

# **CODING PRIMARY SITE**

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## OUTLINE

- What is coding and why do we need it?
- ICD-10 and ICD-O
- ICD-O-3 Topography coding rules
- ICD-O-3 online



# WHAT IS CODING AND WHY DO WE NEED IT?

## ○ Coding:

- to assign **numerical** codes to **text** descriptions
- Example: Malignant neoplasm of the lung = C34

## ○ Advantages:

- group cases with similar concepts – site of origin, type of cancer
- complex series of pieces of information can be:
  - conveyed,
  - stored and
  - retrieved in the form of numbers (quickly, easier)



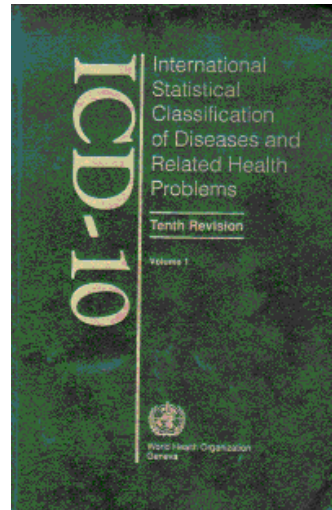
# WHAT IS CODING AND WHY DO WE NEED IT?

- Coding is based on **classification**:
  - arrangement of neoplasms or distribution in classes according to a method or system, ensuring **comparability**.
- The two most important items of information are:
  - **Topography**: the location (site) of the tumour in the body;
  - **Morphology** (histology, cytology): the appearance of the tumour when examined under the microscope.

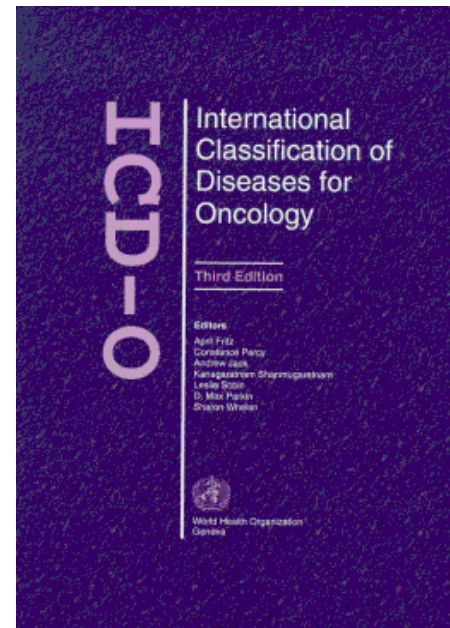


# WHAT IS ICD-O?

- Subset of *International Classification of Diseases*
- Specific code set for neoplasms
- Coding system for primary site and cell type
  - Example: adenocarcinoma of lung = C34, 8140/3



**Original—all diseases**



**Subset—neoplasms only**


## DIFFERENCES: 1. ORGANIZATION

- ICD-10 organized by
  - 1. Behavior
  - 2. Anatomic site involved
  - 3. Morphology codes optional
  
- ICD-O organized by
  - 1. Anatomical site involved
  - 2. Morphology + Behavior



## ICD-10 AND ICD-O-3

<b>Term</b>	<b>ICD-10</b>	<b>ICD-O-3</b>
<b>Lung tumor, benign</b>	<b>D14.3</b>	<b>C34.9 8000/0</b>
<b>Lung tumor, borderline</b>	<b>D38.1</b>	<b>C34.9 8000/1</b>
<b>Lung tumor, in situ</b>	<b>D02.2</b>	<b>C34.9 8000/2</b>
<b>Lung tumor, invasive</b>	<b>C34.9</b>	<b>C34.9 8000/3</b>
<b>Lung tumor, metastatic</b>	<b>C78.0</b>	<b>C34.9 8000/6</b>
<b>Lung tumor, uncertain if primary or metastatic</b>	<b>D38.1</b>	<b>C34.9 8000/9</b>



## DIFFERENCES: 2. SPECIAL CODES

- Some special codes added in ICD-O
- Some ICD-10 codes not used
- Some codes used differently





# ICD-O SPECIAL SITE CODES

- C42 Hematopoietic and reticuloendothelial system
  - C42.0 Blood
  - C42.1 Bone marrow
  - C42.2 Spleen
  - C42.3 Reticuloendothelial system, NOS
  - C42.4 Hematopoietic system, NOS
  
- Use as primary site for leukemia (C42.1), multiple myeloma (C42.1), Waldenstrom macroglobulinemia (C42.0)



# ICD-10 CODES NOT USED IN ICD-O

## HISTOLOGY-SPECIFIC ICD-10 CODES

- ICD-10 Codes (not “anatomic sites” in ICD-O)

		<u>Use instead</u>
C43	Melanoma of skin	C44
C45	Mesothelioma	C38.4
C46	Kaposi's sarcoma	C44
C81-C96	Lymphomas, leukemias, other blood diseases	C42.1 C77._





## SITE CODES USED DIFFERENTLY

- ICD-10

C77 Lymph nodes (primary and secondary)

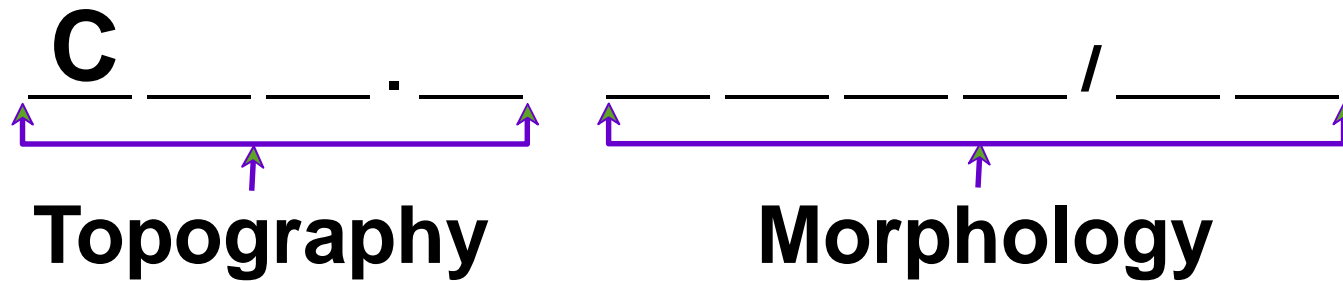
- ICD-O

C77 Lymph nodes

- In ICD-O, use C77.\_ as primary site for **nodal lymphomas**.  
Do not code lymph node metastases as primary sites in ICD-O.



# STRUCTURE OF ICD-O CODE



## Digits

Topography – 4

Cell type – 4

Behavior – 1

Grade – 1



# MEANING

**C 3 4 . 2**

Primary  
Subsite

**8 0 7 0 / 3 2**

Cell type  
Behavior  
Differentiation

**C 3 4 . 2**

Lung  
Middle lobe

**8 0 7 0 / 3 2**

Squamous cell  
carcinoma  
Invasive  
Moderately differentiated



# CODING TOPOGRAPHY USING ICD-O-3

- The topography code:
  - Indicates the **site of origin** of a neoplasm – where the tumour arose.
  - Have four-characters that run **from C00.0 to C80.9**
  - A decimal point (.) separates subdivisions of the three-character categories
- Structure:

C \_ \_ . \_  
site subsite

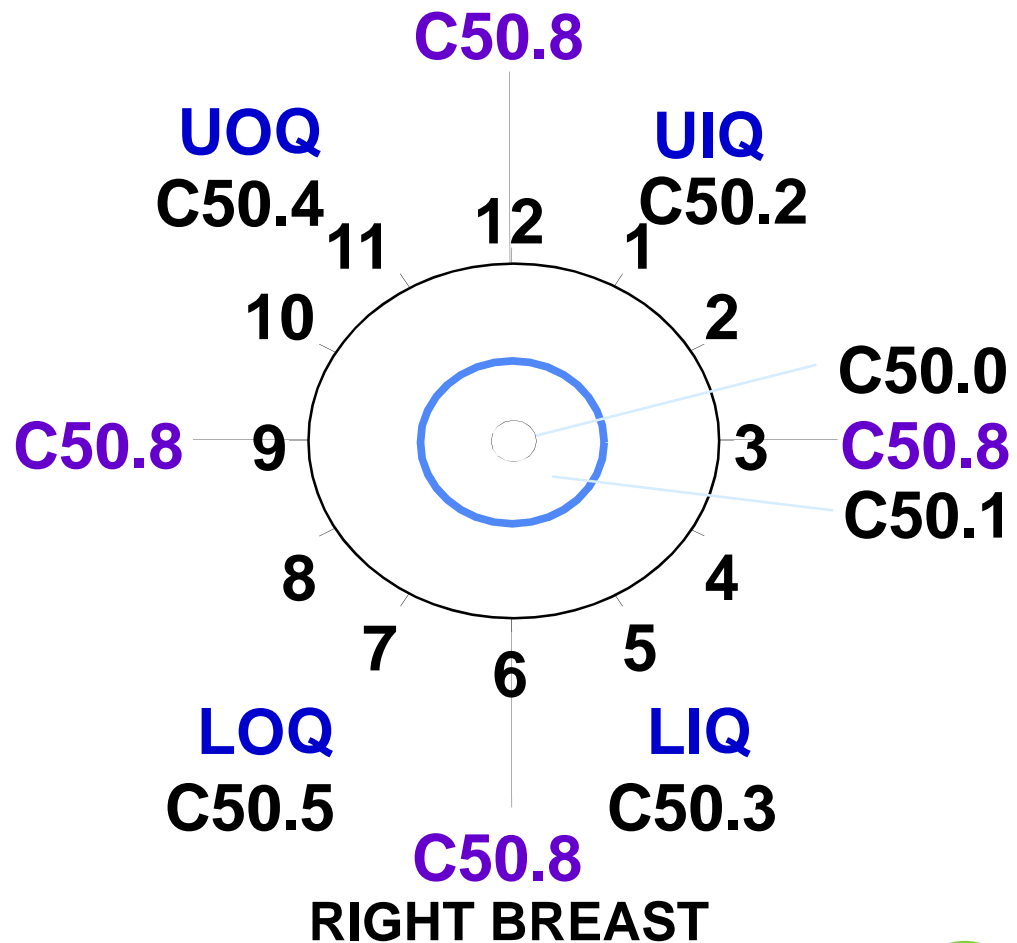
Example: C 50 . 2  
↓ ↓  
breast, upper inner quadrant



# ICD-O TOPOGRAPHY CODES - EXAMPLE

## C50 BREAST (excludes skin of breast C44.5)

- C50.0** Nipple  
Areola
- C50.1** Central portion of breast
- C50.2** Upper-inner quadrant of breast
- C50.3** Lower-inner quadrant of breast
- C50.4** Upper-outer quadrant of breast
- C50.5** Lower-outer quadrant of breast
- C50.6** Axillary tail of breast  
Tail of breast, NOS
- C50.8** Overlapping lesion of breast  
(see section 4.2.6)  
Inner breast  
Lower breast  
Midline of breast  
Outer breast  
Upper breast
- C50.9** Breast, NOS  
Mammary gland

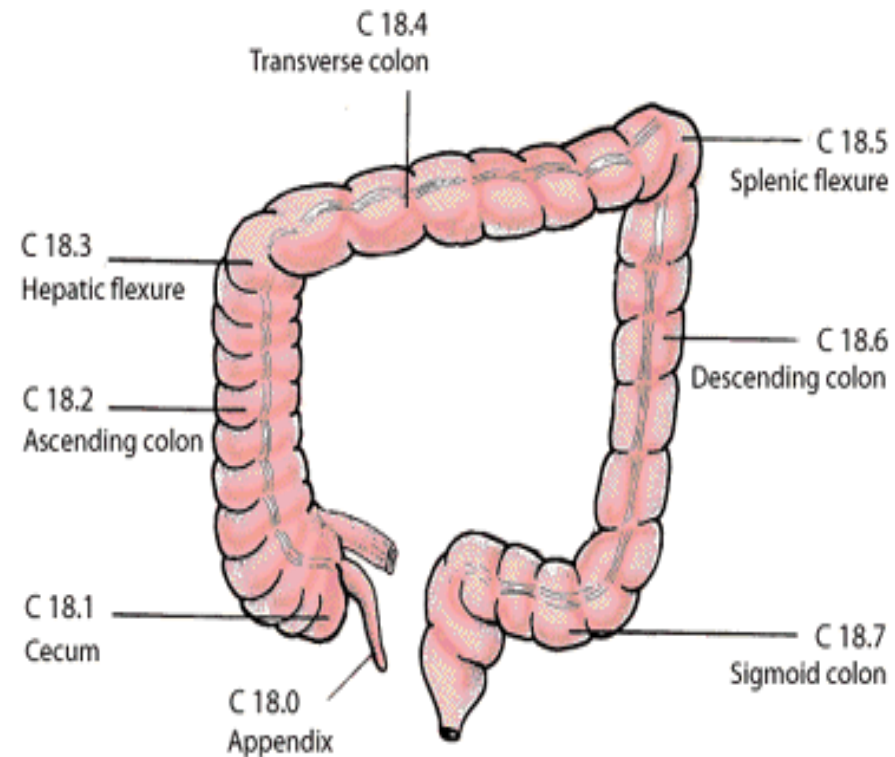




# ICD-O TOPOGRAPHY CODES - EXAMPLE

## C18 COLON

- C18.0 Cecum**  
Ileocecal valve  
Ileocecal junction
- C18.1 Appendix**
- C18.2 Ascending colon**  
Right colon
- C18.3 Hepatic flexure of colon**
- C18.4 Transverse colon**
- C18.5 Splenic flexure of colon**
- C18.6 Descending colon**  
Left colon
- C18.7 Sigmoid colon**  
Sigmoid, NOS  
Sigmoid flexure of colon  
Pelvic colon
- C18.8 Overlapping lesion of colon**  
(see section 4.2.6)
- C18.9 Colon, NOS**  
Large intestine (excludes rectum, NOS  
C20.9 and resectosigmoid junction C19.9)  
Large bowel, NOS



# SPECIAL TOPOGRAPHY CODES:

Divisions of the Esophagus – two incompatible systems are widely used to subdivide the esophagus and both are included.

- C15 Esophagus
    - C15.0 Cervical esophagus
    - C15.1 Thoracic esophagus
    - C15.2 Abdominal esophagus
    - C15.3 Upper third of esophagus
    - C15.4 Middle third of esophagus
    - C15.5 Lower third of esophagus
    - C15.8 **Overlapping** lesion of esophagus
    - C15.9 Esophagus, **NOS**
- radiographic and intraoperative descriptors
- ←
- endoscopic and clinical descriptors
- ←



## ICD-O-3 TOPOGRAPHY CODING RULES

- Rule A. Topographic regions and ill-defined sites
- Rule B. Prefixes
- Rule C. Tumors involving more than one topographic category or subcategory
- Rule D. Topography codes for lymphomas
- Rule E. Topography code for leukemias



## RULE A. TOPOGRAPHIC REGIONS AND ILL-DEFINED SITES

- If the diagnosis does not specify the tissue of origin, use the **appropriate tissues** suggested in the alphabetic index for each ill-defined site in preference to the "NOS" category.
- *Ill-defined site*: term for area of the body used in a general sense
  - Examples: arm, ankle, face
- **NOS**: Not otherwise specified
  - Not elsewhere classified
  - Term used in a general sense
    - When there are more specific codes
    - To encompass an organ as a whole



# RULE A. TOPOGRAPHIC REGIONS AND ILL-DEFINED SITES

- Example: Osteosarcoma of ankle
- Issue: Primary site not fully identified in diagnosis
  - Several non-specific codes available
    - C76.5 Ankle, NOS
    - C40.3 Bone of ankle
    - C44.7 Melanoma of ankle
    - C49.2 Soft tissue of ankle
- Use information from the cell type to code primary site.
  - Example: Osteosarcoma of ankle
  - Code: C40.3 bone of ankle



## RULE A. TOPOGRAPHIC REGIONS AND ILL-DEFINED SITES

- **Implied rule:** Code as specifically as you can with the information you have
- Avoid using ill-defined (NOS) site codes if possible.



## RULE B. PREFIXES

- Many prefix terms in index
  - Periampullary C24.1
  - Periadrenal or perirenal C48.0
  - Retrocecal or peripancreatic C48.0
  - Supratentorial brain C71.0
  
- When term is not listed, determine the location it describes and code that.
  - Examples
    - Paraspinal—along the spine
      - C76.7 Ill-defined site of back
    - Perigastric—near the stomach
      - C76.2 Ill-defined site of abdomen
    - Peribiliary—near the biliary tract
      - C76.2 Ill-defined site of abdomen



## RULE B. PREFIXES

- **Implied rule:** When you can't find a code for the anatomic site term, use "ill-defined site of ..."
- **Do not code to primary site mentioned** (such as spine, stomach, bile duct) when tumor is described as "near" that organ.





## RULE C. TUMORS INVOLVING MORE THAN ONE TOPOGRAPHIC CATEGORY OR SUBCATEGORY

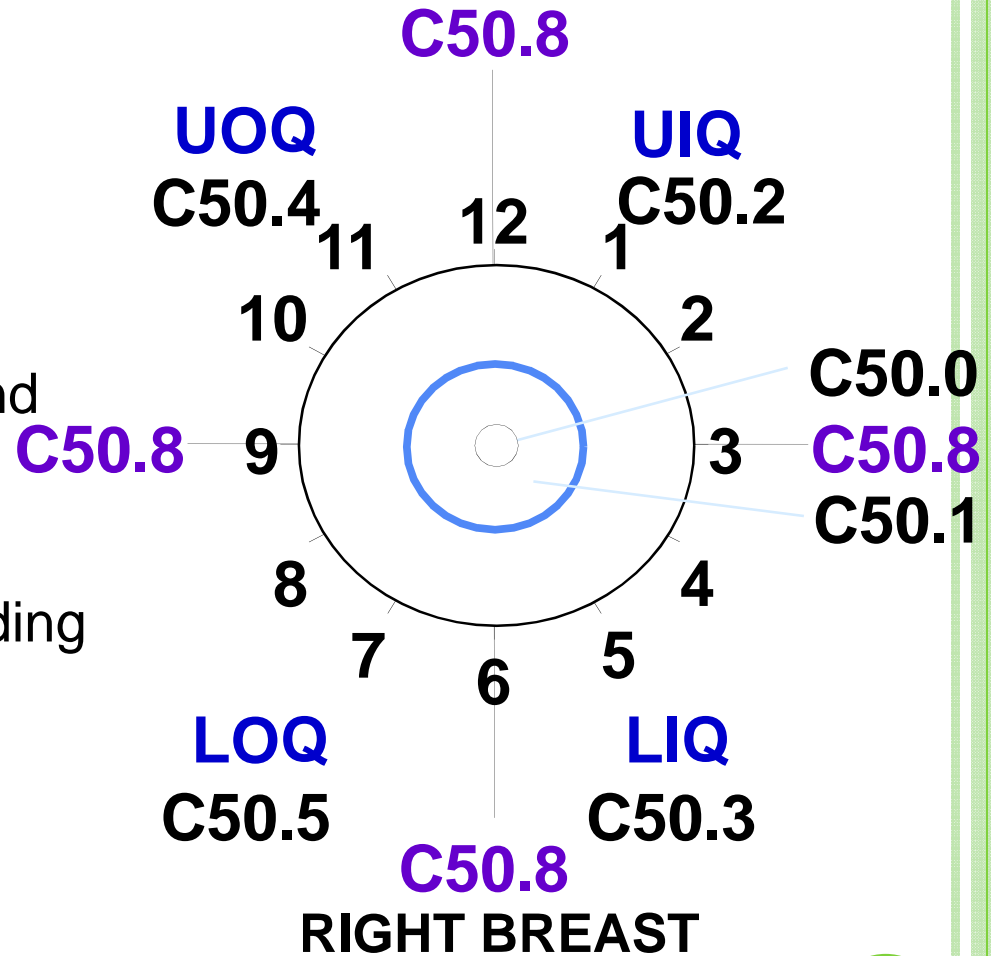
- Use **subcategory ".8"** when a tumor overlaps the boundaries of two or more categories or subcategories and its point of origin cannot be determined.



# RULE C. OVERLAPPING SITES

## ○ Examples

- Tumor of breast at 12:00
- Glioma involving parietal and occipital lobes
- Large neoplasm of descending and sigmoid colon



## RULE C. OVERLAPPING SITES CODES

### ○ Examples

Overlapping lesion of

- Tongue C02.8
- Major salivary glands C08.8
- Lip, oral cavity and pharynx C14.8
- Rectum, anus and anal canal C21.8
- Biliary tract C24.8
- Digestive system C26.8
- Female genital organs C57.8
- Male genital organs C63.8



## RULE C. OVERLAPPING SITES

- **Implied rule:** If you can't tell where a single tumor started in an organ or system, use an "overlapping site code, C\_ \_ . 8.
- **Does not apply to non-adjacent sites**
  - Example: Squamous cell carcinoma of skin of forehead and skin of forearm
    - Primary site: C44.9 Skin, NOS  
*Forearm and forehead are not adjacent sites.*
- **Does not apply to separate lesions**
  - Example: Separate tumors in UIQ and LOQ of breast
    - Primary site: C50.9 Breast, NOS
- **Note:** Multiple primary rules may differ from ICD-O coding



## RULE D. TOPOGRAPHY CODES FOR LYMPHOMAS

- Code lymphomas arising in lymph nodes to **C77.█**.
  - If multiple lymph node regions are involved, code to **C77.8** (lymph nodes of multiple regions).
  - If no site is indicated for a [nodal] lymphoma, code to **C77.9** (lymph node, NOS).
- Code **extranodal lymphomas** to the **site of origin**, which may not be the site of the biopsy.
  - If no site is indicated for a lymphoma and it is suspected to be extranodal, code to C80.9 (unknown primary site).



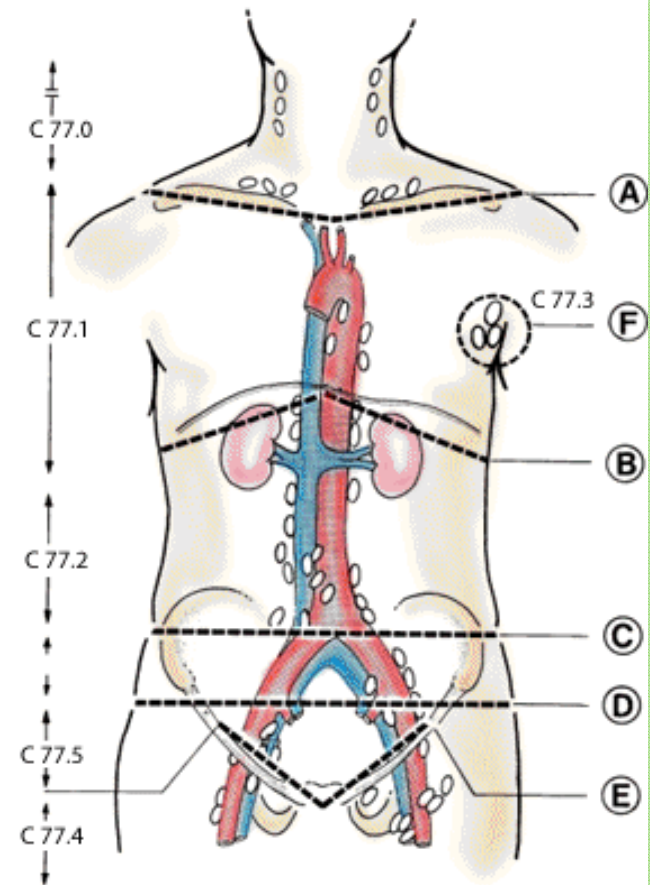
## RULE D. TOPOGRAPHY CODES FOR LYMPHOMAS

- **Implied rule:** Code a lymphoma to its site of origin.
- **Examples**
  - Hodgkin lymphoma of cervical lymph nodes C77.0
  - MALT lymphoma of stomach C16.9
  - B-cell lymphoma of inguinal and femoral nodes C77.4
  - Primary lymphoma of femur C40.2



## RULE D. TOPOGRAPHY CODES FOR LYMPHOMAS

- C77.8 Special Rule: Involved lymph node chains do not have to be adjacent.
- Examples: *Code to C77.\_*
  - Cervical and mediastinal nodes → C77.8
  - Axillary and periaortic nodes → C77.8
  - Preauricular and occipital nodes → C77.0



## RULE E. TOPOGRAPHY CODE FOR LEUKEMIAS

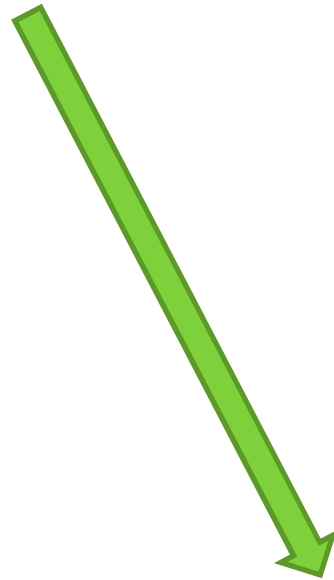
- Code all **leukemias** except myeloid sarcoma (M-9903/3) to **C42.1, bone marrow**.
  - Myeloid sarcoma: a deposit of malignant myeloid cells in soft tissue. Code to location of lesion.
- The following are also coded to bone marrow, C42.1
  - Multiple myeloma
  - Refractory anemias
  - Polycythemia vera
  - Myelodysplastic syndrome
  - Other hematopoietic diseases





# CODING TOPOGRAPHY USING ICD-O-3

- **Examples:**
  - **Cervix uteri**



## C53 CERVIX UTERI

- C53.0 Endocervix**
  - Internal os
  - Cervical canal
  - Endocervical canal
  - Endocervical gland
  - Nabothian gland
- C53.1 Exocervix**
  - External os
- C53.8 Overlapping lesion of cervix uteri** *(see section 4.2.6)*
  - Cervical stump
  - Squamocolumnar junction of cervix
- C53.9 Cervix uteri**
  - Cervix, NOS
  - Uterine cervix



# CODING TOPOGRAPHY USING ICD-O-3

- **Examples:**

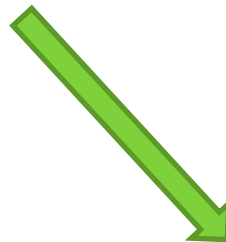
**Left lobe of  
thyroid gland**



## **C73 THYROID GLAND**

**C73.9 Thyroid gland**  
Thyroid, NOS  
Thyroglossal duct

**Male breast, axillary tail**



## **C50 BREAST** (excludes skin of breast C44.5)

- C50.0 Nipple**  
Areola
- C50.1 Central portion of breast**
- C50.2 Upper-inner quadrant of breast**
- C50.3 Lower-inner quadrant of breast**
- C50.4 Upper-outer quadrant of breast**
- C50.5 Lower-outer quadrant of breast**
- C50.6 Axillary tail of breast**  
Tail of breast, NOS
- C50.8 Overlapping lesion of breast**  
(see section 4.2.6)  
Inner breast  
Lower breast  
Midline of breast  
Outer breast  
Upper breast
- C50.9 Breast, NOS**  
Mammary gland



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You are here:

Select ICD-O code and name:

- 8045/3 Combined small cell-adenocarcinoma
- 8140/2 Adenocarcinoma in situ, NOS
- 8140/3 Adenocarcinoma, NOS
- 8140/6 Adenocarcinoma, metastatic, NOS
- 8141/3 Scirrhus adenocarcinoma
- 8143/3 Superficial spreading adenocarcinoma
- 8144/3 Adenocarcinoma, intestinal type
- 8147/3 Basal cell adenocarcinoma
- 8154/3 Mixed endocrine and exocrine adenocarcinoma
- 8161/3 Bile duct cystadenocarcinoma
- 8190/3 Trabecular adenocarcinoma
- 8210/2 Adenocarcinoma in situ in adenomatous polyp
- 8210/3 Adenocarcinoma in adenomatous polyp
- 8211/3 Tubular adenocarcinoma
- 8213/3 Serrated adenocarcinoma
- 8215/3 Adenocarcinoma of anal glands
- 8220/3 Adenocarcinoma in adenomatous polypis coli



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## TOPOGRAPHICAL CODES

### C15 ESOPHAGUS

- C15.0 Cervical esophagus
- C15.1 Thoracic esophagus
- C15.2 Abdominal esophagus
- C15.3 Upper third of esophagus
- C15.4 Middle third of esophagus
- C15.5 Lower third of esophagus
- C15.8 Overlapping lesion of esophagus
- C15.9 Esophagus, NOS



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WHO CLASSIFICATION OF TUMOURS OF THE DIGESTIVE SYSTEM <sup>1</sup>

### C15 - Esophagus:

Premalignant epithelial lesions  
Carcinoma  
Neuroendocrine neoplasms  
Lymphomas  
Mesenchymal tumors  
Secondary tumours

#### Premalignant epithelial lesions

- 8077/0 Squamous intraepithelial neoplasia, low grade
- 8077/2 Squamous intraepithelial neoplasia, high grade

#### Carcinoma

- 8070/3 Squamous cell carcinoma, NOS



# THANK YOU!

ИСКАНЕ  
ЗА ПАТОЛОГОАТОМИЧНО ИЗСЛЕДВАНЕ

на болничен № 590915

История на болестта (амбулаторен) № 51 години

Точен адрес: Свръх гр. К. ул. №

Историята е взета чрез изрязване, кюретен

1. Сайт на 2. Материал за специален статус

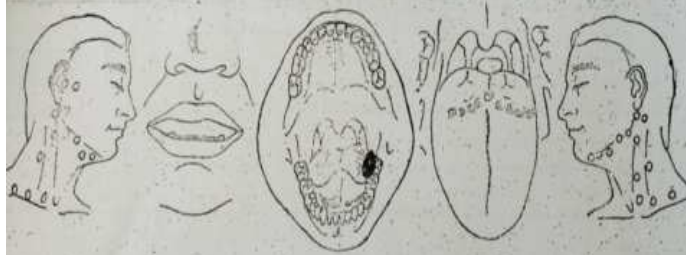
3. Други материали 4. Материал за специален статус

5. Материал за специален статус 6. Материал за специален статус

7. Материал за специален статус 8. Материал за специален статус

Анамнез за специален статус: Насеба на ситроуване от  
Други материали

При операции - вид на пат. процес и точна локализация



Съществува лабораторни данни: \_\_\_\_\_

Приложено лечение: Операция

Изведено ли е преди това биопсично изследване, къде, кога, резултат: \_\_\_\_\_

срочна клинична диагноза: \_\_\_\_\_

Ифрениц. диагноза: \_\_\_\_\_

Дата на изпращане материала: \_\_\_\_\_

Лекуващ лекар: \_\_\_\_\_

ПЪТВАНЕ: За достоверна диагноза необходимо е материалът да се взема правилно, т.е. дава или тумор, ако е  
еми и не може да се изпратят целият, да се изреже от рибна със здрава околност; да се изпраща всички  
разтвори, биопсичен материал само в една хистопатологична лаборатория. Фиксиранията течност да е поне  
и повече от обема на материала; най-добре се фиксира 10% формалин (продажният формалин е 40% една ча

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