# General Rules

# SEER Summary Stage 2000

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National Center for Chronic Disease Prevention and Health Promotion
Division of Cancer Prevention and Control

## Objectives

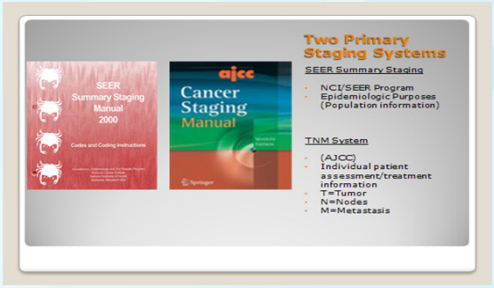
- What is Staging?
- What is Summary Staging?
- How do I assign Summary Stage?
- What are the Summary Staging Groups?
- Important Points
- Exercises

## What is Staging?

A method of grouping cancer cases by primary site to determine how far the cancer has spread at the time of diagnosis.

Comparing data over time

## Two Primary Systems




Slide by Carole Eberle, WI Central Cancer Registry

## Summary Stage 2000

**http://www.seer.cancer.gov/tools/ssm/**

## What is Summary Staging?

"SEER Summary Staging 2000 is the most basic way of categorizing how far a cancer has spread from its point of origin."

Young JL Jr, Roffers SD, Ries LAG, Fritz AG, Hurlbut AA (eds). *SEER Summary Staging Manual - 2000: Codes and Coding Instructions*, National Cancer Institute, NIH Pub. No. 01-4969, Bethesda, MD, 2001.

## What is Summary Staging?

"Summary Staging uses all information available in the medical record: in other words, it is a *combination* of the most precise *clinical and pathologic* documentation of the extent of disease."

Young JL Jr, Roffers SD, Ries LAG, Fritz AG, Hurlbut AA (eds). *SEER Summary Staging Manual - 2000: Codes and Coding Instructions*, National Cancer Institute, NIH Pub. No. 01-4969, Bethesda, MD, 2001.

## Summary Staging Background

- SS 77
  - Diagnosed prior to 2001
- SS 2000
  - Diagnosed from 1/1/2001
- Collaborative Staging
  - Diagnosed from 1/1/2004
- SS 2000 Directly Coded
  - Diagnosed as of 1/1/2015

## What is Summary Staging?

- General categories of in situ, local, regional and distant
- Codes range from 0 – 9
- Combines best clinical and pathological documentation
- Applies to all sites and histologies (unless otherwise noted)
- Used by central cancer registries

**Required by all central cancer registries participating in the National Program of Cancer Registries, Centers for Disease Control & Prevention program**

## How Cancer Spreads

Local invasion

- By direct extension
- Via Lymphatic system
- Via blood-borne metastases
- Intracavity metastatic seeding

## Summary Staging

Answers four basic questions about the extent of disease:

1. Where did the cancer start?
2. Where did the cancer go?
3. How did the cancer get to the other organ or structure?
   - Continuous line of cancer cells from the primary site?
     - ➢ *Probably direct extension*
   - Cancer cells break away from primary cancer and traveled through blood stream or body fluids?
     - ➢ *Probably distant*
4. What are the stage and correct code for this cancer?

## Features of Summary Staging

- List of Ambiguous Terms for determining involvement
- Site specific chapters (by ICD-O-3 primary site)
  - Regional tissues and nodes are listed for each site
  - Additional information such as definitions, diagrams and notes
- Site specific rules (relatively few)
  - Hematopoietic diseases are always distant (code 7)
  - Lymphoma and Kaposi's sarcoma have histology specific schemes
    - any mention of lymph nodes is indicative of involvement
    - only codes 1, 5 and 7 apply
- Unknown primary site is always unknown stage (code 9)
- Assign the highest applicable code

## Timing Rule

All information through completion of surgery(ies)
(first course of treatment)
**OR**
within four months of diagnosis
in the absence of disease progression

**-- whichever comes first --**

## Timing Rule

Stage may be determined after treatment with radiation, chemotherapy, hormones, or immunotherapy…

**IF**

You follow the 4-month rule and do not stage after disease progression.

## Timing Rule - Example

| | |
|---|---|
| 2/10 | Prostate biopsy c/w Adenocarcinoma grade 3 |
| 3/01 | Bone scan: negative |
| 3/15 | Radiation to prostate |
| 7/01 | Patient complaining of hip pain |
| 7/04 | Bone scan: metastatic disease from prostate cancer |

**Would you include all of this information to determine stage?**

## Where do I start?

Where did the cancer start?
- ❖ The correct primary site, or
- ❖ The correct histology?

What is the stage?
- ❖ How far has the cancer spread?

## Where do I look?

Pathology Reports
Cytology Reports
Bone Marrow Biopsies
Autopsy Reports

History and Physical
Admitting Notes
Discharge Summary
Consultative Reports

## KEEP LOOKING!


X-rays and imaging studies
Scopes and manipulative procedures
Laboratory reports
Operative reports
- ➢ Treatment

Physician's office records/letters
Cancer Conferences
Physician Advisor

## Summary Stage Groups

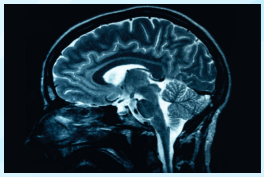
Stage Groups

- 0 In situ
- 1 Local
- 2 Regional by Direct Extension (D.E.)
- 3 Regional Lymph Nodes only involved
- 4 Regional by both D.E. and to Reg. Nodes
- 5 Regional, NOS
- 7 Distant Sites and/or Distant Nodes
- 8 CNS (benign or borderline)
- 9 Unknown or Not Applicable

## Summary Stage Groups

**Code 8** **Benign & Borderline CNS**

- Not applicable
- Added in 2003
- Never use for malignant tumors



## IN SITU = IN PLACE

- Only determined by a pathologist
- No invasion of the basement membrane
- No evidence of invasion, extension, or nodal involvement
- Carcinoma and Melanoma only
- No foci of invasion
- No micro invasion

**Stage 0**

## IN SITU

Be careful when reading pathology reports

Example 1
Large in situ carcinoma of the breast with 3 of 15 axillary nodes positive for cancer

Example 2
Final Diagnosis of Carcinoma in situ with a focus of microinvasion on the lateral margin

**Would you stage either of these in situ?**

1 _____

2 _____

## LOCAL

- Rule out in situ – is there invasion?
- Rule out any nodal involvement
- Rule out extension to regional organ(s) or tissues
- Rule out distant disease
- Cancer must be confined to the organ of origin

**Stage 1**

## LOCAL

**If still within the organ of origin**

- Blood vessel invasion
- Perineural lymphatic invasion
- Vascular invasion

**Does not change the stage**

**Potential for spread**

**Stage 1**

## LOCAL

**If still within the organ of origin**

- Multiple tumors, same cell type
- Metastases within the organ of origin
- Multifocal

**Does not change the stage**

**Potential for spread**

**Stage 1**

## REGIONAL DISEASE

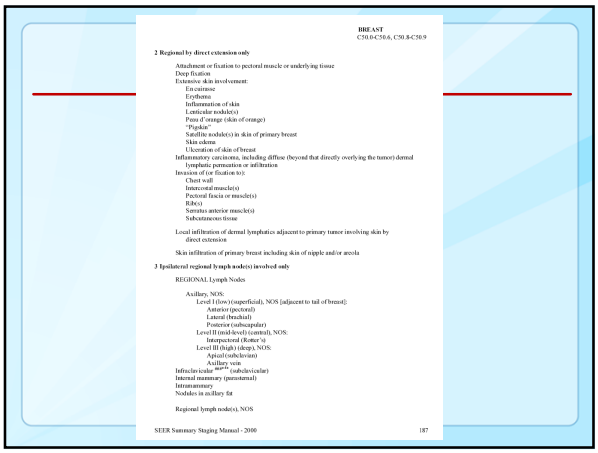
Subdivided into Stages 2-5:

- Stage 2 - Regional By Direct Extension
- Stage 3 - Invasion of Regional Lymph Nodes
  (first drainage area)
- Stage 4 – Both Extension & Nodes
- Stage 5 – Regional, NOS

## REGIONAL, NOS

- Insufficient workup or information
- Patient did not continue with workup
- Clinical diagnosis only

**Stage 5**



BREAST
C50.0-C50.6, C50.8-C50.9

**2 Regional by direct extension only**

Attachment or fixation to pectoral muscle or underlying tissue
Deep fixation
Extensive skin involvement:
Ecchymose
Erythema
Inflammation of skin
Lenticular nodule(s)
Peau d'orange (skin of orange)
"Pigskin"
Satellite nodule(s) in skin of primary breast
Skin edema
Ulceration of skin of breast
Inflammatory carcinoma, including diffuse (beyond that directly overlying the tumor) dermal lymphatic permeation or infiltration
Invasion of (or fixation to):
Chest wall
Intercostal muscle(s)
Pectoral fascia or muscle(s)
Rib(s)
Serratus anterior muscle(s)
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

**3 Ipsilateral regional lymph node(s) involved only**

REGIONAL Lymph Nodes

Axillary, NOS:
Level I (low) (superficial), NOS [adjacent to tail of breast]:
Anterior (pectoral)
Lateral (brachial)
Posterior (subscapular)
Level II (mid-level) (central), NOS:
Interpectoral (Rotter's)
Level III (high) (deep), NOS:
Apical (subclavian)
Axillary vein
Infraclavicular [or] supraclavicular(cular)
Internal mammary (parasternal)
Intramammary
Nodules in axillary fat

Regional lymph node(s), NOS

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## Site Specific Lymph Nodes

- Regional Lymph Nodes
- Distant Lymph Nodes
- Not listed as regional or distant
  - Synonymous with a listed node
  - Non Synonymous, assume distant

## SOLID TUMORS

Palpable, visible, swelling, or shotty lymph nodes are not considered involved.

Enlarged and lymphadenopathy should be ignored EXCEPT for lung.

Matted lymph nodes or, for example, "mass in the mediastinum" are considered involvement.

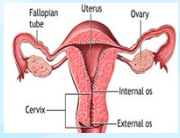
## Lymph Node Involvement

| TUMOR | INVOLVED | TUMOR | NO INVOLVEMENT |
|---|---|---|---|
| SOLID TUMORS | Fixed, matted mass in the mediastinum, Retro peritoneum and/or mesentery | SOLID TUMORS | Palpable, visible, swelling, shotty (without clinical or path statement) |
| LUNG | Enlarged, lymphadenopathy | SOLID TUMORS (except lung) | Enlarged, lymphadenopathy |
| | | | |
| LYMPHOMAS | Any mention of lymph nodes | | |
| | | | |

## Lymph Nodes Inaccessible

SITES

Bladder
Kidney
Prostate
Esophagus
Stomach
Lung
Liver
Ovary
Corpus uteri




## DISTANT

Systemic disease: diffuse and/or advanced

Spread:

- to distant organs or tissues
- to distant nodes
- seeding in a body cavity
  - peritoneal cavity or pleural cavity

**Stage 7**

## UNKNOWN STAGE

- Insufficient information to stage
- Patient expired before workup
- Patient refused workup
- Limited workup due to age, or comorbid conditions

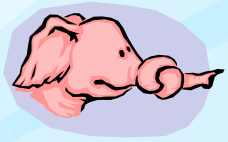
**Stage 9**

## UNKNOWN STAGE

Contact the Managing Physician

Review all Information Carefully

Assign Unknown Stage Sparingly



**Always document unknown stage in the text.**

**Stage 9**

## LUNG – UNKNOWN STAGE

Study conducted by 4 central registries
- 11% - 43% were staged unknown

NPCR audit of lung cancer = 75% accuracy rate

Reason for the high error rate?

**Stage 9**

## LUNG CANCER

| | |
|---|---|
| CXR: | Solitary mass in the LUL |
| Biopsy: | Positive for adenocarcinoma |
| CT scan: | LUL mass with bilateral mediastinal lymphadenopathy |
| Bone Scan: | Negative |

These cases were being staged localized or unknown.
The clinical evidence was not being included.
**Review the scans carefully!**


Lymphoma
only Stages 1, 5, 7 or 9

Malignant brain and meninges
only Stages 1, 5, 7 or 9

## LYMPHOMA

**Any** mention of lymphadenopathy
is considered involvement of the nodes.

## REMEMBER

Unknown Primary Site (C80.9) is Always Unknown Stage

Leukemia Always Distant

Multiple Myeloma Always Distant

## Important Points

- Read first section carefully
- Schemas organized by primary site codes
  - Except for those based on histology
  - Example: Kaposi's Sarcoma (pg 274)
- ALL sites (or histologies) have a staging schema
- Helpful anatomy illustrations

## Important Points

- All malignant tissue is not removed
  - Include information from gross observation
- Disagreement concerning excised tissue
  - Pathology report has precedence over operative report
- Operative/pathology disproves clinical information
  - Operative/pathology has precedence over clinical information

## Accuracy of Data

- Review the summary stage and compare with the text
- **Bone mets** noted in text and the summary stage is NOT distant
- In situ stage with only a clinical diagnosis is impossible

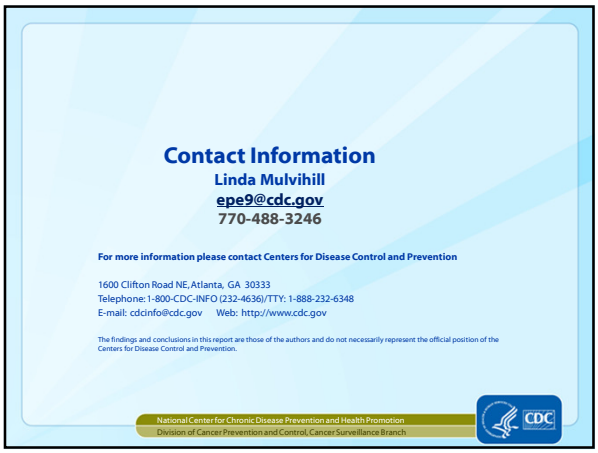
## QUESTIONS?

**For NPCR Central Cancer Registries**:
cancerstaging@cdc.gov

**For SEER Central Cancer Registries:**
http://seer.cancer.gov/registrars/contact.html

We acknowledge Melissa Pearson, CTR, NC Central Cancer Registry, for her help with this presentation.


**Centers for Disease Control and Prevention**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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
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