2018-2019 Solid Tumor Rules & Coding Intensive II

2019-2020 FCDS Educational Webcast Series

10/24/2019

Steven Peace, CTR

IACR International Association of Cancer Registries

1

2018 Solid Tumor Rules & Histology Coding Intensive Part II

CDC & Florida DOH Attribution

"Funding for this conference was made possible (in part) by the Centers for Disease Control and Prevention. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the US Government."

FCDS would also like to acknowledge the Florida Department of Health for its support of the Florida Cancer Data System, including the development, printing and distribution of materials for the 2019 FCDS Annual Conference and the 2019-2020 FCDS Webcast Series under state contract CODJU. The findings and conclusions in this series are those of the author(s) and do not necessarily represent the official position of the Florida Department of Health.

3

FLccSC LMS – CEU Quiz –FCDS IDEA

- Attendees must take and pass a 3-5 question CEU Quiz to get CEUs
- CEU Awards are Restricted to Attendees with a FLccSC LMS Account
- The CEU Quiz will be posted to FLccSC 1-2 hours after the webcast ends

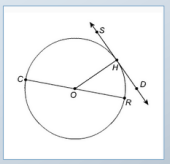
- Only registered FLccSC Users will be given access to the CEU Quiz
- Florida attendees must have a Florida FLccSC Account to take the Quiz
- South Carolina attendees must have a South Carolina FLccSC Account
- New FLccSC States will follow similar instructions for the CEU Quiz

- Attendees can attend any of the live webcasts without receiving CEUs
- Recorded Sessions are also available for non-FLccSC Users – No CEUs

4

Outline

- Introduction to Session
- FCDS No Longer Allows Blank/Unknown Date of Dx for Any Cases
- SEER is the Author and Standard Setter for the 2018 Solid Tumors Manual
- Do Not Use CAnswer Forum for Histology Coding or Multiple Primary Questions
- Use Hematopoietic Online Database for ALL lymphoma, leukemia, plasma cell neoplasms
- 2018 Solid Tumors Manual Update - July 2019
- Quick Review of Content and Structure of Solid Tumors Manual
- ICD-O-3.2 @ IARC/WHO – where to get it & how to use it - DEMO!
- Use Solid Tumors Manual with ICD-O-3.2 to Validate Histology Code
- More Difficult Case Vignettes Determining Number of Primary Tumors, Site & Histology Coding
- SEER*Educate – Histology Coding Drills – 500 Solid Tumor Practice Cases + Hematopoietic Cases
- New FCDS Education & Training On-Line Evaluation Tool
- Questions



5

Introduction

- SEER is the U.S. Authority for ICD-O, Solid Tumor Rules, Heme DB & Rules
- CAnswer/Ask a Pathologist/CAP/AJCC Manual 8th ed. Are NOT Used in Place of SEER MP/H Rules & Do Not Overrule any SEER/WHO Histology Coding Instructions
- Please Use Ask a SEER Registrar and SINQ for ICD-O-3 Coding and MP/H Rule Questions
- ICD-O is a World Standard for Cancer Registries to Code Primary Site, Histology, Behavior, Grade and Includes Rules for Using the International Classification
- SEER works closely with WHO/IARC/ICD-O to maintain this standard
- United States developed Solid Tumor Rules to be used with ICD-O when the ICD-O-3 was not keeping up with the release of WHO Classification 4th editions
- Beginning 2021 there will be ANNUAL Updates to ICD-O and Solid Tumors Rules
- Always go to SEER Inquiry when you have questions on Histology
- You may not be able to AJCC Stage some cases due to SEER/WHO/IARC Rules

6

IMPORTANT FCDS POLICY CHANGE

- The Date of Diagnosis Changes will take place immediately - they are creating errors.
- FCDS has long recognized that medical record history and physical exams often include mention of a 'history of cancer' but provide little if any information regarding when or where the initial diagnosis or cancer or initial treatment occurred. This is why for many years FCDS has allowed registrars to enter blanks, 9's, or use the Date of Admission as a proxy for the Date of Initial Diagnosis when no information was available in the medical record. This generally applied to non-analytic cases seen at your facility with current evidence of cancer and historical-only cases with no evidence of cancer reported to FCDS in the historical grid when a new cancer has been diagnosed (multiple primaries diagnosed over patient's lifetime).
- Without a valid year of diagnosis, the EDITS cannot determine which set of diagnosis year specific standards to apply which has led to complicated Florida-only rules for EDITS to point to which standards the EDITS must apply when trying to stage and grade cases (and the site-specific data items) and based on the Date of First Contact. Date of First Contact has proven not to be a very good proxy for Date of Diagnosis.

7

IMPORTANT FCDS POLICY CHANGE

- FCDS Will No Longer Accept an Unknown or Blank Date of Diagnosis
  - DO NOT USE ADMISSION DATE AS A PROXY DATE OF DIAGNOSIS
  - You MUST Estimate Date of Initial Diagnosis for ALL Cases
    - ALL Analytic – no excuse not to estimate a recent dx for cancer you are treating
    - Non-analytic with Evidence of Recurrence/Progression
    - Historical case - No Evidence of one Cancer BUT evidence of another cancer
  - Guidelines will be available in the July 2019 FCDS Memo
  - Guidelines will be available in the 2019 FCDS DAM
  - You MUST Estimate Treatment Dates when you feel they are part of 1st Course TX
- Registrars MUST use every resource available at the reporting facility to determine the best date of diagnosis. In the absence of an exact date of initial diagnosis, you MUST estimate at least the year of diagnosis using your best approximation from the information available in the record.

8

IMPORTANT FCDS POLICY CHANGE

- Often, the History and Physical or a Consultation Report will provide clues to aid in estimating a date of diagnosis. Key words and phrases such as recently, a few months ago, or in the distant past can provide hints to when a patient was diagnosed without providing an exact year or date. However, registrars can use these key words and phrases to guide them when determining a reasonable estimated date of diagnosis. Admission Date is a terrible proxy date for First Dx.
- Some histories provide no clues at all as to when the patient was diagnosed with cancer. These can be the most difficult cases to estimate a date of diagnosis.
- Guidelines for estimating dates are provided below bearing in mind that the clues in the record should be used first and will always override the guidelines.
- These are guidelines. No specific rules exist or are available from any program.

9

IMPORTANT FCDS POLICY CHANGE

22. FINAL RESORT FOR ESTIMATING DATE OF DIAGNOSIS WHEN NO INFORMATION OR HINTS FOUND:

a. Always take into account the chronology of previous diagnosis of cancer and adjust the below recommendations to take the age of the patient and the chronology of diagnoses into account.

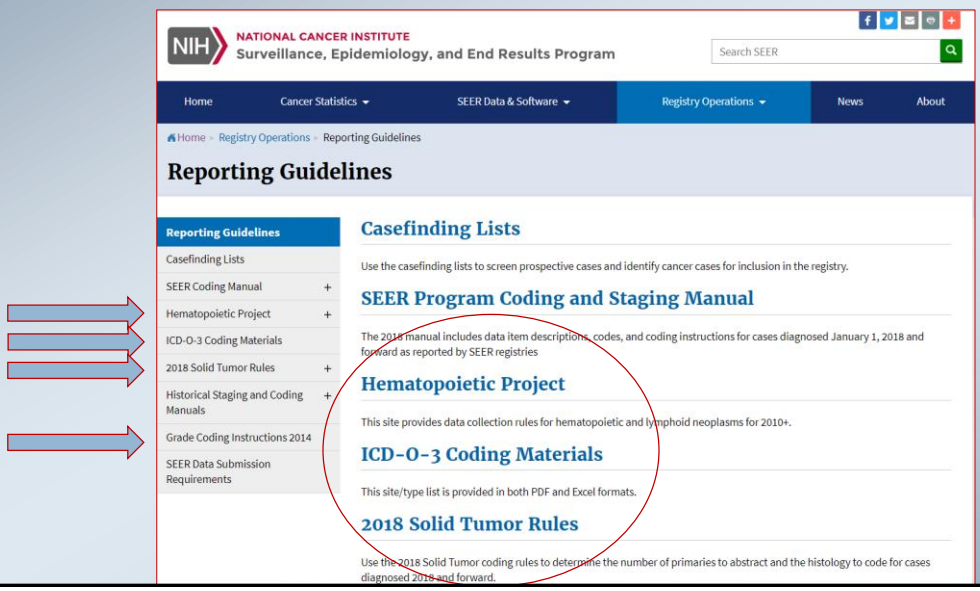
b. FCDS Cancer Site-Specific Estimates when no information available except 'history of *xyz* cancer'. The below estimates are suggestions for a date of diagnosis of last resort and must take the chronology of the other cancers, initial course of therapy, and other factors into account.

c. FCDS Cancer Site-Specific Estimates are loosely based on the Multiple Primary Rules, estimated time to recurrence or progression, expected lifespan, and/or FCDS Experience applying the Multiple Primary Rules over many years and as available. These estimates are far from perfect and must always be used with caution taking into account all other factors available in the H&P.

i. Head and Neck Sites – at least 3 years prior to admission
ii. Colon/Rectosigmoid/Rectum Sites – at least 5 years prior to admission
iii. Lung – at least 3 years prior to admission
iv. Kidney – at least 5 years prior to admission
v. Cutaneous Melanoma – at least 1 year prior to admission
vi. Breast – at least 5 years prior to admission
vii. GYN Sites – at least 5 years prior to admission
viii. Urinary Sites – at least 3 years prior to admission
ix. Prostate – at least 5 years prior to admission
x. Malignant Lymphoma – at least 3 years prior to admission
xi. Chronic Leukemia – at least 5 years prior to admission
xii. Myeloproliferative/Myelodysplastic Neoplasms – at least 5 years prior to admission AND before 2001 when these cancers became reportable to FCDS
xiii. Benign Brain Tumors – at least 5 years prior to admission AND before 2004 when these cancers became reportable to FCDS.
xiv. Malignant Brain Tumors – at least 1 year prior to admission
xv. Other Sites – at least 5 years prior to admission

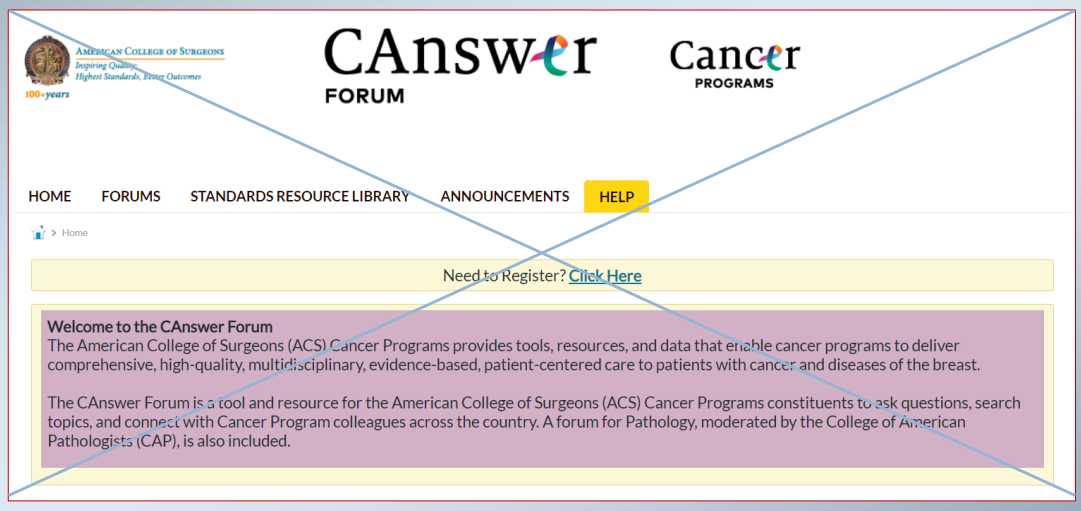
10

SEER is the Author and Standard Setter for the 2018 Solid Tumors Manual & Rules



11

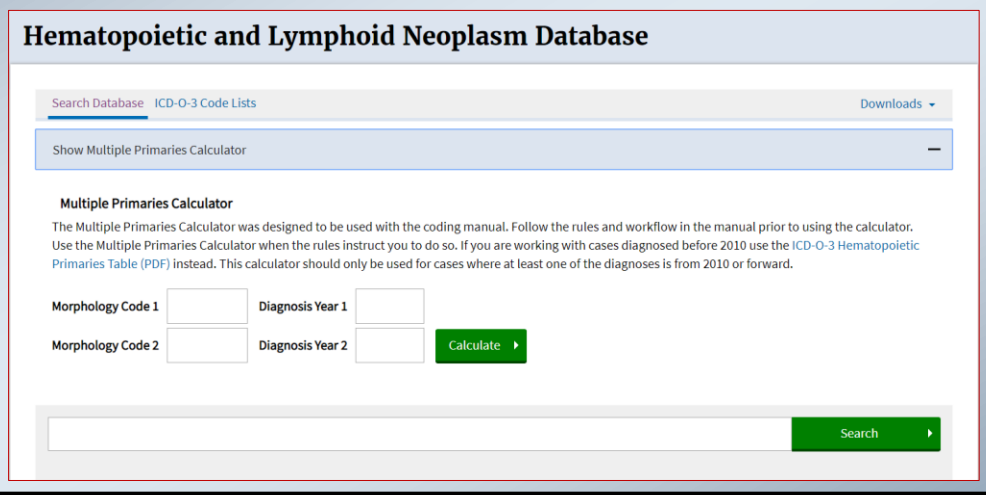
Do Not Use CAnswer Forum for Histology Coding or Multiple Primary Questions



12

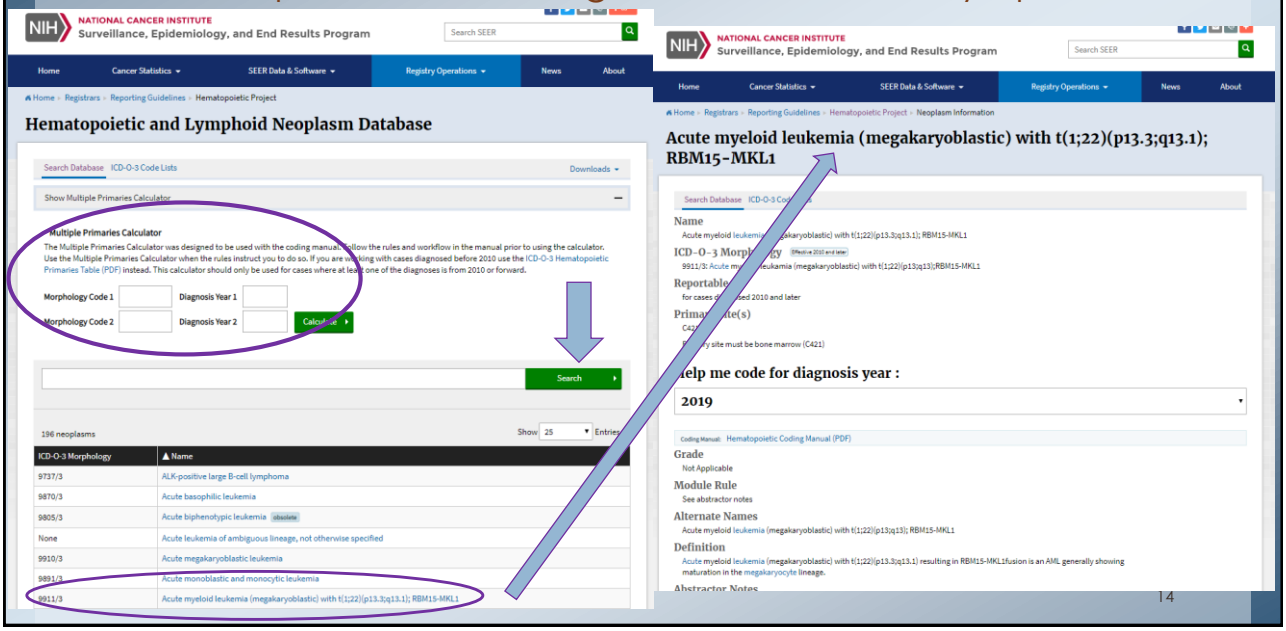
Hematopoietic Online Database
https://seer.cancer.gov/seertools/hemelymph/

Lymphoid and Myeloid Neoplasms - Single/Multiple Primary & Histology Coding – Always Use the Online Version of the Heme DB



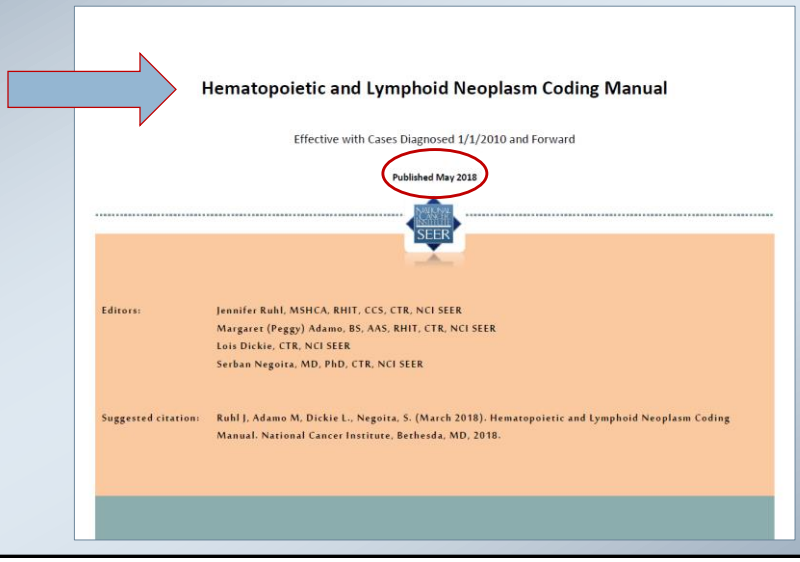
13

Hematopoietic Online Database
https://seer.cancer.gov/seertools/hemelymph/



14

Hematopoietic and Lymphoid Neoplasm Coding Manual



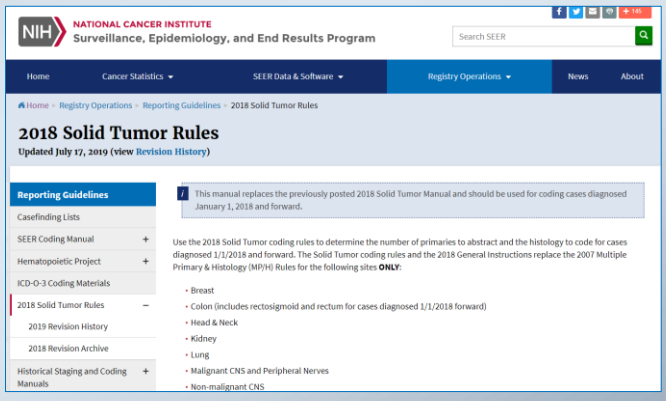
15

2018 Solid Tumor MP/H Rules

https://seer.cancer.gov/tools/solidtumor/

Solid Tumor Rules - Revision History

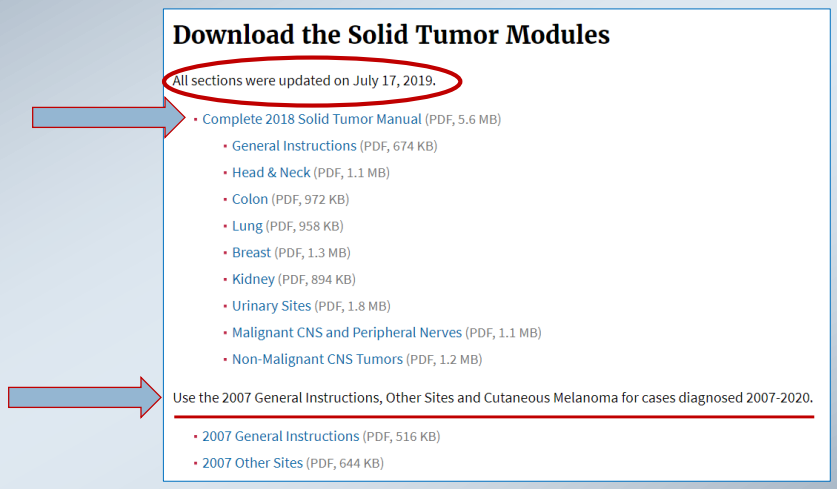
1. 6/25/2018
2. 6/28/2018
3. 7/3/2018
4. 7/19/2018
5. 7/31/2018
6. 8/2/2018
7. 8/8/2018
8. 8/13/2018
9. 8/16/2018
10. 8/20/2018
11. 8/23/2018
12. 9/11/2018
13. 10/12/2018
14. January 2019
15. July 2019



16

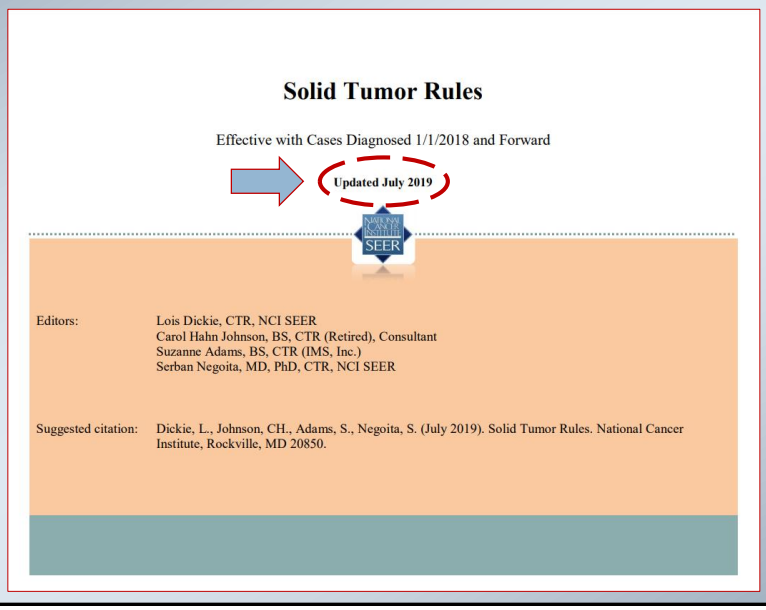
2018 Solid Tumor MP/H Rules

https://seer.cancer.gov/tools/solidtumor/



17

2018 Solid Tumor MP/H Rules



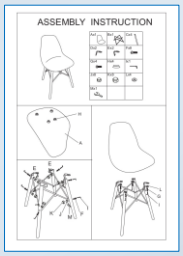
18

Quick Review of Content & Structure

- General Instructions
- Definitions & Clarifications
- Ambiguous Terminology
- Review of Tables That Many Could Not View at Annual Meeting
- How to Use the Solid Tumor Manual Tables
  - Primary Site Tables
  - Specific Histologies, NOS, and Subtypes/Variants Tables
  - Combination Histologies and Code Tables
- Solid Tumor Manual - Important Highlights
- Using ICD-O-3.2 with the Solid Tumor Rules

19

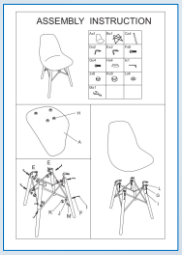
General Instructions



- TEXT ONLY RULES INCLUDE:
  - General Instructions PLUS
  - 10 Sets of Solid Tumor MP/H Rules
  - Each Module includes Multiple Sections (Notes/Site/MP/Histology)
- Code subtypes/variants when definitively described (no modifiers)
- Do Not Use Ambiguous Terminology to Code Histology (unless):
  - Ambiguous terminology is used to determine "case reportability"
  - Ambiguous terminology is not to be used to determine histology
  - Ambiguous terminology such as "with features of", etc. are no longer used to determine a subtype OR to determine which histology should be coded. **…..MOST OF THE TIME….**
  - Use the Histology (H) Rules to determine when to use or not use any ambiguous terminology when an ambiguous term is used to describe a histologic type – sometimes you use the ambiguous term to code a subtype or variant or mixed histology -- and sometimes you do not.

20

General Instructions



How to Use the Solid Tumor Rules

Note: The rules do not apply to hematopoietic primaries (lymphoma and leukemia) of any site. Use the Hematopoietic & Lymphoid Neoplasm Coding Manual and Database for histologies M9590-M9992.

1. The **purpose** of these rules is to determine **multiple primaries** and to code **histology ONLY**. The Solid Tumor Rules are **not used** to determine case reportability, casefinding, stage, or tumor grade. For instructions on coding grade, stage, SSDIs, and treatment, please refer to the appropriate manuals.
2. Staging systems are **not used** to determine the number of primaries or histology.
3. Use the following site-specific rules for tumors diagnosed 1/1/2018 and forward:
   - Malignant CNS and Peripheral Nerves
   - Non-Malignant CNS
   - Breast
   - Colon
   - Head and neck
   - Kidney
   - Lung
   - Urinary sites
4. Use the following site-specific rules for tumors diagnosed 1/1/2007 through 12/31/2020:
   - Cutaneous Melanoma (not updated for 2018)
   - Other Sites (not updated for 2018) for solid tumors which occur in primary sites not covered by the site-specific rules.
5. 2007 MPH Rules and 2018 Solid Tumor Rules are used based on **date of diagnosis**.
   - Tumors diagnosed 01/01/2007 through 12/31/2017: Use 2007 MPH Rules
   - Tumors diagnosed 01/01/2018 and later: Use 2018 Solid Tumor Rules (with exceptions in #4)
   - An original tumor diagnosed before 1/1/2018 and a subsequent tumor diagnosed 1/1/2018 or later **in the same primary site**: Use the 2018 Solid Tumor Rules
6. Use the Solid Tumor Rules in the following order:
   A. For multiple tumors, you must decide whether they are a single or multiple primaries:
      i. Use the Histology Rules to assign a "working" histology for each tumor.
      ii. Use Multiple Primary Rules to determine whether the tumors are a single primary or multiple primaries.
      iii. If a single primary, follow the priority order in #6B.
      iv. If multiple primaries, follow the priority order in #6B for **EACH** of the separate tumors/primaries.
   B. For a single tumor or multiple tumors determined to be a single primary:
      i. General Instructions
      ii. Equivalent Terms and Definitions
      iii. Multiple Primary Rules
      iv. Histology Rules
7. The Solid Tumor Rules are available in text format.
8. **Notes** and **examples** are included with some of the rules to highlight key points or to add clarity to the rules.
9. Rules are in **hierarchical** order within each module. Use the first rule that applies and

STOP

21

Ambiguous Terminology

Note: If the histology described by ambiguous terminology does not meet any of the criteria in bullets 1, 2, or 3, **DO NOT CODE** the histology.

Ambiguous Terminology

Apparently	Most likely
Appears	Presumed
Comparable with	Probable
Compatible with	Suspect(ed)
Consistent with	Suspicious (for)
Favor(s)	Typical (of)
Malignant appearing	

Ambiguous terminology from the SEER Manual and CoC Manual is used to determine reportability, not to determine histology.

22

Definitions

Definitions

***Note*: Use these terms and definitions for all reportable tumors except lymphoma and leukemia primaries (M9590-9992).**

Bilateral: Relating to the right **and** left sides of the body or of a body structure; bilaterality is **not** an indication of single or multiple primaries.

Clinical Diagnosis: A diagnosis that is not microscopically confirmed. It may be based on information from the clinician's expertise.

Contiguous tumor: A single tumor that involves, invades, or bridges adjacent or connecting sites or subsites.

De novo: For colon cancer, de novo (formerly called frank) carcinoma originates in the mucosa of the colon rather than in a polyp.

Focal: An adjective meaning limited to one specific area. A focal cancer is limited to one specific area or organ. The area may be microscopic **or** macroscopic.

Foci: Plural of focus.

Focus: A term used by pathologists to describe a
different from the surrounding tissue either by th

Recurrence: This term has two meanings:

- The reappearance of disease that was thought to be cured or inactive (in remission). Recurrent cancer starts from cancer cells that were not removed or destroyed by the original therapy.
- A new occurrence of cancer in the same primary site such as a previous adenocarcinoma of the right lung and a subsequent squamous cell carcinoma of the left lung called a "recurrence" of lung cancer (the patient had lung cancer before, now has another lung cancer). This type of recurrence arises from cells that have nothing to do with the earlier (first) cancer. A new or another occurrence, incidence, episode, or report of the same disease (cancer) in a general sense – a new occurrence of cancer.

Simultaneous: This term is used in the Solid Tumor Rules to describe malignant tumors diagnosed at the same time or during initial workup (prior to first course of therapy).

Single primary: One reportable case. The Multiple Primary Rules say "abstract a single primary" when multiple tumors are:

- Simultaneous and abstracted as a single primary **OR**
- Subsequent tumor(s) which are a recurrence rather than a multiple primary

Synchronous: See "Simultaneous".

23

How to Use the Tables

Using the Primary Site Tables - Breast

Terms and Descriptive Language	Site Term and Code
Areolar Nipple Paget disease **without** underlying tumor *Note:* Paget with underlying tumor is coded to the quadrant of breast in which the underlying tumor is located	Nipple **C500**
Above nipple Area extending 1 cm around areolar complex Behind the nipple Below the nipple Beneath the nipple Central portion of breast Cephalad to nipple Infra-areolar Lower central Next to areola NOS Next to nipple Retroareolar Subareolar Under the nipple Underneath the nipple	Central portion of breast **C501**
Superior inner Superior medial Upper inner quadrant (UIQ) Upper medial	Upper inner quadrant of breast **C502**

24

How to Use the Tables

Using the Primary Site Tables - Lung

Terminology	Laterality	Site Term and Code
Bronchus intermedius **Carina** **Hilus of lung** **Perihilar**	Bilateral	Mainstem bronchus **C340** *Note*: **Bronchus intermedius** is the portion of the **right mainstem bronchus** between the upper lobar bronchus and the origin of the middle and lower lobar bronchi
Lingula of lung	Left	Upper lobe **C341**
Apex **Apex of lung** **Lung apex** **Pancoast tumor** **Superior lobar bronchus** **Upper lobe bronchi**	Bilateral	Upper lobe **C341**
Middle lobe **Middle lobe bronchi**	Right	Middle lobe **C342**
Base of lung **Lower lobar bronchus** **Lower lobe** **Lower lobe bronchi** **Lower lobe segmental bronchi**	Bilateral	Lower lobe **C343**
Overlapping lesion of lung	Bilateral	Overlapping lesion of lung **C348** *Note*: **One** lesion/tumor which **overlaps two or more** lobes

25

How to Use the Tables

Using the Primary Site Tables - Head & Neck

Table Index

Table Number	Table Title
Table 1	Tumors of Nasal Cavity **C300** Paranasal Sinuses **C310-C313, C318, C319**
Table 2	Tumors of Nasopharynx **C110, C111 (posterior wall of nasopharynx only), C112, C113, C118, C119**
Table 3	Pyriform Sinus **C129** Tumors of Hypopharynx **C130-C132, C138, C139** Larynx **C320-C323, C328, C329** Trachea **C339** and Parapharyngeal Space **C139**
Table 4	Tumors of Oral Cavity and mobile tongue **C020-C024, C028, C029, C030, C031, C039, C040, C041, C048, C049, C050-C052, C058, C059, C060-C062, C068, C069**
Table 5	Tumors of Oropharynx **C100-C104, C108 C109** Base of Tongue **C019** Tonsils **C090, C091, C098, C099** Adenoids/pharyngeal tonsil only **C111**
Table 6	Tumors of Salivary Glands **C079, C080, C081, C088, C089**
Table 7	Tumors of Odontogenic and Maxillofacial Bone (Mandible **C410**, Maxilla **C411**)
Table 8	Tumors of Ear **C301** and External auditory canal **C442**
Table 9	Paraganglioma of Carotid body, Larynx, Middle Ear, Vagal nerve **C479**
Table 10	Paired Sites

26

How to Use the Tables

Using the Primary Site Tables - Head & Neck

Table 4: Tumors of Oral Cavity and Mobile Tongue

Table 4 lists the more common histologies for the following head and neck subsites:

The **oral cavity category** includes the following:

Mobile Tongue:
- **C020** Dorsal surface of tongue NOS
- **C021** Border of tongue
- **C022** Ventral surface of tongue NOS
- **C023** Anterior 2/3 of tongue NOS
- **C024** Lingual tonsil
- **C028** Overlapping lesion of tongue
- **C029** Tongue NOS

Gum:
- **C030** Upper gum, maxillary gingiva, upper alveolar mucosa, upper alveolar ridge mucosa, upper alveolus, upper gingiva
- **C031** Lower gum mandibular gingiva, lower alveolar mucosa, lower alveolar ridge mucosa, lower alveolus, lower gingiva
- **C039** Gum NOS, gingiva NOS, alveolar mucosa NOS, alveolar ridge mucosa NOS, alveolar NOS periodontal tissue, tooth socket

Floor of Mouth:
- **C040** Anterior floor of mouth
- **C041** Lateral floor of mouth
- **C048** Overlapping lesion floor of mouth
- **C049** Floor of mouth NOS

Palate:
- **C050** Hard palate
- **C051** Soft palate
- **C052** Uvula
- **C058** Overlapping lesion of palate, junction of hard and soft palate
- **C059** Palate NOS, roof of mouth

Other and unspecified parts of Mouth:
- **C060** Cheek mucosa, buccal mucosa, internal cheek

27

How to Use the Tables

Using the Primary Site Tables - Head & Neck

- **C061** Vestibule of mouth, alveolar sulcus, buccal sulcus, labial sulcus
- **C062** Retromolar area, retromolar triangle, retromolar trigone
- **C068** Overlapping lesion of other and unspecified parts of mouth
- **C069** Mouth NOS, buccal cavity, oral cavity, oral mucosa, minor salivary gland NOS

Note: There is no ICD-O site code for minor salivary glands. Many minor salivary glands are located in the lips, inner cheek (buccal mucosa) and there are extensive minor salivary glands in the linings of the mouth and throat. Code to the site in which the salivary gland is located.

For hematopoietic neoplasms such as lymphomas, myelomas, etc., see the Hematopoietic Database.
Note: Hematopoietic tumors are common to the oral cavity.

Column 1 contains specific and NOS histology terms.
- **Specific** histology terms **do not** have **subtypes/variants**
- **NOS** histology terms **do** have **subtypes/variants.**

Column 2 contains **synonyms** for the specific or NOS term. Synonyms have the **same** histology **code** as the specific or NOS term.
Column 3 contains **subtypes/variants** of the **NOS** histology. Subtypes/variants **do not** have the **same** histology code as the NOS term.

Specific or NOS Term and Code	Synonyms	Subtypes/Variants
Kaposi sarcoma 9140	Kaposi disease	
Mucoepidermoid carcinoma 8430	Mucoepidermoid tumor	
Myofibroblastic sarcoma 8825	Myofibrosarcoma	
Oral mucosal melanoma 8720		
Squamous cell carcinoma 8070	Squamous carcinoma Squamous cell carcinoma NOS	Acantholytic squamous cell carcinoma **8075**

28

How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables Colon/Rectum/Rectosigmoid

Column 1 contains specific and NOS histology terms.

- **Specific** histology terms **do not** have **subtypes/variants**
- **NOS** histology terms **do** have **subtypes/variants**

Column 2 contains **synonyms** for the specific or NOS term. Synonyms have the **same** histology **code** as the specific or NOS term.
Column 3 contains **subtypes/variants** of the **NOS** histology. Subtypes/variants **do not** have the **same** histology code as the NOS term.

Specific and NOS Term and Code	Synonyms for Specific or NOS Term	Subtypes/Variants
Adenocarcinoma 8140 *Note 1*: See Histology Rules for instructions on coding adenocarcinoma **subtypes/variants** arising in a polyp *Note 2*: When the term **intestinal adenocarcinoma** is used to describe a colon primary, it simply means the **appearance** is	Adenocarcinoma, NOS Adenocarcinoma/carcinoma in a polyp NOS (now coded to 8140) Adenocarcinoma/carcinoma in adenomatous polyp (now coded to 8140) Adenocarcinoma/carcinoma in polypoid adenoma (now coded to 8140) Adenocarcinoma/carcinoma in serrated adenoma (now coded to 8140) Adenocarcinoma and mucinous carcinoma, mucinous documented as less than 50% of tumor OR percentage of mucinous	Adenoid cystic carcinoma **8200** Cribriform comedo-type carcinoma/ adenocarcinoma, cribriform comedo-type **8201*** Diffuse adenocarcinoma/carcinoma **8145** Linitis plastica **8142/3** Medullary adenocarcinoma/carcinoma **8510** Micropapillary carcinoma **8265*** Mucinous/colloid adenocarcinoma/carcinoma **8480** Mucoepidermoid carcinoma **8430** Serrated adenocarcinoma **8213***

29

How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables Colon/Rectum/Rectosigmoid

Specific and NOS Term and Code	Synonyms for Specific or NOS Term	Subtypes/Variants
similar to adenocarcinoma seen in the stomach and is coded to adenocarcinoma NOS **8140**	unknown/not documented Adenocarcinoma and signet ring cell carcinoma, percentage of signet ring cell carcinoma documented as less than 50% of tumor OR percentage of signet ring cell carcinoma unknown/not documented Adenocarcinoma/carcinoma in tubular polyp (now coded to 8140) Adenocarcinoma/carcinoma in tubulovillous polyp (now coded to 8140) Adenocarcinoma/carcinoma in villous adenoma (now coded to 8140) Adenocarcinoma in any type of polyp Adenocarcinoma, intestinal type Adenocarcinoma and cribriform carcinoma percentage of cribriform documented as less than 50% of tumor OR percentage of cribriform carcinoma unknown/not documented Adenocarcinoma with mucinous and signet ring cell features Comedocarcinoma Intestinal adenocarcinoma	Signet ring cell/poorly cohesive adenocarcinoma/carcinoma **8490** Superficial spreading adenocarcinoma **8143** Tubulopapillary carcinoma **8263** Undifferentiated adenocarcinoma/carcinoma **8020**
Adenosquamous carcinoma 8560 *Note:* This code **cannot be used** for **adenocarcinoma subtypes/variants** with squamous cell/epidermoid carcinoma	Mixed adenocarcinoma NOS and epidermoid carcinoma Mixed adenocarcinoma NOS and squamous cell carcinoma	

30

How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables Lung

Specific or NOS Histology Term and Code	Synonym of Specific or NOS	Subtype/variant of NOS and Code
Adenocarcinoma 8140 **Note 1:** Mucinous adenocarcinoma for lung only is coded as follows: • **8253/3*** when o Behavior unknown/not documented (use staging form to determine behavior when available) o Invasive • **8257/3*** when o Microinvasive o Minimally invasive • **8253/2*** when o Preinvasive o In situ **Note 2:** Non-mucinous adenocarcinoma for lung only is coded as follows: • **8256/3*** when o Microinvasive o Minimally invasive • **8250/2*** when o Preinvasive o In situ	Adenocarcinoma NOS Adenocarcinoma in situ **8140/2** Adenocarcinoma invasive **8140/3** Adenocarcinoma, non-mucinous, NOS	Acinar adenocarcinoma/adenocarcinoma, acinar predominant **(for lung only) 8551*** Adenoid cystic/adenocystic carcinoma **8200** Colloid adenocarcinoma **8480** Fetal adenocarcinoma **8333** Lepidic adenocarcinoma/adenocarcinoma, lepidic predominant **8250/3*** Mucinous carcinoma/adenocarcinoma **(for lung only)** in situ **8253/2*** invasive **8253/3*** minimally invasive **8257/3*** microinvasive **8257/3*** preinvasive **8253/2*** Micropapillary adenocarcinoma/adenocarcinoma, micropapillary predominant **8265** Mixed invasive mucinous and non-mucinous adenocarcinoma **8254*** Non-mucinous adenocarcinoma **(for lung only)** in situ **8250/2*** microinvasive **8256/3*** minimally invasive **8256/3*** preinvasive **8250/2*** Papillary adenocarcinoma/adenocarcinoma, papillary predominant **8260** Pulmonary intestinal-type adenocarcinoma/enteric adenocarcinoma **8144** Solid adenocarcinoma/adenocarcinoma, solid predominant **8230**

31

How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables Lung

Specific or NOS Histology Term and Code	Synonym of Specific or NOS	Subtype/variant of NOS and Code
Large cell carcinoma 8012 *Note 1:* A diagnosis of large cell carcinoma is usually followed by further diagnostic testing to identify the subtype/variant. *Note 2:* The diagnosis of large cell carcinoma usually happens when there is a small amount of tissue (FNA), cytology, or when the tumor is highly differentiated. Large cell carcinoma lacks the features of small cell carcinoma, adenocarcinoma, or squamous carcinoma. *Note 3:* Large cell carcinoma with **neuroendocrine (NE) differentiation** lacks NE morphology and is coded as **large cell** carcinoma, **not large cell neuroendocrine** carcinoma.	Large cell anaplastic carcinoma Large cell carcinoma NOS Large cell carcinoma with no additional stains (subtype/variant – no ICD-O code) Large cell carcinoma with null immunohistochemical features (subtype/variant – no ICD-O code) Large cell carcinoma with unclear immunohistochemical features (subtype/variant – no ICD-O code) Large cell undifferentiated carcinoma	
Lymphoepithelioma-like carcinoma 8082		
Melanoma 8720		
Mucoepidermoid carcinoma 8430 *Note:* Mucoepidermoid tumor **is** listed as a synonym of mucoepidermoid carcinoma in WHO	Mucoepidermoid tumor	
Myoepithelial carcinoma 8982		

32

How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables
Lung

Specific or NOS Histology Term and Code	Synonym of Specific or NOS	Subtype/variant of NOS and Code
Sarcoma NOS 8800/3		Biphasic synovial sarcoma **9043/3** Epithelioid cell synovial sarcoma **9042/3** Pulmonary artery intimal sarcoma/low-grade malignant myxoid endobronchial tumor **9173/3** Pulmonary myxoid sarcoma with EWSR1 - CREB1 translocation **8842/3** Spindle cell synovial sarcoma **9041/3** Synovial sarcoma **9040/3**
Small cell carcinoma 8041/3 *Note 1:* This row applies to neuroendocrine tumors (NET). *Note 2:* Large cell carcinoma with neuroendocrine differentiation lacks NE morphology and is coded as large cell carcinoma, not large cell neuroendocrine carcinoma.	Reserve cell carcinoma Round cell carcinoma SCLC Small cell carcinoma NOS Small cell neuroendocrine carcinoma	Atypical carcinoid **8249/3** Combined small cell carcinoma **8045/3** Large cell neuroendocrine carcinoma/combined large cell neuroendocrine carcinoma **8013/3** Typical carcinoid **8240/3** Neuroendocrine carcinoma, NOS Well-differentiated neuroendocrine carcinoma
Spindle cell carcinoma 8032		
Squamous cell carcinoma 8070	Epidermoid carcinoma Epidermoid carcinoma NOS Squamous carcinoma Squamous cell carcinoma NOS Squamous cell epithelioma Squamous cell carcinoma in situ **8070/2**	Basaloid carcinoma/basaloid squamous cell carcinoma **8083** Keratinizing squamous cell carcinoma **8071** Non-keratinizing carcinoma **8072**

33

How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables
Breast

Specific and NOS/NST Terms and Code	Synonyms	Subtypes/Variants
Acinic cell carcinoma 8550	Acinar adenocarcinoma Acinar carcinoma	
Adenoid cystic carcinoma (ACC) 8200	ACC Adenocystic basal cell carcinoma Carcinoma adenoides cysticum Cylindromatous carcinoma	
Adenomyoepithelioma with carcinoma 8983	AME Malignant AME	
Apocrine carcinoma 8401 *Note:* This is a diagnosis that is **EXACTLY** apocrine **carcinoma**, **not** a carcinoma **NST** with apocrine **features**, **differentiation**, or **type.**		
Carcinoma NST 8500 *Note:* Cribriform carcinoma may consist of up to 50% tubular formations. The term cribriform/tubular carcinoma is coded as cribriform carcinoma.	Carcinoma of no special type (ductal/NST) Carcinoma/carcinoma NST with choriocarcinomatous features Carcinoma/carcinoma NST with cribriform features Carcinoma/carcinoma NST with melanotic features Carcinoma/carcinoma NST with signet ring cell differentiation DCIS **8500/2** Duct/ductal carcinoma Duct/ductal carcinoma in situ **8500/2** Duct/ductal carcinoma NOS	Carcinoma with osteoclastic-like stromal giant cells **8035** Cribriform carcinoma **8201/3** Pleomorphic carcinoma **8022/3**

34

How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables

Breast

Specific and NOS/NST Terms and Code	Synonyms	Subtypes/Variants
	Duct/ductal carcinoma NST (no special type) Duct/ductal carcinoma with apocrine features Duct/ductal carcinoma with apocrine metaplasia Duct/ductal carcinoma with lobular features Duct/ductal carcinoma with micropapillary features Duct/ductal carcinoma with mucin production Duct/ductal carcinoma with squamous metaplasia Infiltrating ductal carcinoma **8500/3** Invasive carcinoma with micropapillary features **8500/3** Invasive carcinoma not otherwise specified (ductal/NOS) **8500/3** Invasive carcinoma NST with metaplastic features **8500/3** Invasive carcinoma NST/duct with medullary features **8500/3** Invasive carcinoma, with signet-ring cell features **8500/3** Invasive carcinoma of no special type (NST) **8500/3** Invasive carcinoma with clear cell (glycogen rich) features **8500/3**	

35

How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables

Breast

Specific and NOS/NST Terms and Code	Synonyms	Subtypes/Variants
	Invasive carcinoma, NST **8500/3** Invasive carcinoma, type cannot be determined **8500/3** Invasive mammary carcinoma **8500/3** Invasive mammary carcinoma associated with encysted papillary carcinoma **8500/3** Invasive mammary carcinoma NST with lobular features **8500/3** Invasive mammary carcinoma NST with medullary features **8500/3** Invasive mammary carcinoma NST with mucinous features **8500/3** Invasive mammary carcinoma NST with tubulo-lobular variant **8500/3** Invasive mammary carcinoma with apocrine features **8500/3** Invasive mammary carcinoma with cribriform features **8500/3** Invasive mammary carcinoma with tubular features **8500/3** Mammary carcinoma in situ **8500/2** Mammary carcinoma/cancer Non-invasive mammary carcinoma **8500/2**	
Glycogen-rich clear cell carcinoma 8315	Glycogen-rich carcinoma	Clear cell carcinoma **8310**
Inflammatory carcinoma 8530		
Lipid-rich carcinoma 8314	Lipid-secreting carcinoma	

36

How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables
Breast

Specific and NOS/NST Terms and Code	Synonyms	Subtypes/Variants
Lobular carcinoma 8520	Alveolar lobular carcinoma Classic lobular carcinoma Intraductal papilloma with lobular carcinoma in situ **8520/2** Invasive lobular carcinoma, alveolar type/variant **8520/3** Invasive lobular carcinoma, solid type **8520/3** Lobular carcinoma in situ **8520/2** Lobular carcinoma with cribriform features Mixed lobular carcinoma (lobular carcinoma NOS and one or more variants of lobular carcinoma) Invasive pleomorphic lobular carcinoma **8520/3** Solid lobular carcinoma Tubulolobular carcinoma	Pleomorphic lobular carcinoma in situ **8519/2*** *Note:* 8519/2 is a new code for in situ /2 tumors only.
Medullary carcinoma 8510	MC	Atypical medullary carcinoma (AMC) **8513**

Table continues on next page

37

How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables
Breast

Specific and NOS/NST Terms and Code	Synonyms	Subtypes/Variants
Paget disease of the nipple with no underlying tumor 8540/3		
Papillary carcinoma 8503	Intraductal papillary carcinoma **8503/2*** Intraductal papillary carcinoma with DCIS **8503/2*** Invasive papillary carcinoma **8503/3** Papillary carcinoma non-invasive **8503/2*** Papillary ductal carcinoma in situ **8503/2***	Encapsulated papillary carcinoma **8504** non-infiltrating/intracystic **8504/2** with invasion **8504/3** Micropapillary carcinoma **8507*** Solid papillary carcinoma in situ **8509/2*** with invasion **8509/3***
Periductal stromal tumor, low grade 9020/3	Phyllodes tumor, malignant	
Polymorphous carcinoma 8525		
Sarcoma NOS 8800/3 *Note*: Rhabdomyosarcoma **8900/3** is also a NOS with the following subtypes/variants: Alveolar type rhabdomyosarcoma **8920/3** Embryonal type rhabdomyosarcoma **8910/3** Pleomorphic rhabdomyosarcoma **8901/3**		Angiosarcoma **9120/3** Hemangiosarcoma Lymphangiosarcoma **9170/3** Malignant hemangioendothelioma Liposarcoma **8850/3** Leiomyosarcoma **8890/3** Osteosarcoma **9180/3** Rhabdomyosarcoma **8900/3** Alveolar type **8920/3** Embryonal type **8910/3** Pleomorphic **8901/3**

38

How to Use the Tables

Using the Combination Histologies and Code Tables
Lung

Required Terms	Combination Histologies and Code
Adenocarcinoma NOS **AND** Squamous cell carcinoma NOS *Note:* Diagnosis **must be** adenocarcinoma NOS and squamous cell carcinoma NOS, **NOT** any of the **subtypes/variants** of adenocarcinoma or squamous cell carcinoma	Adenosquamous carcinoma **8560**
Giant cell carcinoma **AND** Spindle cell carcinoma *Note:* Sarcomatoid carcinoma is not in the histology table because sarcomatoid tumors primarily originate in the mediastinum. The combination code is added for the rare occasion when a tumor occurs within the lung.	Sarcomatoid carcinoma **8033** *Note:* Both giant cell carcinoma and spindle cell carcinoma are components of sarcomatoid carcinoma. The most accurate code for a combination of giant cell and spindle cell carcinoma is sarcomatoid carcinoma
Epithelial carcinoma **AND** Myoepithelial carcinoma	Epithelial-myoepithelial carcinoma **8562**
Mucinous carcinoma, invasive **AND** Non-mucinous carcinoma, invasive	Mixed invasive mucinous and non-mucinous carcinoma **8254/3***

39

How to Use the Tables

Using the Combination Histologies and Code Tables
Lung

Required Terms	Combination Histologies and Code
Small cell carcinoma/neuroendocrine tumor (NET) *Note:* **Includes subtypes/variants** of small cell/neuroendocrine tumor. See Table 3 for subtypes/variants. **AND** **At least one** of the following: • Adenocarcinoma and any subtype/variant of adenocarcinoma • Adenosquamous carcinoma • Large cell carcinoma and any subtype/variant of large cell carcinoma • Squamous cell carcinoma and any subtype/variant of squamous cell carcinoma • Non-small cell carcinoma	Combined small cell carcinoma **8045**
Squamous cell carcinoma (epidermoid carcinoma) **AND** Large cell non-keratinizing squamous cell carcinoma *Note:* Squamous cell carcinoma and epidermoid carcinoma are synonyms	Squamous cell carcinoma, large cell, nonkeratinizing **8072**
Squamous cell carcinoma (epidermoid carcinoma) **AND** Small cell nonkeratinizing squamous cell carcinoma *Note:* Squamous cell carcinoma and epidermoid carcinoma are synonyms	Squamous cell carcinoma, small cell, nonkeratinizing **8073**

40

How to Use the Tables

Using the Combination Histologies and Code Tables
Lung

Required Terms	Combination Histologies and Code
Diagnosis must be a single tumor which meets one of the following two criteria: 1. At least two of the subtypes/variants of adenocarcinoma **AND** percentages of each type are unknown/not stated • Acinar adenocarcinoma • Clear cell adenocarcinoma • Lepidic adenocarcinoma *Note*: Lepidic adenocarcinoma may or may not have mucinous components. • Micropapillary adenocarcinoma • Papillary adenocarcinoma • Solid adenocarcinoma • Well-differentiated fetal adenocarcinoma *Note:* This includes a diagnosis of adenocarcinoma **AND** at least two subtypes/variants of adenocarcinoma. 2. A combination of histologies **not listed on previous rows** of this table.	Adenocarcinoma with mixed subtypes **8255/3** *Note 1:* 8255 is a "last resort" code. *Note 2:* See the **Histology Rules** to determine when it is appropriate to use this code for combination histologies other than adenocarcinoma subtypes/variants. *Note 3:* 8255 does not apply to squamous cell carcinoma, NOS and/or subtype/variants of SCC.

41

How to Use the Tables

Using the Combination Histologies and Code Tables
Breast

Required Histology Terms	Histology Combination Term and Code
DCIS/duct carcinoma/carcinoma NST **8500** **AND** Lobular carcinoma **8520** *Note 1:* Both histologies, duct and lobular, **must have** the **same behavior** code. *Note 2:* **8522** is used when: • Duct **AND** lobular carcinoma are present in a **single tumor OR** • Duct is present in at least one tumor and lobular is present in at least one tumor in the same breast **OR** • One tumor is mixed duct and lobular; the other tumor in the same breast is either duct or lobular **OR** • All tumors in the same breast are mixed duct and lobular *Example*: One tumor with invasive duct CA in LOQ RT breast; second tumor with invasive lobular in UOQ RT breast *Note 3:* **Do not** use 8522 when the diagnosis is carcinoma NST/duct carcinoma with lobular **differentiation**. See Histology Rules for instructions on **coding differentiation.**	**Invasive** carcinoma NST/duct carcinoma **and invasive** lobular carcinoma **8522/3** *Note 1:* CAP uses the term Invasive carcinoma with ductal and lobular features ("mixed type carcinoma") *Note 2:* Carcinoma NST includes all subtypes/variants of carcinoma NST. DCIS **and in situ** lobular carcinoma **8522/2** *Note:* The lobular carcinoma includes pleomorphic lobular carcinoma in situ **8519/2.**
DCIS/duct carcinoma/carcinoma NST **OR** any ONE subtype/variant of carcinoma NST **AND** **Any** histology in **Table 3 with exception** of • Lobular carcinoma **8520** and pleomorphic lobular carcinoma in situ **8519/2*** • Paget disease **8540** *Note 1:* Both histologies **must have** the **same behavior** code. *Note 2:* See Table 3 for carcinoma NST/duct carcinoma subtypes/variants. *Note 3:* **Do not** use combination code for duct with lobular **differentiation.** This is a synonym for carcinoma NST.	Invasive carcinoma NST/duct mixed with other types of invasive carcinoma **8523/3** DCIS mixed with other in situ carcinoma **8500/2** *Note:* Prior to 2018, DCIS and other in situ was coded **8523/2.**

42

How to Use the Tables

Using the Combination Histologies and Code Tables
Breast

Required Histology Terms	Histology Combination Term and Code
Lobular carcinoma **AND** **Any** histology in **Table 3 with exception** of • Duct carcinoma/carcinoma NST/DCIS (and subtypes/variants) **8500** • Paget disease, in situ and invasive *Note 1:* See Table 3 for carcinoma NST/duct carcinoma subtypes/variants. *Note 2:* This code does not include lobular and Paget disease. See Multiple Primary Rules. Lobular carcinoma and Paget are separate primaries.	Infiltrating lobular mixed with other types of carcinoma **8524/3** In situ lobular mixed with other types of in situ carcinoma **8524/2**
Paget disease **AND** **Underlying** DCIS *Note:* Paget disease is classified as malignant /3 in the ICD-O. Paget disease is coded as in situ /2 **ONLY** when the pathology states the Paget disease is in situ.	Paget disease (invasive or behavior not specified) and DCIS/intraductal carcinoma **8543/3** **Paget disease** (specified as in situ) and DCIS/intraductal carcinoma **8543/2**
Paget disease **AND** **Underlying** infiltrating **duct** carcinoma/carcinoma NST and **all subtypes/variants** of infiltrating duct/carcinoma NST (must be a /3) *Note:* See Table 3 for subtypes/variants of carcinoma NST/duct carcinoma.	Paget disease and infiltrating duct carcinoma **8541/3**
Any two invasive carcinoma NST subtypes/variants (percentage not stated) abstracted as a single primary *Note 1:* The diagnosis may be two subtypes/variants and the pathologist may mention the presence of duct/carcinoma NST. Ignore the mention of carcinoma NST. *Note 2:* See Table 3 for subtypes/variants of carcinoma NST/duct carcinoma.	Adenocarcinoma with mixed subtypes **8255/3**

43

A Few Important Highlights

Breast

NST (No Special Type), mammary carcinoma NST, and carcinoma NST are the new terms for duct or ductal carcinoma. Previously, it was thought that carcinoma originated in the ducts or lobules of the breast, hence the names duct carcinoma and lobular carcinoma. Current thinking is that carcinoma originates in the "terminal duct lobular unit" therefore the preferred term is NST or carcinoma NST.

Mammary carcinoma is a synonym for carcinoma no special type (NST)/duct carcinoma not otherwise specified (NOS) **8500.** It will **no longer** be coded as carcinoma NOS **8010.**

DCIS/Carcinoma NST in situ has a major classification change.

A. Subtypes/variant, architecture, pattern, and features **ARE NOT CODED**. The majority of in situ tumors will be coded to DCIS **8500/2.**
B. It is very important to code the grade of all DCIS.
   i. Code grade as designated in current AJCC Manual, SEER Coding Manual, and COC Coding Manual.
   ii. The current breast **WHO** edition emphasizes coding the **grade** of tumor rather than the **subtype/variant**.
   iii. The WHO editions are used internationally by pathologists to keep their nomenclature and histology identification current.
   iv. Over time, **subtypes/variants** will be diagnosed **less frequently.**

The invasive subtype/variant is coded **ONLY** when it comprises **greater than 90%** of the tumor. This change has been implemented in both the WHO and in the CAP protocols.

New codes/terms are identified by asterisks (*) in the histology table in the Terms and Definitions.

Excerpt from the CAP Invasive Breast Protocol (page 17): "A modified list is presented in the protocol based on the most frequent types of invasive carcinomas and terminology that is in widespread usage. The modified list is intended to capture the majority of tumors and reduce the classification of tumors being reported as 'other.' The WHO classification is presented for completeness".

44

A Few Important Highlights

Colon/Rectum/Rectosigmoid

2007 Rules instruct "Code the histology from the most representative specimen." For all sites except breast and CNS, 2018 Rules instruct "Code the most specific histology from biopsy or resection. When there is a discrepancy between the biopsy and resection (two distinctly different histologies/different rows), code the histology from the most representative specimen (the greater amount of tumor)."

Rectum and **Rectosigmoid** are now included with the Colon Rules. In the 2007 MPH Rules, they were included with Other Sites.

There are new multiple primary rules which address **anastomotic recurrence.**

Neuroendocrine tumors (formerly carcinoid) arising in the appendix are reportable for cases diagnosed 1/1/2015 and forward.

Rule clarification: Pseudomyxoma peritonei (accumulation of mucin-secreting tumor cells in the abdominal or pelvic cavity) now has a **two-tiered system** (WHO 2010) that classifies pseudomyxoma peritonei as either **high-grade** or **low-grade** (see below). Pseudomyxoma peritonei is usually associated with **mucinous** tumors of the appendix and is rarely associated with ovarian mucinous tumors.

- **High**-grade pseudomyxoma peritonei is **malignant** /3
- **Low**-grade pseudomyxoma peritonei is **not malignant** /1
- See **Histology Rules** for **coding instructions**

There are **dysplasias** which have been assigned an **in situ behavior** code /2 in **WHO** and in **the ICD-O Update**. Despite becoming a /2, they are **not reportable in the US**. They are reportable in Canada.

- Dysplasia **was not** collected in the past. If dysplasia is added to the database with the same code as in situ tumors, there will be a **huge upsurge** in the **incidence** of in situ neoplasms. The various agencies are looking for solutions to this issue.
- There would be no way to **separate** the dysplasias from the in-situ neoplasms in the database, which would cause problems with surveillance (long-term studies) since the prognosis and probabilities of disease progression are different between an in-situ tumor and a dysplasia
- **Pathologists frequently use the term "severe dysplasia" or "high grade dysplasia" in place of carcinoma in situ. Code CIS only if the pathologist expressly states "CIS"**

Polyps are now **disregarded** when coding histology. For example, adenocarcinoma in an adenomatous polyp is coded as adenocarcinoma 8140. For the purposes of determining multiple primaries, tumors coded as adenocarcinoma in a polyp for pre-2018 cases should be treated as adenocarcinoma 8140.

45

A Few Important Highlights

Head and Neck

2007 Rules instruct "Code the histology from the most representative specimen." For all sites except breast and CNS, 2018 Rules instruct "Code the most specific histology from biopsy or resection. When there is a discrepancy between the biopsy and resection (two distinctly different histologies/different rows), code the histology from the most representative specimen (the greater amount of tumor)."

Two bone sites, mandible C410 and maxilla C411, have been added to the Head and Neck Rules.

External ear C442 has been added to the Head and Neck Rules. Basal cell carcinoma, squamous cell carcinoma, and all non-reportable neoplasms are excluded.

Autonomic nervous system C479 has been added as a primary site for those paragangliomas reported as malignant.

Carotid body paraganglioma 8690 *Note 1:* This neoplasm is only reportable when documented as malignant/invasive /3 behavior. *Note 2:* Cases diagnosed as malignant in 2018 should be reported as 8690/3. The proposed new code, 8692/3, cannot be used because it has not been implemented.	Carotid body tumor Chemodectoma, carotid Non-chromaffin paraganglioma, carotid
Laryngeal paraganglioma 8690 *Note 1:* This neoplasm is only reportable when documented as malignant/invasive /3 behavior. *Note 2:* Cases diagnosed as malignant in 2018 should be reported as 8690/3. The proposed new code, 8693/3, cannot be used because it has not been implemented. *Note 3:* Vagal paraganglioma has the same proposed histology code as laryngeal paraganglioma. Laryngeal and vagal are in separate rows to emphasize the primary site.	Chemodectoma, laryngeal Non-chromaffin paraganglioma, laryngeal
Middle ear paraganglioma 8690 *Note 1:* This neoplasm is only reportable when documented as malignant/invasive /3 behavior. *Note 2:* Cases diagnosed as malignant in 2018 should be reported as 8690/3.	Glomus jugulare tumor of middle ear Glomus tympanicum Jugulotympanic chemodectoma
Vagal paraganglioma 8690 *Note 1:* This neoplasm is only reportable when documented as malignant/invasive /3 behavior. *Note 2:* Cases diagnosed as malignant in 2018 should be reported as 8690/3. The proposed new code, 8693/3, cannot be used because it has not been implemented. *Note 3:* Vagal paraganglioma has the same proposed histology code as laryngeal paraganglioma. Laryngeal and vagal are in separate rows to emphasize the primary site.	Glomus jugulare tumor of vagal trunk Chemodectoma of vagal trunk Non-chromaffin paraganglioma of vagal trunk

46

A Few Important Highlights

Lung

Changes are **implemented slowly** over time, so it is not unusual for a pathology report to use an obsolete term. **Obsolete** terms and codes **can be used** when they are the **only information** available.
WHO 4th Ed Tumors of Lung 2015 has a new classification of adenocarcinoma which is a significant change from the 2004 WHO classification. One of the major changes is discontinuing usage of the term **bronchioloalveolar carcinoma (BAC)** beginning with cases diagnosed 1/1/2018 and forward. The preferred term for BAC is now mucinous adenocarcinoma **8253**.

The following new adenocarcinoma terms and codes have been added. The new terms and codes are **for lung only**. See notes in Table 3.

A. Mucinous carcinoma/adenocarcinoma
- **8253/3** when
  - Behavior unknown/not documented (use staging form to determine behavior when available)
  - Invasive
- **8257/3** when
  - Microinvasive
  - Minimally invasive
- **8253/2** when
  - Preinvasive
  - In situ

Note: Previously, only **invasive** /3 codes were available for mucinous adenocarcinoma of the lung. It has been recognized that not all lung cancers are invasive /3 so new codes were implemented.

B. Non-mucinous carcinoma/adenocarcinoma
- **8256/3** when
  - Microinvasive
  - Minimally invasive
- **8250/2** when
  - Preinvasive

C. Adenocarcinomas (CAP Terminology)
Adenocarcinoma, acinar predominant 8551
- Adenocarcinoma, lepidic predominant 8250
- Adenocarcinoma, micropapillary predominant 8265
- Adenocarcinoma, papillary predominant 8260
- Adenocarcinoma, solid predominant 8230

47

A Few Important Highlights

Malignant Brain and CNS and Peripheral Nerves

2016 CNS WHO presents major restructuring of the diffuse gliomas, medulloblastomas and other embryonal tumors, and incorporates new entities that are defined by both histology and molecular features, including glioblastoma, IDH-wildtype and glioblastoma, IDH-mutant; diffuse midline glioma, H3 K27M-mutant, RELA fusion-positive ependymoma, medulloblastoma, WNT-activated and medulloblastoma, SHH-activated, and embryonal tumor with multilayered rosettes, C19MC-altered. The 2016 edition has added newly recognized neoplasms and has referred to some entities, variants and patterns as "not recommended" (previously called obsolete).

A. It has been determined that these "not recommended" terms no longer have diagnostic and/or biological relevance. For example, gliomatosis cerebri is a term which is no longer recommended. Gliomatosis cerebri is now termed a "growth pattern" rather than a histologic type.
B. Terms which are not recommended are not included in the tables. When one of these terms are used, refer to the ICD-O and all updates for the correct histology code. For example, glioma NOS is an umbrella term for all gliomas and astrocytomas. Glioma NOS is not recommended because diagnostic methodology is able to determine a more specific diagnosis.

Rule change: The 2007 rules said a glioblastoma multiforme (GBM) following an astrocytic or glial tumor was a single primary (recurrence). In the 2018 Solid Tumor Rules, GBM subsequent to an astrocytic or glial tumor is a multiple primary. GBM is now being collected as a new primary so it is possible to analyze the frequency with which these tumors recur in a more aggressive form (GBM).

Clarifications:
A. The following meningiomas are reportable: intraosseous, cavernous sinus and sphenoid wing.
B. Multiple cerebral meningiomas are a single primary.
C. Multiple brain tumors (same histology) are a single primary.
D. Laterality is not used to determine multiple primaries.
E. Timing is not used to determine multiple primaries.
F. The brain (C710-C719) is a single primary site.
G. Neurofibromatosis NOS, Neurofibromatosis 1 (NF1), Neurofibromatosis 2 (NF2), and schwannomatosis are genetic syndromes and not reportable neoplasms. People with this genetic syndrome do have a high risk of developing:
   i. Non-reportable non-malignant tumors occurring in skin and sites other than CNS AND
   ii. Reportable malignant tumors

48

A Few Important Highlights

Non-Malignant Brain and CNS Tumors

Clarifications:

- The following meningiomas are reportable: **Intraosseous**, **cavernous sinus,** and **sphenoid wing.**
- Multiple cerebral meningiomas (same histology or NOS and subtype/variant) are a single primary.
- Multiple brain tumors (same histology) are a single primary.
- Bilateral optic nerve gliomas/pilocytic astrocytomas are a single primary.
- Laterality is not used to determine multiple primaries.
- Timing is not used to determine multiple primaries.
- The brain C710-C719 is a single primary site.
- Neurofibromatosis NOS, Neurofibromatosis 1 (NF1), Neurofibromatosis 2 (NF2), and schwannomatosis are familial tumor syndromes and are not reportable conditions. People with NF1 and NF2 have a high risk of developing reportable and non-reportable tumors. Tumors associated with NF1 and NF2 are reportable when they meet the behavior (/0 or /1), site (within the CNS), and histology reportability requirements (see Reportability Criteria).

49

2018 Solid Tumors Database

- Genetics Data & Biomarkers
- Treatment(s)
- Abstractor Notes
- Signs & Symptoms
- Diagnostic Exams
- Recurrence & Metastasis
- Epidemiology & Mortality

STDB is Still Under Construction

50

ICD-O-3.2 Code & Behavior Updates

- **From: <iacr@iarc.fr>**
  Date: October 8, 2018 at 11:54:58 AM EDT
  To: <alevin@med.miami.edu>, <dlee@med.miami.edu>
  Subject: ANUSAFLO: Announcement from the IARC/WHO ICD-O Committee; IACR 2018 Reminder

- **Dear Colleagues,**

  The IARC/WHO ICD-O Committee has updated the currently recommended ICD-O-3.1 classification. The new version, ICD-O-3.2, will be recommended for use from 2019. These documents are available and will remain open for feedback until 1 November 2018. Please visit the IACR website (newsflash) for more details:

  http://www.iacr.com.fr/index.php?option=com_content&view=article&id=149:icd-o-3-2&catid=80:newsflashes&Itemid=545

  After the consultation period, the final version will be locked and ICD-O-3.2 pdf generated.

  Reminder: Registrations are still open for IACR 2018 Arequipa, Peru this 12-15 November 2018. Details here: www.iacr2018.org

  With thanks and best regards,

  the IACR Secretariat
  www.iacr.com.fr
  www.iacr2018.org
  iacr@iarc.fr

- **ICD-O will treat modified copies of ICD-O tables, manuals and files as copyright infringement if altered or published by AJCC, CAP, or others without approval by IARC/WHO/ICD-O Committee – even for North America.**

51

ICD-O-3.2 New Histology Codes with New Terms - Only

Status	Histology Value	Behavior	Preferred	label	Reportable	Comments
New term & code	8023	3	FALSE	Midline carcinoma of children and young adults with NUT rearrangement (C30.0, C31.9, C34._)	Y	
New term & code	8023	3	TRUE	NUT carcinoma (C30.0, C31.9, C34._)	Y	
New term & code	8023	3	FALSE	NUT midline carcinoma (C30.0, C31.9, C34._)	Y	
New term & code	8054	3	FALSE	Condylomatous carcinoma (C60.0-C60.2, C60.9)	Y	Cases diagnosed prior to 1/1/2018 use code 8051/3 All other sites use 8051/3 2018 forward
New term & code	8054	3	TRUE	Warty carcinoma (C60.0-C60.2, C60.9)	Y	Cases diagnosed prior to 1/1/2018 use code 8051/3 All other sites use 8051/3 2018 forward
New term & code	8085	3	TRUE	Squamous cell carcinoma, HPV-positive (C01.9, 09.9,C10.2, C10.3, C10.8, C10.9, C31.0-C31.3, C31.9)	Y	
New term & code	8086	3	TRUE	Squamous cell carcinoma, HPV-negative (C01.9, C09.9, C10.2, C10.3, C10.8, C10.9, C31.0-C31.3, C31.9)	Y	
New term & code	8158	1	FALSE	ACTH-producing tumor	N	Not reportable for all years
New term & code	8158	1	TRUE	Endocrine tumor, functioning, NOS	N	Not reportable for all years
New term & code	8163	3	FALSE	Adenocarcinoma, pancreatobiliary-type (C24.1)	Y	Cases diagnosed prior to 1/1/2018 use code 8255/3
New term & code	8163	3	TRUE	Pancreatobiliary-type carcinoma (C24.1)	Y	Cases diagnosed prior to 1/1/2018 use code 8255/3
New term & code	8256	3	TRUE	Minimally invasive adenocarcinoma, non-mucinous (C34._)	Y	
New term & code	8257	3	TRUE	Minimally invasive adenocarcinoma, mucinous (C34._)	Y	
New term & code	8265	3	TRUE	Micropapillary carcinoma, NOS (C18._, C19.9, C20.9, C34._)	Y	Cases diagnosed prior to 1/1/2018 use code 8507/3. Code 8265 is not valid for C50._. Use 8507 for micropapillary adenocarcinoma in breast primaries
New term & code	8265	3	FALSE	Micropapillary adenocarcinoma (C34._)	Y	Cases diagnosed prior to 1/1/2018 use code 8507/3. Code 8265 is not valid for C50._. Use 8507 for micropapillary adenocarcinoma in breast primaries
New term & code	8339	3	TRUE	Follicular thyroid carcinoma (FTC), encapsulated angioinvasive (C73.9)	Y	
New term & code	8474	3	TRUE	Seromucinous carcinoma (C56.9)	Y	
New term & code	8509	2	TRUE	Solid papillary carcinoma in situ (C50._)	Y	
New term & code	8509	3	TRUE	Solid papillary carcinoma with invasion (C50._)	Y	
New term & code	8519	2	TRUE	Pleomorphic lobular carcinoma in situ (C50._)	Y	ICD-O-3 rule F DOES NOT APPLY to code 8519. Invasive pleomorphic lobular carcinoma is coded 8520/3
New term & code	8552	3	TRUE	Mixed acinar ductal carcinoma	Y	Cases diagnosed prior to 1/1/2018 use code 8523/3
New term & code	8594	1	TRUE	Mixed germ cell sex cord-stromal tumor, unclassified (C48.2, C56.9, C57.9)	N	Not reportable for all years
New term & code	8714	3	FALSE	Malignant perivascular epithelial cell tumor	Y	
New term & code	8714	3	TRUE	PEComa, malignant	Y	
New term & code	8714	3	FALSE	Perivascular epithelioid cell tumor, malignant	Y	
New term/behavior	8815	1	TRUE	Solitary fibrous tumor/hemanglopericytoma Grade 2 (CNS) (C71._)	Y	Reportable for CNS ONLY
New term & code	8975	1	TRUE	Calcifying nested epithelial stromal tumor (C22.0)	N	Not reportable for all years
New term & code	9045	3	TRUE	Biphenotypic sinonasal sarcoma (C30.0, C31.0-C31.3, C31.8, C31.9)	Y	
New term & code	9086	3	TRUE	Germ cell tumors with associated hematological malignancy (C37.9)	Y	
New term & code	9137	3	TRUE	Intimal sarcoma	Y	
New term & code	9137	3	FALSE	Pulmonary artery intimal sarcoma	Y	
New term & code	9385	3	TRUE	Diffuse midline glioma, H3 K27M-mutant (C71._)	Y	
New term & code	9395	3	TRUE	Papillary tumor of pineal region (C75.3)	Y	Cases diagnosed prior to 1/1/2018 use code 9361/3
New term & code	9396	3	TRUE	Ependymoma, RELA fusion-positive (C71._)	Y	
New term & code	9425	3	TRUE	Pilomyxoid astrocytoma (C71._)	Y	Cases diagnosed prior to 1/1/2018 use code 9421/3
New term & code	9431	1	TRUE	Angiocentric glioma (C71._)	Y	Cases diagnosed prior to 1/1/2018 use code 9380/1
New term & code	9432	1	TRUE	Pituicytoma (C75.1)	Y	Cases diagnosed prior to 1/1/2018 use code 9380/1
New term & code	9445	3	TRUE	Glioblastoma, IDH-mutant (C71._)	Y	
New term & code	9475	3	TRUE	Medulloblastoma, WNT-activated (C71._)	Y	
New term & code	9476	3	TRUE	Medulloblastoma, SHH-activated and TP53 mutant (C71._)	Y	
New term & code	9477	3	FALSE	Medulloblastoma, group 3 (C71._)	Y	
New term & code	9477	3	FALSE	Medulloblastoma, group 4 (C71._)	Y	
New term & code	9477	3	TRUE	Medulloblastoma, non-WNT/non-SHH (C71._)	Y	
New term & code	9478	3	FALSE	Embryonal tumor with multilayered rosettes C19MC-altered (C71._)	Y	
New term & code	9478	3	TRUE	Embryonal tumor with multilayered rosettes, NOS (C71._)	Y	
New term & code	9509	1	FALSE	Diffuse leptomeningeal glioneuronal tumor (C71._)	Y	Cases diagnosed prior to 1/1/2018 use code 9505/1
New term & code	9509	1	TRUE	Papillary glioneuronal tumor (C71._)	Y	Cases diagnosed prior to 1/1/2018 use code 9505/1
New term & code	9509	1	TRUE	Rosette-forming glioneuronal tumor (C71._)	Y	Cases diagnosed prior to 1/1/2018 use code 9505/1
New term & code	9542	3	TRUE	Epithelioid malignant peripheral nerve sheath tumor (C47.0-C47.6, C47.8, C47.9)	Y	

52

IARC/WHO and ICD-O-3.2

http://www.iacr.com.fr/index.php?option=com_content&view=article&id=149:icd-o-3-2&catid=80:newsflashes&Itemid=545

ICD-O-3.2

Created on Tuesday, 23 April 2019 14:05

ICD-O-3.2

The IARC/WHO ICD-O Committee[1] has updated the draft ICD-O-3.1 classification, with new morphology codes and terms from the 4th series of WHO Classification of Tumours (Blue Books). The IACR Working Group on ICD-O Updates[2] has compiled a listing of additio changes and revisions between ICD-O-3.1 and ICD-O-3.2 as a reference materi registries.

Both documents have been revised according to the comments received during the consultation period and the final Excel tables are available for download in our Support for registries pages.

The ICD-O-3.2 book in pdf format is in preparation. We would like to thank all registries and individuals for comments provided to the draft versions.

[1] Ian Cree, Jacques Ferlay, Robert Jakob, Brian Rous, Reiko Watanabe, Valerie White, Ariana Znaor
[2] Atul Budukh, Jacques Ferlay, Keri Green, Tomohiro Matsuda, Brian Rous, Ariana Znaor

ICD-O-3

INTERNATIONAL CLASSIFICATION OF DISEASES FOR ONCOLOGY

Third edition Edited by A. Fritz, C. Percy, A. Jack, K. Shanmugaratnam, L. Sobin,D.M. Parkin and S. Whelan

This publication is now available online: http://codes.iarc.fr

ICD-O-3.2 TABLES

The IARC/WHO ICD-O Committee[1] has updated the draft ICD-O-3.1 classification, with new morphology codes and terms from the 4th series of WHO Classification of Tumours (Blue Books). The new version, **ICD-O-3.2, is recommended for use from 2020**. The IACR Working Group on ICD-O Updates[2] has compiled a listing of additions, changes and revisions between ICD-O-3.1 and ICD-O-3.2 as a reference material for cancer registries.

Both documents have been revised according to the comments received the consultation period and the final tables are available for download here:

A LISTING OF ALL ADDITIONS, CHANGES AND REVISIONS TO THE ICD-O-3 REVISION (ICDO-O-3.1) FOR ICD-O-3.2

ICDO- THIRD EDITION, SECOND REVISION MORPHOLOGY

The ICD-O-3.2 book in pdf format is in preparation. We thank all the individuals and institutions/organizations that provided comments to the draft versions. Their contributions will be acknowledged in the ICD-O-3.2 book, while the individual replies will be provided via email.

[1] Ian Cree, Jacques Ferlay, Robert Jakob, Brian Rous, Reiko Watanabe, Valerie White, Ariana Znaor

53

ICD-O-3.2 – complete histology table

http://www.iacr.com.fr/index.php?option=com_content&view=article&id=149:icd-o-3-2&catid=80:newsflashes&Itemid=545

International Agency for Research on Cancer
World Health Organization

ICD-O- Third Edition, Second Revision Morphology

ICDO3.2	Level	Term	Code reference	obs	See also	See r	Includes	Excludes
8173/3	Preferred	Hepatocellular carcinoma, spindle cell variant	(C22.0)					
8173/3	Synonym	Hepatocellular carcinoma, sarcomatoid	(C22.0)					
8174/3	Preferred	Hepatocellular carcinoma, clear cell type	(C22.0)					
8175/3	Preferred	Hepatocellular carcinoma, pleomorphic type	(C22.0)					
8180/3	Preferred	Combined hepatocellular carcinoma and cholangiocarcinoma	(C22.0)					
8180/3	Synonym	Hepatocholangiocarcinoma	(C22.0)					
8180/3	Synonym	Mixed hepatocellular and bile duct carcinoma	(C22.0)					
8190/0	Preferred	Trabecular adenoma						
8190/3	Preferred	Trabecular adenocarcinoma						
8190/3	Synonym	Trabecular carcinoma						
8191/0	Preferred	Embryonal adenoma						
8200/0	Preferred	Eccrine dermal cylindroma	(C44._)					
8200/0	Related	Cylindroma of skin	(C44._)					
8200/0	Related	Cylindroma of breast	(C50._)					
8200/0	Related	Turban tumor	(C44.4)					
8200/3	Preferred	Adenoid cystic carcinoma						
8200/3	Synonym	Cylindroma, NOS		[obs]				(except of skin or breast
8200/3	Synonym	Adenocarcinoma, cylindroid		[obs]				
8200/3	Synonym	Adenocystic carcinoma						
8200/3	Related	Bronchial adenoma, cylindroid	(C34._)	[obs]				
8200/3	Related	Thymic carcinoma with adenoid cystic carcinoma-like features	(C37.9)					
8201/2	Preferred	Cribriform carcinoma in situ	(C50._)					
8201/2	Synonym	Ductal carcinoma in situ, cribriform type	(C50._)					
8201/3	Preferred	Cribriform carcinoma, NOS						
8201/3	Synonym	Ductal carcinoma, cribriform type	(C50._)					
8201/3	Related	Cribriform comedo type carcinoma	(C18._, C19.9, C20.9)					
8201/3	Synonym	Adenocarcinoma, cribriform comedo type	(C18._, C19.9, C20.9)					

54

2021 – All Bets are off…

More Data Requirements – NPCR/SEER/CoC

Annual Updates to Solid Tumor Rules

Annual Updates - ICD-O-5

New Research to Add New SSDI and Text Requirements in Diagnostics (Imaging and Histology), Biomolecular Genetics, Lab Tests, Anti-Neoplastic Agents, Radiation Therapy Techniques, Target Agents, etc.

55

What you need - right now

- 2018 Solid Tumor Rules – July 2019 Revision
- Hematopoietic/Lymphoid DB & Manual – Use the On-Line Version Only!!
- ICD-O-3 Purple Book – Original ICD-O-3
- ICD-O-3.2 Excel Table – Proxy ICD-O-4
- New ICD-O-3.2 Histology Codes – Slide #49

- 2018 FCDS DAM – Appendix R – ICD-O-3 Updates for 2018
- FCDS Requirement for Unknown Date of Diagnosis – 8/1/2019 – ALL CASES

56

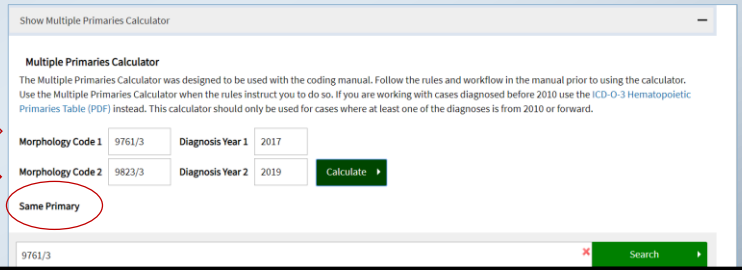
Case #1

Patient with 2 year diagnosis of Waldenstrom Macroglobulinemia (WM) with interferon therapy with new finding of Chronic Lymphocytic Leukemia (CLL) just 3 days ago.

# Primaries?	One – Demo Code Lookup & MP Calculator
Histology #1?	9761/3 – Waldenstrom Macroglobulinemia
Histology #2?	CLL/SLL (9823/3) = same primary as WM – So, code histology using the original 1st dx.

WM

CLL/SLL



57

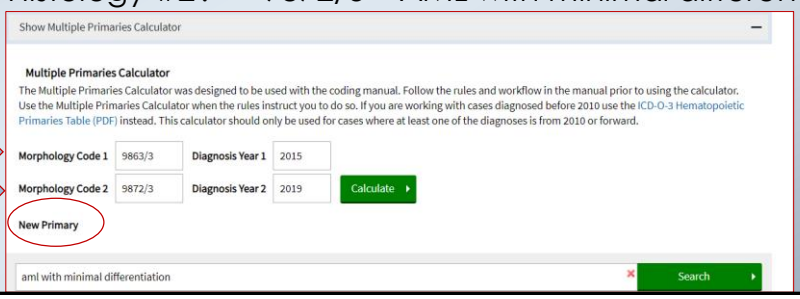
Case #2

Patient with CML (chronic myelogenous leukemia) diagnosed in 2015 with recent progression to AML (acute myelogenous leukemia) with minimal differentiation and a noted loss (deletion) of chromosome 5 [del(5q)] and chromosome 7 [del(7q)].

# Primaries?	Two – chronic to acute is 2 primaries
Histology #1?	9863/3 – CML (BRC/ALB1 status unknown)
Histology #2?	9872/3 – AML with minimal differentiation

CML

AML



58

Case #2

9863/3 – CML with unknown BCR-ABL1

Grade

Not Applicable

Module Rule

None

Alternate Names

Chronic granulocytic leukemia, NOS
Chronic myelocytic leukemia, NOS
Chronic myelogenous leukemia, BCR-ABL1 status unknown
Chronic myelogenous leukemia, NOS
Chronic myeloid leukemia, BCR-ABL1 status unknown, Accelerated phase (AP)
Chronic myeloid leukemia, BCR-ABL1 status unknown, Blast phase (BP)
Chronic myeloid leukemia, BCR-ABL1 status unknown, Chronic phase (CP)
CML, BCR-ABL1 status unknown, Accelerated phase (AP)
CML, BCR-ABL1 status unknown, Blastic phase (BP)
CML, BCR-ABL1 status unknown, Chronic phase (BP)
CML, NOS

Definition

No delineation of translocation, BCR-ABL1, or Phil chromosome noted to qualify for ICD-O-3 9863.

9872/3 – AML with minimal differentiation

Alternate Names

Acute myeloblastic leukemia
Acute myeloblastic leukemia, *minimal*ly differentiated
Acute myeloid leukemia, M0
Acute myeloid leukemia, *minimal differentiation*
FAB M0

Definition

Acute myeloid leukemia (*AML*) with *minimal differentiation* is an *AML* with no r
myeloid *differentiation*. The myeloid nature of the blasts is demonstrated by im
distinguishing this entity from lymphoblastic leukemia.

Abstractor Notes

If the leukemia occurs before or simultaneously with Myeloid Sarcoma (9930/3),

Definitive Diagnostic Methods

Genetic testing
Immunophenotyping

Genetics Data

FLT3
Gain of chromome 9
Loss of chromosome 5 [del(5q)] and 7 [del(7q)]
RUNX1(also called *AML*1)

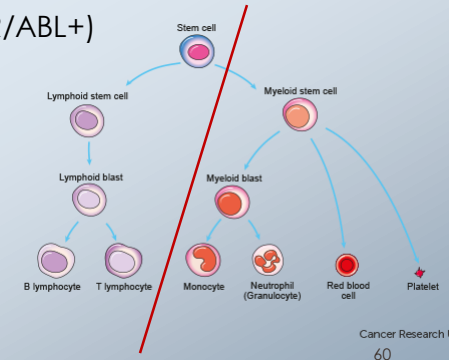
59

Case #3

Patient with 2 year history of CLL/SLL (chronic lymphocytic leukemia/small lymphocytic lymphoma) with new diagnosis of BCR/ABL1 positive CML (chronic myeloid leukemia).

# Primaries?	Two – one lymphoid and one myeloid
Histology #1?	9823/3 (CLL/SLL)
Histology #2?	9875/3 (CML – BCR/ABL+)

Lymphoid Neoplasms (lymphoma, chronic or acute lymphoid leukemia and plasma cell neoplasms including plasma cell myeloma) ARE ALWAYS A DIFFERENT PRIMARY than Myeloid Neoplasms (myeloproliferative (MPN), myelodysplastic (MDS), chronic myeloid leukemia or acute myeloid leukemia) – Arise from different cell origins.



Cancer Research UK

60

Case #4

Patient had stereotactic left breast UOQ core biopsy showing DCIS, intermediate grade, with comedo necrosis and microcalcifications. Another core biopsy one month later showed low-grade DCIS with microcalcifictaions. Excision one week after showed invasive cribriform carcinoma, grade II with margins uninvolved. No tumor size documented, no nodes examined.

Primary Site? UOQ Left Breast – C50.4

Histology? Code to DCIS or Comedo or Cribriform?

Answer: Code the invasive histology when in-situ and invasive carcinoma are present. Cribriform Carcinoma is one of the only subtypes of ductal carcinoma we still code. Use Subtypes Table

Code Invasive Cribriform Carcinoma, Grade II = 8201/3

For tumors with both **invasive** and **in situ** behavior. The **Histology Rules** instruct to code the invasive histology.

61

Case #4

The tumor was not described as having features of cribriform carcinoma but rather as cribriform carcinoma. Cribriform Carcinoma is in the Breast Subtypes Table showing that when not described as 'features' or 'architecture' that you assign code 8201/3 not 8500/3. The term 'comedo necrosis' would never be used even if the tumor was all in-situ.

Carcinoma NST 8500 *Note*: Cribriform carcinoma may consist of up to 50% tubular formations. The term cribriform/tubular carcinoma is coded as cribriform carcinoma.	Carcinoma of no special type (ductal/NST) Carcinoma/carcinoma NST with choriocarcinomatous features Carcinoma/carcinoma NST with cribriform features Carcinoma/carcinoma NST with melanotic features Carcinoma/carcinoma NST with signet ring cell differentiation DCIS **8500/2** Duct/ductal carcinoma Duct/ductal carcinoma in situ **8500/2** Duct/ductal carcinoma NOS	Carc… osteoclastic-like st… giant cells **8035** Cribriform carcinoma **8201/3** Pleomorphic carcinoma **8022/3**

62

Case #5

Patient with biopsy of perianum shows Paget Disease of perianal skin. Two weeks later patient had endoscopy with biopsy of a rectal polyp with foci of invasive adenocarcinoma arising from a tubulovillous adenoma (margins free) and wide excision of anal squamous intraepithelial neoplasia grade 3 (AIN-3) w/ Paget Disease - no invasion.

# Primaries?	Two – adenocarcinoma and squamous AIN 3
Primary Site(s)?	C20.9 (rectum) and C21.0 (anus)
Histology 1?	8140/3
Histology 2?	8077/2

Anal Intraepithelial Neoplasia (AIN III) is reportable to FCDS and should be included in casefinding activities. This non-invasive neoplasm of the anus or anal canal (C21.0-C21.1) is not the same as SCC of perianal skin (C44.5). It is important to distinguish

Rule M6 Abstract **multiple primaries**[ii] when separate/non-contiguous tumors are on **different rows in** Table 1 in the Equivalent Terms and Definitions. Timing is irrelevant.
Note: Each row in the table is a **distinctly different** histology.

Rule H2 Code the **histology** and **ignore the polyp** when a carcinoma **originates** in a **polyp.**
Note 1: This is a **change** from the **2007** MPH rules which instructed registrars to use the codes for malignancies in a polyp, such as adenocarcinoma in a polyp **8210.**

63

Case #5

Where are the AIN III Rules and the extra-mammary Paget Disease Rule?

The rules for both are found in the Other Sites Chapter as they involve all of the intraepithelial neoplasia Grade III Sites – vulva, vagina, and anus.

Rule H21 Code 8077/2 (Squamous intraepithelial neoplasia, grade III) for in situ squamous intraepithelial **neoplasia grade III** in sites such as the **vulva** (VIN III) **vagina** (VAIN III), or **anus** (AIN III).
Note 1: VIN, VAIN, and AIN are squamous cell carcinomas. Code 8077 cannot be used for glandular intraepithelial neoplasia such as prostatic intraepithelial neoplasia (PIN) or pancreatic intraepithelial neoplasia (PAIN).
Note 2: This code may be used for reportable-by-agreement cases.

Rule H22 Code 8148/2 (Glandular intraepithelial neoplasia grade III) for in situ glandular **intraepithelial neoplasia grade III** in sites such as the **pancreas** (PAIN III).
Note: This code may be used for reportable-by-agreement cases such as intraepithelial neoplasia of the **prostate** (PIN III).

(NOTE: PAIN III is a ductal/glandular intraepithelial neoplasm – 8148/2)

The instruction for extra-mammary Paget Disease for anus, perianal region or vulva are also found in the Other Sites Rules

Rule H24 Code the histology of the underlying tumor when there is **extramammary Paget disease** and an underlying tumor of the **anus, perianal region, or vulva.**

64

Case #6

Incidentally found Left lower lobe lung mass when chest x-ray was taken for arthritis follow-up. Chest x-ray showed a subtle nodular density overlying the left peripheral lung field. This is reported to be new from prior chest x-ray.

CT Chest: Multiple pulmonary nodules, left lower lobe, the largest measures 1.4cm, demonstrates a spiculated contour and lies in the left lower lobe.

PET: 1.7cm metabolically active left lower lobe nodule consistent with biopsy-proven non-small cell carcinoma of the left lower lobe. Non-enlarged minimally active bilateral hilar lymph nodes, likely reactive in nature.

Left lower lobe core biopsy shows non-small cell carcinoma, favor lung primary.

Left lower lobe wedge resection converted to left pneumonectomy with 1.5cm moderately differentiated acinar predominant adenocarcinoma (60%) with lepidic predominant 15%, and solid predominant 25%, 0/9 hilar nodes involved, tumor invades visceral pleura, no LVI, free margins, pT2 N0.

EGFR – neg, BRAF – positive, PD-L1 – expressed, ROS1 –neg, ALK FISH – neg.

Histology Code? 8551/3 – Acinar Adenocarcinoma of the Lung

ICDO3.2	Histology	Behavior	Level	Term	Code reference
8551/3	8551	3	Preferred	Acinar cell cystadenocarcinoma	
8551/3	8551	3	Related	Acinar adenocarcinoma of the lung	(C34._)

65

Case #6

Adenocarcinomas (CAP Terminology)

Adenocarcinoma, acinar predominant 8551

- Adenocarcinoma, lepidic predominant 8250
- Adenocarcinoma, micropapillary predominant 8265
- Adenocarcinoma, papillary predominant 8260
- Adenocarcinoma, solid predominant 8230

Multiple References Found in Notes, Subtypes Table, Rule H7 & Example 1 under Rule H7

Specific or NOS Histology Term and Code	Synonym of Specific or NOS	Subtype/variant of NOS and Code
Adenocarcinoma 8140 **Note 1:** Mucinous adenocarcinoma for lung only is coded as follows: • **8253/3*** when o Behavior unknown/not documented (use staging form to determine behavior when available) o Invasive • **8257/3*** when o Microinvasive o Minimally invasive • **8253/2*** when o Preinvasive o In situ	Adenocarcinoma NOS Adenocarcinoma in situ **8140/2** Adenocarcinoma invasive **8140/3** Adenocarcinoma, non-mucinous, NOS	Acinar adenocarcinoma/adenocarcinoma, acinar predominant **(for lung only) 8551*** Adenoid cystic/adenocystic carcinoma **8200** Colloid adenocarcinoma **8480** Fetal adenocarcinoma **8333** Lepidic adenocarcinoma/adenocarcinoma, lepidic predominant **8250/3*** Mucinous carcinoma/adenocarcinoma **(for lung only)** in situ **8253/2*** invasive **8253/3*** minimally invasive **8257/3*** microinvasive **8257/3*** preinvasive **8253/2***

Rule H7 Code the histology that comprises the **greatest percentage** of tumor when two or more of the following histologies are present:

- Acinar adenocarcinoma / Adenocarcinoma, acinar predominant **8551**
- Lepidic adenocarcinoma / Adenocarcinoma, lepidic predominant **8250**
- Micropapillary adenocarcinoma / Adenocarcinoma, micropapillary predominant **8265**
- Papillary adenocarcinoma / Adenocarcinoma, papillary predominant **8260**
- Solid adenocarcinoma / Adenocarcinoma, solid predominant **8230**

Example 1: Pathology reads the tumor is adenocarcinoma, acinar predominant (acinar 60%, solid predominant 20%, lepidic predominant 20%). Code the histology with the highest percentage: acinar adenocarcinoma 8551/3.

66

Case #7

Patient with non-invasive transitional cell/urothelial carcinoma of the bladder in 2007, now seen with urothelial carcinoma in-situ of bladder in 2018. Is this one primary or two based on the time interval between cancers or non-invasive versus in-situ since both are behavior = /2 (non-invasive and in-situ)?

Answer: Abstract only one urothelial/transitional cell carcinoma non-invasive/in-situ (behavior = /2) only (forever) followed by the possibility of only one invasive (behavior = /3) urothelial/transitional cell carcinoma (forever) - that is all that we will allow at most – Two urothelial carcinoma abstracts – one /2 and one /3 - ever. There is ONLY ONE EXCEPTION to urothelial carcinoma type (below)…

'Micropapillary' is the ONLY urothelial carcinoma histology/behavior exception (8131/2 or 8131/3).

If a new histology is **NOT urothelial** (i.e. pure squamous cell or pure small cell carcinoma or pure adenocarcinoma) – then the case will be a new cancer. NEVER code a subtype for urothelial carcinoma such as urothelial carcinoma with squamous cell features, or with small cell features.

There is no 3 year rule between diagnosis dates or any other timing rule for urothelial carcinoma of bladder. Urinary System Rule # M7 for in-situ and # M9 for invasive. #M8 is micropapillary exception.

There is only one primary non-invasive (behavior = /2) urothelial carcinoma of the bladder - ever. There is only one invasive (behavior = /3) – ever. Exception for 8131/2 or 8131/3 – only.

The only other possible bladder primary would have to be a different pure histologic type that is not urothelial/transitional cell carcinoma with or without features of other carcinoma type.

67

Case #7

Rule M7 Abstract a **single primary**[i] when the patient has multiple occurrences of /2 urothelial carcinoma in the **bladder**. Tumors may be any combination of:

- In situ urothelial carcinoma **8120/2 AND/OR**
- Papillary urothelial carcinoma noninvasive **8130/2** (does **not** include micropapillary subtype)

Note 1: Timing is irrelevant. Tumors may be synchronous or non-synchronous.
Note 2: Abstract only one /2 urothelial bladder primary per the patient's lifetime.

Rule M9 Abstract a **single primary**[i] when the patient has multiple **invasive** urothelial cell carcinomas in the **bladder**. All tumors are **either**:

- Multiple occurrences of urothelial or urothelial subtypes (with exception of micropapillary) **OR**
- Multiple occurrences of micropapillary

Note 1: Timing is irrelevant. Tumors may be synchronous or non-synchronous.

Specific and NOS Histology Codes	Synonyms	Subtypes/Variants
Urothelial carcinoma **8120** *Note 1:* Previously called **transitional cell** carcinoma, a term that is no longer recommended. *Note 2:* Micropapillary **8131** is a subtype/variant of papillary urothelial carcinoma **8130**. It is an invasive /3 neoplasm with aggressive behavior.	Clear cell (glycogen-rich) urothelial carcinoma **8120/3** Infiltrating urothelial carcinoma **8120/3** Infiltrating urothelial carcinoma with divergent differentiation **8120/3** Infiltrating urothelial carcinoma with endodermal sinus lines **8120/3** Infiltrating urothelial carcinoma with glandular differentiation **8120/3** Infiltrating urothelial carcinoma with squamous differentiation **8120/3** Infiltrating urothelial carcinoma with trophoblastic differentiation **8120/3** Lipid-rich urothelial carcinoma **8120/3** Microcystic urothelial carcinoma **8120/3** Nested urothelial carcinoma **8120/3** Plasmacytoid urothelial carcinoma **8120/3** Urothelial carcinoma in situ **8120/2**	Giant cell urothelial carcinoma **8031/3** Lymphoepithelioma-like urothelial carcinoma **8082/3** Plasmacytoid/signet ring cell/diffuse variant Papillary urothelial (transitional cell) carcinoma in situ **8130/2** invasive **8130/3** Micropapillary urothelial carcinoma **8131/3** Poorly differentiated carcinoma **8020/3** Sarcomatoid urothelial carcinoma **8122/3**

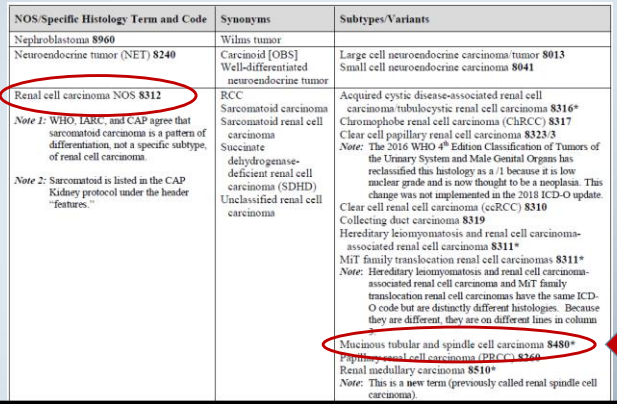
Micro-papillary Exception

68

Case #8

Patient with right kidney cancer treated with surgery of radical nephrectomy which shows a unifocal/single tumor, 7.5cm that is a mucinous, tubular, and spindle cell renal cell carcinoma, pT1b, WHO/ISUP Nuclear Grade 2/4. Tumor is confined within the renal parenchyma. All margins negative.

Histology Code: 8480/3 (mucinous adenocarcinoma) – not mixed.



NOS/Specific Histology Term and Code	Synonyms	Subtypes/Variants
Nephroblastoma **8960**	Wilms tumor	
Neuroendocrine tumor (NET) **8240**	Carcinoid [OBS] Well-differentiated neuroendocrine tumor	Large cell neuroendocrine carcinoma/tumor **8013** Small cell neuroendocrine carcinoma **8041**
Renal cell carcinoma NOS **8312** *Note 1:* WHO, IARC, and CAP agree that sarcomatoid carcinoma is a pattern of differentiation, not a specific subtype, of renal cell carcinoma. *Note 2:* Sarcomatoid is listed in the CAP Kidney protocol under the header "features."	RCC Sarcomatoid carcinoma Sarcomatoid renal cell carcinoma Succinate dehydrogenase-deficient renal cell carcinoma (SDHD) Unclassified renal cell carcinoma	Acquired cystic disease-associated renal cell carcinoma/tubulocystic renal cell carcinoma **8316*** Chromophobe renal cell carcinoma (ChRCC) **8317** Clear cell papillary renal cell carcinoma **8323/3** *Note:* The 2016 WHO 4th Edition Classification of Tumors of the Urinary System and Male Genital Organs has reclassified this histology as a /1 because it is low nuclear grade and is now thought to be a neoplasia. This change was not implemented in the 2018 ICD-O update. Clear cell renal cell carcinoma (ccRCC) **8310** Collecting duct carcinoma **8319** Hereditary leiomyomatosis and renal cell carcinoma-associated renal cell carcinoma **8311*** MiT family translocation renal cell carcinomas **8311*** *Note:* Hereditary leiomyomatosis and renal cell carcinoma-associated renal cell carcinoma and MiT family translocation renal cell carcinomas have the same ICD-O code but are distinctly different histologies. Because they are different, they are on different lines in column 3. Mucinous tubular and spindle cell carcinoma **8480*** Papillary renal cell carcinoma (PRCC) **8260*** Renal medullary carcinoma **8510*** *Note:* This is a new term (previously called renal spindle cell carcinoma).

69

Case #8

Patient with right kidney cancer treated with surgery of radical nephrectomy which shows a unifocal/single tumor, 7.5cm that is a mucinous, tubular, and spindle cell renal cell carcinoma, pT1b, WHO/ISUP Nuclear Grade 2/4. Tumor is confined within the renal parenchyma. All margins negative.

Histology Code: 8480/3 (mucinous adenocarcinoma) – not mixed.

ICDO3.2	Histology	Behavior	Level	Term	Code reference
8480/3	8480	3	Preferred	Mucinous adenocarcinoma	
8480/3	8480	3	Synonym	Acinar adenocarcinoma, mucinous variant	
8480/3	8480	3	Synonym	Colloid adenocarcinoma	
8480/3	8480	3	Synonym	Colloid carcinoma	
8480/3	8480	3	Synonym	Gelatinous adenocarcinoma	
8480/3	8480	3	Synonym	Gelatinous carcinoma	
8480/3	8480	3	Synonym	Mucinous carcinoma	
8480/3	8480	3	Synonym	Mucoid adenocarcinoma	
8480/3	8480	3	Synonym	Mucoid carcinoma	
8480/3	8480	3	Synonym	Mucous adenocarcinoma	
8480/3	8480	3	Synonym	Mucous carcinoma	
8480/3	8480	3	Related	Pseudomyxoma peritonei with unknown primary site	(C80.9)
8480/3	8480	3	Related	Mucinous tubular and spindle cell carcinoma	(C64.9)

70

Case #9

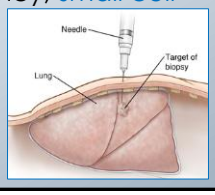
Patient had a FNA of lung showing adenocarcinoma by cytology but bone metastasis is showing small cell carcinoma by FNA cytology. Do I abstract this as two primaries (adenocarcinoma and small cell carcinoma)? Is the FNA diagnostic from the primary site or from a metastatic site - both? Treated with carboplatin, etoposide, and Tecentriq. Is this helpful if no final diagnosis is given?

FNA left upper lobe mass; rare atypical epithelial cells suspicious for non-small cell carcinoma favor adenocarcinoma. A definitive diagnosis cannot be made on this scant biopsy material. The obtaining of additional diagnostic material is recommended.

FNA left iliac bone; positive for malignancy, favor small cell carcinoma

Core Biopsy left upper lobe mass; positive for malignancy, small cell neuroendocarine carcinoma, high grade

Now What Do I Do???



71

Case #9

- This case is a tough call for which you might need to verify with oncology.
- FNA cytology must always be later proven to be malignant for any type when ambiguous terms are used to describe the findings as in all of the FNA reports for this patient. So, you cannot take either adenocarcinoma or small cell carcinoma as diagnostic – both say suspicious or favor – ambiguous terms.
- The core biopsy should be used as more representative – but not much more.
- However, if you look this drug up on internet – and you may need to do this in some instances – Tecentriq was approved by the FDA in March 2019 to be used as first-line therapy in combination with chemotherapy (carboplatin and etoposide) and is the first and only cancer immunotherapy approved for the initial treatment of extensive-stage small cell lung cancer (ES-SCLC)
- So, the conclusion without confirmation by medical oncology would be extensive stage small cell lung cancer (ES-SCLC) based on treatment regimen and not solely based upon the FNA findings which were all 'ambiguous'.

72

Case #10

Patient with diagnosis of SEIC (serous intraepithelial carcinoma of the endometrium). I have never heard of this histology before. Is this a reportable cancer of the endometrium? Are there any GYN Multiple Primary/Histology Coding Rules to Reference? The pathologist & surgeon both staged her pT1a FIGO 1A. Doesn't this indicate the cancer is malignant not in-situ/intraepithelial? They treated her with low dose brachytherapy, Carboplatin and Taxol chemo after hysterectomy. What is histology code and behavior?

Primary Site: Endometrium (C54.1)

Histology Code: 8441/2 (SEIC – serous intraepithelial carcinoma of the endometrium)

ICDO3.2	Histology	Behavior	Level	Term	Code reference
8441/2	8441	2	Preferred	Serous intraepithelial carcinoma	
8441/2	8441	2	Related	Serous tubal intraepithelial carcinoma (STIC)	(C57.0)
8441/2	8441	2	Related	Serous endometrial intraepithelial carcinoma	(C54.1)

73

Bonus Case/Question #1

- For the new histology codes for Head and Neck HPV positive Squamous Cell Carcinoma (8085/3) and HPV Negative Squamous Cell Carcinoma (8086/3), can we use the p16 status to use these histology codes or do we need to have the HPV ISH/PCR test results to use these histology codes?
- **ANSWER:** Per H&N Instructions in Solid Tumor Manual, "HPV-positive is not equivalent to HPV-mediated (p16+). HPV-type 16 refers to virus type and is different from p16 overexpression (p16+). HPV status is determined by tests designed to detect viral DNA or RNA. Tests based on ISH, PCR, RT-PCR technologies detect the viral DNA or RNA; whereas, the test for p16 expression, a surrogate marker for HPV, is IHC. HPV testing must be positive by viral detection tests in order to code histology as 8085."
- The new codes 8085/3 and 8086/3 are restricted via edits to specific site codes. So, you can use the HPV testing for histology coding but the histology code of 8085 or 8086 may not be allowed for certain site/histology combinations in validation edits at this time – though the site-specific status is not indicated in the histology coding tables from WHO/IARC or SEER.

74

Bonus Case/Question #1

- **Why is this important:** HPV status, p16 status, basaloid differentiation and keratinization in squamous cell carcinoma of the head and neck and particularly in the oral cavity are *significant prognostic factors* in oropharyngeal squamous cell carcinoma. These are particularly important for oral cavity neoplasms. But, not as significant for the oropharyngeal sites.
- Patients with p16 negative, non-basaloid and non-keratinizing tumors of the oral cavity and oropharynx have prognostic advantage over those with p16 positive testing, basaloid histologic features and non-keratinization of the neoplasm on H&E staining.

Status	ICD-O-3 Morphology Code	Term	Reportable Y/N
New code/term	8085/3	Squamous cell carcinoma, HPV-positive (C01.9, C09.9, C10.2, C10.3, C10.8, C10.9, C31.0–C31.3, C31.9)	Y
New code/term	8086/3	Squamous cell carcinoma, HPV-negative (C01.9, C09.9, C10.2, C10.3, C10.8, C10.9, C31.0–C31.3, C31.9)	Y

75

Bonus Case/Question #2

- Clarification needed for using Keratinization in Head and Neck Rules, when can we use keratinizing squamous cell carcinoma? My pathologists are still using the keratinizing histology. However, in previous webinars we were told not to use the keratinizing code but just code squamous cell carcinoma, NOS (8070/3).
- **ANSWER:** The term, rules and corresponding instructions for assigning the histology code for keratinizing squamous cell carcinoma have not changed. When the information is provided that the neoplasm is a keratinizing squamous cell carcinoma; assign the correct code 8071/3 not 8070/3.
- **Why is this important?** "Keratinization is a histologic feature on hematoxylin-eosin staining that is independently associated with adverse outcomes in head and neck cancer, particularly oral cavity squamous cell carcinoma. Keratinizing tumors are more likely to have advanced-stage disease at presentation and to be p16 negative.
- However, the prognostic value of keratinization and p-16 status have not been demonstrated in oropharyngeal squamous cell carcinoma."
- "Patients with nonkeratinized oropharyngeal squamous cell carcinoma have improved survival compared with those with keratinizing tumors. Information on keratinization is most useful prognostically in those who have p16-negative and nonbasaloid tumors and in patients who are smokers. Survival can be stratified using keratinization, p16 status, and smoking status."

JAMA Otolaryngol Head Neck Surg. 2015;141(3):250-256. doi:10.1001/jamaoto.2014.3335

76

Bonus Case/Question #3

- When a patient has a diagnosis of a lymphoma and has multiple lymph node regions involved at time of diagnosis; is the correct primary site C77.8, C77.9 or C80.9?
- **ANSWER:** When a patient has involvement of more than one Lymph Node REGION (see Hematopoietic & Lymphoid Neoplasms MP/H Manual – 2018 for regions) involved at diagnosis (Stage II, III and some stage IV) the primary site should be C77.8 not C77.9.
- **Note:** Extranodal primary lymphoma cannot be determined by histologic type or subtype of lymphoma. It can only be determined by physical exam, biopsy or imaging noted involvement of solid organ(s) not including lymphoid organs, and not by histologic type or subtype of the lymphoma. C77.9 would be preference in cases when it is not known if one or more nodal regions are involved at time of diagnosis or if the case is an extranodal lymphoma – not unknown C80.9 unless rules state otherwise.

- When do you use primary site C80.9 for lymphoma cases?
- **ANSWER:** This is a really old rule from SEER. The use of primary site code C80.9 for lymphoma is highly discouraged even when the primary is unknown. The assumption is that lymphoma will always begin in lymph node(s) or lymphoid organ(s). The primary site should be C77.9 in this case – not C80.9 unless otherwise instructed in the rules.

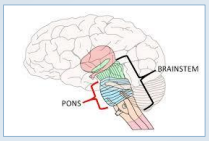
77

Bonus Case/Question #4

- New Patient with bilateral Ocular MALT Lymphoma.
- Do we use the Solid Tumor Rules for Other Sites which instruct the registrar to abstract this paired organ as 2 primaries?
- Do we use the Hematopoietic Manual which instructs the registrar to abstract this as a single primary (M2) which includes involvement by lymphoma including both sides of a paired extranodal organ?
- **ANSWER:** This case was included to ensure that registrars understand there are Multiple Primary Rules available for both the Solid Tumors and the Lymphoid and Myeloid Neoplasms and that the rules are different depending on site and histology. You MUST use the correct manual.
- Use the Hematopoietic Manual for lymphoma, leukemia, plasma cell neoplasms and use the Solid Tumor Manual for solid tumors – only.
- The answer is that this is a single primary MALT Lymphoma.

78

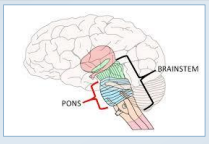
Bonus Case/Question #5



- We have had a community cancer concern regarding DIPG (diffuse intrinsic pontine glioma) for several years from a father who lost a child to this awful brain cancer. In 2017, there was no histology code, they were all categorized within malignant glioma, NOS (9380/3). In the 2018 Updates to ICD-O-3 there is a new histology code for 'diffuse midline glioma, H3 K27M-mutant (9385/3). Is this a diffuse intrinsic pontine glioma (DIPG) code? What if I don't have the mutation info?
- **ANSWER:** yes, this is a new code for DIPG. And yes, we need to be sure that registrars working with pediatric records know this. This is a high-grade glioma usually found in kids age 5-9 years, occasionally adolescents (rarely in adults).
- The primary site should be C71.7 (pons or brainstem) in all cases with histology code 9385/3 only when the mutation is specifically annotated. The pons is part of the brainstem that links the main brain to the spinal cord or more specifically the medulla oblongata to the thalamus. Tumors in the brainstem are high grade and particularly aggressive, hard to treat, and always a community concern because they primarily effect young kids and almost always result in death at a young age.
- You have to look for the mutation. Always code C71.7 not C71.9 so we can identify these very important pediatric tumors and differentiate them from GBM. Try not to use glioma, NOS (9380/3) or glioblastoma multiforme code (9440/3) for these cases.
- This is not clearly annotated in the ICD-O-3 Updates – Pediatrics NOTE.

79

Bonus Case/Question #5



- The pons controls many of the body's most vital functions including breathing, heart rate and breathing. DIPG is a very important 'new' histology when there is genetic testing of the neoplasm showing H3 K27M mutation. By making sure our Pediatric Cancer Programs are aware of this new code for "diffuse midline pontine glioma" we can better identify these cases for cancer cluster investigations and can better distinguish them from the NOS glioma cases or the glioblastoma multiforme cases often coded to other brain sites including C71.9…but, we can improve this with increased awareness. Code Primary Site to C71.7 so we can find them.
- There are no specific rules in the Solid Tumor Rules for Malignant Brain & CNS Tumors that instruct registrars when to use the code if no mutation stated - yet. We hope to add this in the future.

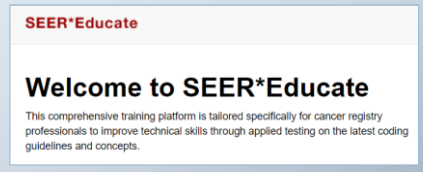
ICDO3.2	Histology	Behavior	Level	Term	Code reference
9385/3	9385	3	Preferred	Diffuse midline glioma, H3 K27M-mutant	(C71. _)
9385/3	9385	3	Related	Diffuse intrinsic pontine glioma, H3 K27M-mutant	(C71.7)

Status	ICD-O-3 Morphology Code	Term	Reportable Y/N
Behavior Code/term	9302/3	Ghost cell odontogenic carcinoma **(C41.0, C41.1)**	Y
Behavior Code/term	9341/3	Clear cell odontogenic carcinoma **(C41.0, C41.1)**	Y
New Term	9382/3	Anaplastic oligoastrocytoma **(C71. _)**	Y
New Term	9382/3	Oligoastrocytoma, NOS **(C71. _)**	Y
New code/term	9385/3	**Diffuse midline glioma, H3 K27M-mutant (C71._)**	Y

80

SEER Coding Drills for Dx Year 2018 Histologies

- SEER*Educate just released on August 30, 2019 - 110 hands-on coding exercises for coding primary site, histology, and behavior and to reinforce the use of 2018 ICD-O-3 Updates/ 2018 Solid Tumor Rules. Most cases show how to use the Solid Tumor Rules with New Codes
- Check personal coding skills and ability to follow the Solid Tumor Rules under the Training Menu/CTR Prep Tests/CTR Prep – Coding Drill – Dx 2018 Histology (Solid Tumors) on the SEER*Educate Website https://educate.fredhutch.org/
  - Colon, Rectosigmoid, and Rectum (10 cases)
  - Cutaneous Melanoma (10 cases)
  - Head & Neck (10 cases)
  - Kidney (10 cases)
  - Lung (20 cases)
  - Malignant CNS and Peripheral Nerves (10 cases)
  - Non-Malignant CNS (10 cases)
  - Urinary (10 cases)



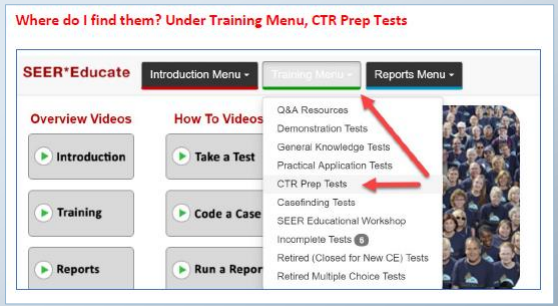
DEMONSTRATE

Don't Forget to Demonstrate the Site

81

150 More SEER Coding Drills for 2018 Histologies

- October 14, 2019 SEER*Educate released another 150 hands-on coding exercises to reinforce the use of the 2018 ICD-O-3 Updates and the 2018 Solid Tumor Rules.
- SEER plans to release 145 more cases in November and another 105 in December.



Log in or sign up at **SEER*Educate** today by visiting https://educate.fredhutch.org/ and **Learn by Doing**!

82

New FCDS Post-Training Survey Tool

- FCDS has developed a new on-line post-training survey tool to better understand how well our state education and training program components (annual meeting, webcasts, abstracting basics course, etc.) are meeting our state cancer registrar training needs. This tool will provide feedback on our individual education and training offerings to meet a new NPCR requirement.
- You will get a notification from Go To Meeting with a link to the survey tool. Please help us to improve our state education program and to evaluate our state-provided education and training tools, programs, webinars, and more.

83