

# SEER Lymph Node Codes Revisited

SEER Program Training Materials  
October 2002

## This Review Covers

- ✓ EOD Lymph Node Involvement
- ✓ Number of Regional Nodes Positive
- ✓ Number of Regional Nodes Examined
- ✓ Scope of Regional Lymph Node Surgery
- ✓ Number of Regional Lymph Nodes Examined
- ✓ Lymph Node Anatomy of Major Sites

## EOD Lymph Node Involvement

- ✓ One digit hierarchical code
- ✓ Describes farthest lymph node involvement
  - regional
  - distant
- ✓ Corresponds to AJCC N, M fields where name of involved node chain is important

## Lymph Node Involvement<sub>(1)</sub>

- ✓ Code LN involvement 0 for all in situ cases
- ✓ Code distant lymph nodes if present
- ✓ Read each scheme--know when size, laterality, number of nodes and location of nodes is important

## Lymph Node Involvement <sup>(2)</sup>

- ✓ Terms which do NOT indicate LN involvement (except for lymphoma)
  - Palpable
  - Enlarged
  - Visible
  - Swelling
  - Shotty
  - Lymphadenopathy
- ✓ For lymphomas, any mention of lymph nodes is coded as involvement

## Number of Regional LN Positive and Examined

- ✓ Each 2 digit numeric field
- ✓ Each cumulative over all first course procedures
- ✓ Number positive corresponds to AJCC N category for sites where number of involved nodes is a criterion
- ✓ Number examined useful to determine extent of regional node dissection

## Number of Reg LN Positive and Examined--Guidelines <sup>(1)</sup>

- ✓ # Pos = the number pathologically examined that were positive even after pre-surgery therapy
- ✓ # Exam = the number pathologically examined (reported in micro description)
- ✓ Always code 9s for
  - Bone marrow; leukemia/myeloma
  - Lymphoma; mycosis/Sezary's
  - Unknown primary; ill-defined sites
  - Brain tumor

## Number of Regional Lymph Nodes Positive--Guidelines <sup>(2)</sup>

- ✓ Special codes
  - 97 Nodes positive but number unknown OR aspirated node positive
  - 98 No nodes examined; no LN surgery
  - 99 Not known if nodes are positive or negative or field not applicable (unknown or ill-defined primary site)

## Number of Regional Lymph Nodes Examined--Guidelines<sup>(2)</sup>

- ✓ Special codes
  - 95 No nodes removed; aspiration
  - 96 Sampling; number not known
  - 97 Dissection; number not known
  - 98 Procedure not described; number not known
  - 99 Not known if nodes were examined; not applicable

## Scope of Regional Lymph Node Surgery

- ✓ Regional lymph nodes only
- ✓ Procedure based
- ✓ No minimum number of nodes
- ✓ Neck dissections defined
- ✓ Hierarchical
- ✓ Not the same concept as EOD LN Involvement field

## Scope of Regional Lymph Node Surgery

Simple NO / YES format

Liver and Intrahepatic Bile Ducts

- 0 No regional LN removed
- 1 Regional lymph node(s) removed
- 9 Unknown; not stated; death certificate only

## Scope of Regional Lymph Node Surgery

Specific procedures

Head and Neck

- 1 Regional lymph node(s) removed, NOS
- 2 Neck dissection, NOS
- 3 Selective, limited; nodal sampling; "berry picking"
- 4 Modified/modified radical
- 5 Radical

## Scope of Regional Lymph Node Surgery

### Colon--general terms

- Colic nodes
- Mesenteric nodes
- Peri-\epi-\para-\ colic

### Colon--specific node chains

#### Examples:

- Anterior cecal
- Ileocolic
- Posterior cecal
- Right colic

## Scope of Regional Lymph Node Surgery--Guidelines

- ✓ Code farthest nodes removed, even if negative
- ✓ Code node aspiration to NOS
- ✓ Nodes not in regional list are coded as distant

## Number of Regional Lymph Nodes Removed

- ✓ Not cumulative

### Special Codes

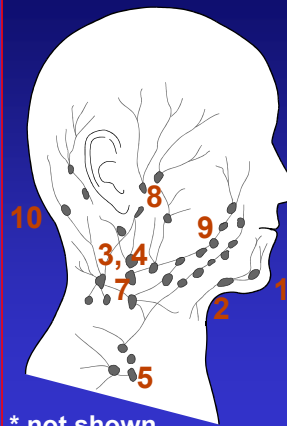
- |    |  |
|----|--|
| 90 | Ninety or more regional nodes...                     |
| 95 | Aspiration   |
| 96 | Sampling, number not stated                          |
| 97 | Dissections, number not stated                       |
| 98 | Nodes removed, number unknown, procedure not defined |

## Number of Regional Lymph Nodes Removed--Guidelines

- ✓ 00 if no nodes in specimen
- ✓ 01 - 90 nodes examined
- ✓ Code "sampling," "dissection"
- ✓ Code aspiration if no nodes removed

# Lymph Node Anatomy for Selected Sites

## Major Lymph Node Chains of Head



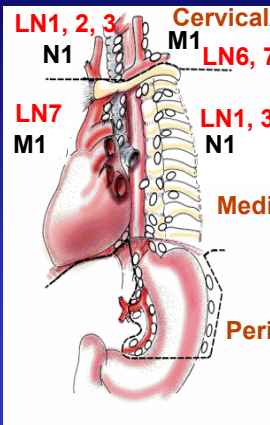
### CERVICAL LYMPH NODES

1. submental
2. submandibular
3. jugular (deep cervical)
4. superficial cervical
5. supraclavicular
6. prelaryngeal\* and paratracheal\*
7. retropharyngeal
8. parotid
9. buccal
10. retroauricular and occipital

\* not shown

## Lymph Nodes of Esophagus

Cervical esophagus primary



Intrathoracic esophagus primary

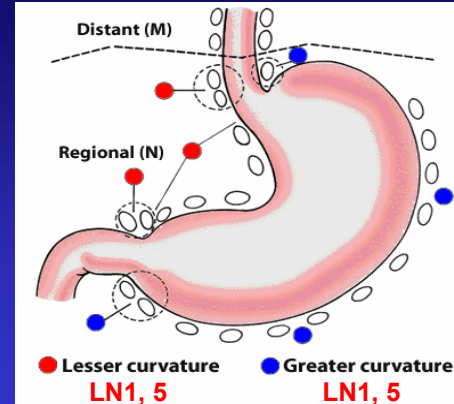
Mediastinal

Perigastric

Source: TNM-interactive, UICC, 1998

LN# = EOD LN code

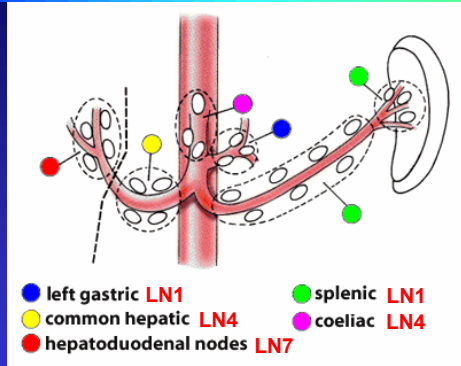
## Lymph Nodes of Stomach



Source: TNM-interactive, UICC, 1998

LN# = EOD LN code

## Lymph Nodes of Stomach



- left gastric LN1
- common hepatic LN4
- hepatoduodenal nodes LN7
- splenic LN1
- coeliac LN4

Source: TNM-interactive, UICC, 1998

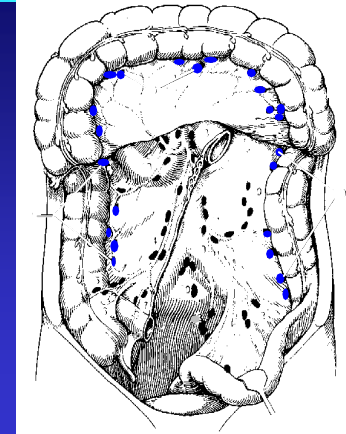
LN# = EOD LN code

## Regional Nodes -- Colon

Terms that apply to all segments:

- Colic LN1
- peri-epi-para-Mesenteric LN3

LN# = EOD LN code

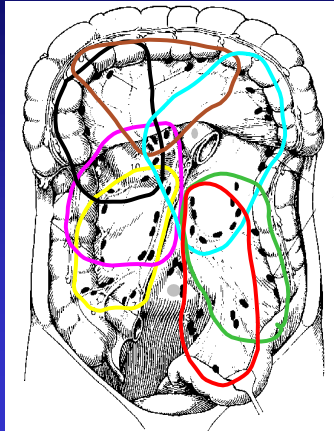


## Regional Nodes -- Colon

"Named" nodes are EOD LN code 2

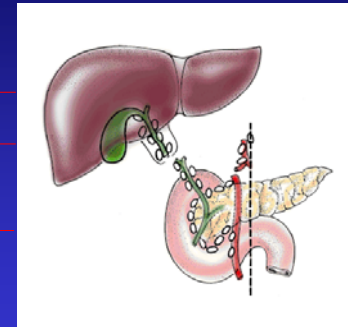
Regional nodes specific to each segment of colon

- Cecum
- Ascending
- Hepatic flexure
- Transverse
- Splenic flexure
- Descending
- Sigmoid



## Gallbladder and Extrahepatic Bile Ducts Lymph Nodes

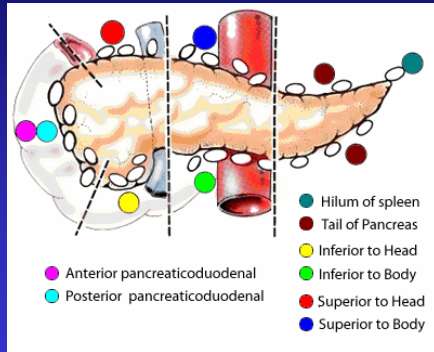
- Regional Lymph Nodes
- Cystic duct node
- Pericholedochal LN1
- Hilar
- Peripancreatic (head only) LN2
- Periduodenal
- Periportal
- Celiac LN5
- Superior Mesenteric LN6



Source: TNM-interactive, UICC, 1998

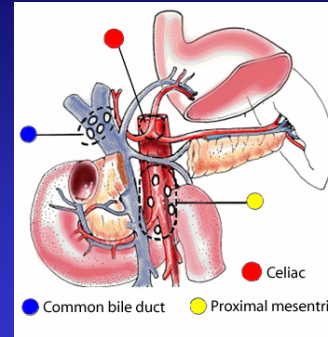
LN# = EOD LN code

## Lymph Nodes of Pancreas



Source: TNM-interactive, UICC, 1998

## Lymph Nodes of Pancreas

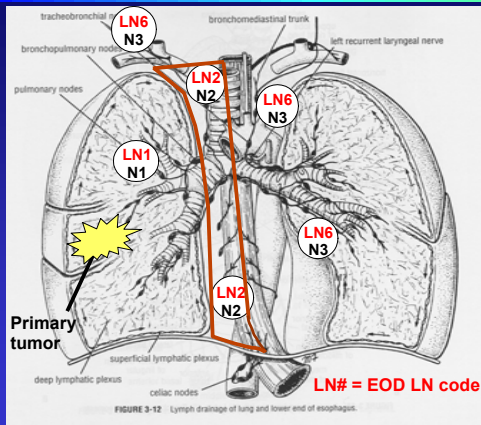


Source: TNM-interactive, UICC, 1998

### EOD LN Codes

	Head	Body, Tail
Peripancreatic	1	1
Hepatic	1	1
Celiac	1	7
Infrasubpyloric	1	7
Prox. mesenteric	1	1
Common bile duct	1	7
Splenic	7	1
Pancreaticocolic	7	1

## Lymph Nodes of Lung



### Lymph Nodes

- N1 Same side Peribronchial Hilar
- N2 Same side Subcarinal Mediastinal
- N3 Contralateral Mediastinal Hilar Any scalene supraclavicular

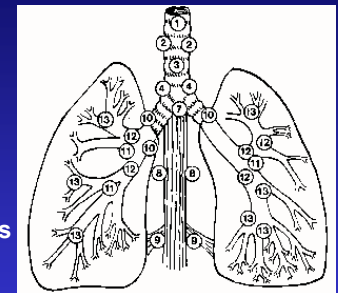
Adapted from R S Snell: Clinical Anatomy for Medical Students, 5th ed. 1995.

## Lymph Node Stations -- Lung

- Pulmonary (N1, LN1)
- 10 Hilar
- 11-14 Lobar and segmental

- Mediastinal (N2-3, LN 2, 6)
- 1 Superior mediastinal
- 2 Paratracheal (upper)
- 3 Pretracheal, retrotracheal
- 4 Lower paratracheal, azygos
- 5-6 Aortic (not shown)
- 7 Carinal, subcarinal (N2)
- 8 Paraesophageal (below carina)
- 9 Pulmonary ligament

LN# = EOD LN code

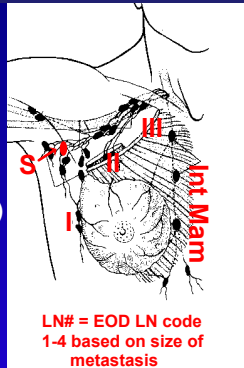


Lymph Node Stations



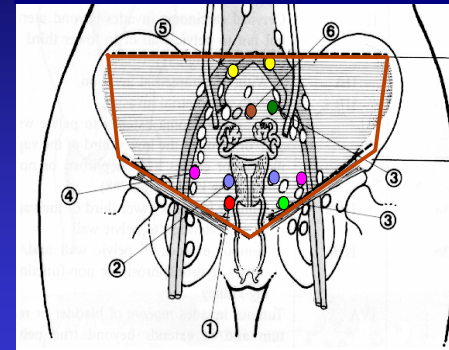
## Scope of Regional Lymph Node Surgery--Breast

- Level I (N1, LN 1-4, 6; N2, LN5)  
Superficial axillary nodes  
(low axillary, intramammary)
- Level II (N1, LN 1-4, 6; N2, LN5)  
Interpectoral axillary lymph nodes  
(Rotter's nodes)
- Level III (N1, LN 1-4, 6; N2, LN5)  
Deep axillary lymph nodes  
(high axillary, apical)
- Internal mammary (N3, LN 7)  
(parasternal lymph nodes)



LN# = EOD LN code  
1-4 based on size of metastasis

## Lymph Nodes of Cervix

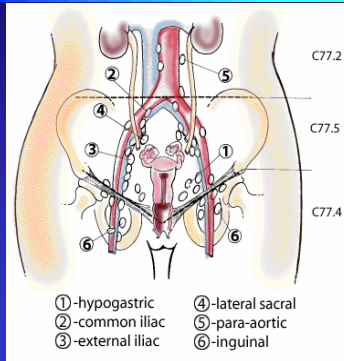


- 5. Common iliac
- 6. Presacral
- 4. External iliac
- 3. Hypogastric (obturator)
- 3. Internal iliac
- 2. Parametrial
- 1. Paracervical

All are  
EOD LN code 1

Source: TNM Atlas, 3rd ed. 2nd rev., by B. Spiessl et al. Springer Verlag 1992.

## Lymph Nodes of Corpus, Ovary, and Fallopian Tube



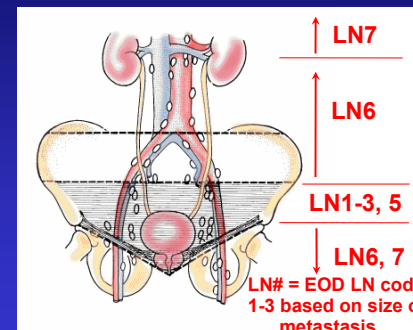
### EOD LN Codes

	Corpus	Ovary, Tube
Hypogastric	1	1
Common iliac	1	1
External iliac	1	1
Lateral sacral	1	1
Para-aortic	2	2
Inguinal	5, 7	3

Source: TNM-interactive, UICC, 1998

## Lymph Nodes of Prostate

below the bifurcation of the common iliac arteries



LN# = EOD LN code  
1-3 based on size of metastasis

Source: TNM-interactive, UICC, 1998



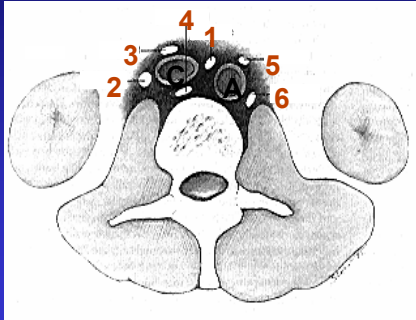
# Lymph Nodes of Testis

Abdominal paraaortic (periaortic)

- 1 Interaortocaval
- 2 Paracaval
- 3 Precaval
- 4 Retrocaval
- 5 Preaortic
- 6 Retroaortic

*Under certain conditions:*  
 Intrapelvic  
 External iliac  
 Inguinal LN6

All are EOD LN code 1-3 or 5 except as noted 1-3 based on size of metastasis



Source: Cancer: PPO, DeVita et al

# Lymph Nodes for Kidney, Renal Pelvis and Ureter

Kidney and Renal Pelvis

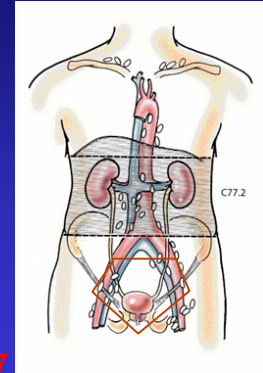
EOD LN code 1-3 or 5  
 1-3 based on size of metastasis

Hilar  
 Abdominal para-aortic  
 Paracaval

Ureter

EOD LN code 1-3 or 5  
 except as noted  
 1-3 based on size of metastasis

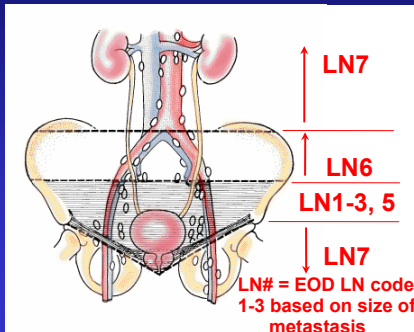
Hilar  
 Paracaval  
 Intrapelvic (Pelvic, NOS)  
 Abdominal para-aortic LN7



Source: TNM-interactive, UICC, 1998

# Lymph Nodes of Bladder

below the bifurcation of the common iliac arteries



Source: TNM-interactive, UICC, 1998

# Malignant Lymphoma

Anatomic Lymph Node Regions for Ann Arbor Staging

For lymphomas, lymph node regions are counted in the EOD Extension field.

Graphic: Clinical Oncology-- a multidisciplinary approach, 7th ed. P. Rubin)

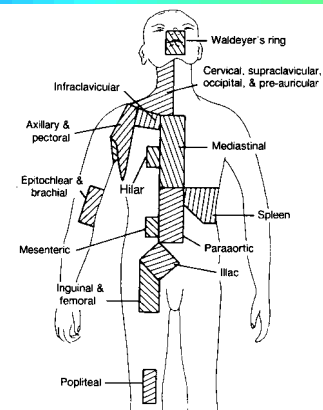


Fig. 18-3. Anatomic staging: Anatomic definition of separate lymph node regions.