
<td>Frozen pelvis, NOS</td>
</tr>
</tbody>
</table>
Vulva

• Isolated Tumor Cells
• Counted as “none” in Summary Stage for Vulva
• Corresponds to AJCC 8th edition which has N0 (i+) or N0

Submit a Question to a SEER Registrar

Questions submitted through this form will be sent to the appropriate SEER personnel. The question and answer may be added to the SEER Inquiry System for others to reference.

Choose a subject

Reporting Guidelines
  - Hematopoietic Rules (database and manual)
  - Multiple Primary & Histology Rules (for cases diagnosed 2007-2017)
  - SEER*Stat
  - SEER Manual
  - ICD-O-3 Update (for cases diagnosed 2018+)
  - Solid Tumor Rules (for cases diagnosed 2018+)

Staging
  - Collaborative Stage (for cases diagnosed 2016+)
  - Extent of Disease (EOD 2018)
  - Summary Stage 2018 (SS2018)

https://seer.cancer.gov/registrars/contact.html
Why is Summary Stage Important

- Summary Stage is used to look at trends in rates overtime by stage (since AJCC changes)
- It is how survival is reported on SEER web site
- Cancer Fact Sheets
- CSR (Cancer Statistics Review)
- Online tools, SEER*Explorer
- Summary Stage available in SEER*STAT for researchers
- Healthy People 2020 uses Summary stage to measure some of the national goals on cancer


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Why is Summary Stage Important

**Used by Susan G. Komen**

![Summary Stage Table](image)

- SEER breast cancer survival rates are vital to researchers, advocates and policymakers. They are very helpful in estimating survival for individuals because the stages are defined so broadly.

Figure 4.8: 5-year relative breast cancer survival rates based on SEER staging

<table>
<thead>
<tr>
<th>Summary Stage Category</th>
<th>Definition (for all types of cancer)</th>
<th>5-Year Relative Breast Cancer Survival*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized</td>
<td>The cancer cells have not spread beyond the organ where they began to grow.</td>
<td>98%</td>
</tr>
<tr>
<td>Regionalized</td>
<td>The cancer cells have spread beyond the organ where they began (for example to nearby lymph nodes), but this spread is limited.</td>
<td>88%</td>
</tr>
<tr>
<td>Distant</td>
<td>The cancer cells have spread to other parts of the body (metastasis).</td>
<td>27%</td>
</tr>
</tbody>
</table>

*Note: Survival rates are estimates and are based on the SEER 18 registries. Rates may vary by state and time period.
Conclusion

- Chapters and descriptions based on AJCC, but the two are very different
- Review Summary Stage chapters carefully
- ALWAYS check DISTANT (code 7) if can’t find information in codes 1, 2, or 3
- Summary Stage is very important for Cancer Surveillance
  - Used by both SEER and NPCR