NAACCR
2015-2016
Webinar
Series

Collecting Cancer Data: MP/H

NAACCR 2016-2017 Webinar Series

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Q&A

- Please submit all questions concerning webinar content through the Q&A panel.
- Reminder:
  - If you have participants watching this webinar at your site, please collect their names and emails.
  - We will be distributing a Q&A document in about one week. This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.

Fabulous Prizes

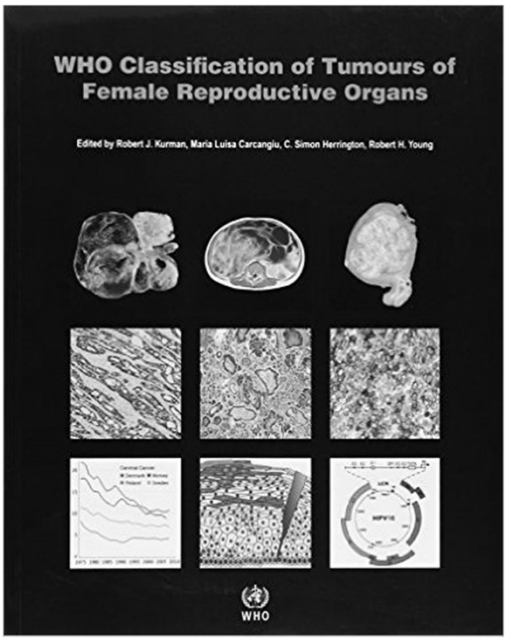
Agenda

- 2018 Update
- Background Rules
- Lung
  - Quiz
- Breast
  - Quiz
- Urinary
  - Quiz
- Case Scenarios

Background for Rules

Major Contributors and References

- World Health Organization (WHO) Classification of Tumors
- Specialty physicians
- Contract pathologist
- MPH Task Force
  - Central registry
  - Hospital registry
- Epidemiologist consult



How WHO and ICD-O Work Together

WHO

- Proposes new codes, terms, synonyms
- Declares codes and terms obsolete

ICD-O

- Implements new codes, terms, synonyms
- Makes codes and terms obsolete

WHO

- Updated more frequently than ICD-O
- Used by pathologists
- Internationally recognized

Specialty Physicians

- Active practice
- Publishes articles
  - Uses data
- AJCC author and/or editor
- Recognized in their specialty

Rules

- Intended to cover 85-90% of cases
- Go to seer.cancer.gov to submit questions for rare cases

General Rules Common Misconceptions

When to Use General Rules

- Apply to all site rules
  - Unless specifically excluded
- Rules NOT used for
  - Reportability OR
  - Staging OR
  - Grade of tumor
    - Includes CNS

Determining Multiple Primaries

- Rules determine multiple primaries
  - Exception: Comparison original slides to subsequent tumor
- Epidemiology
  - Long-term studies incidence, mortality and causation
  - Goal: reducing or eliminating disease

Why Emphasis on Epidemiology

- All DB used for epidemiology
  - In-house physician research
  - National databases
  - International databases
- Basic premise: if data are not collected consistently, they cannot be analyzed

Pop Quiz

- Primary site: right lower lung
- Two nodules, both in RLL
  - Nodule 1: 2.2 cm Pathology: Acinic cell adenocarcinoma
  - Nodule 2: 0.9 cm. Pathology: Adenocarcinoma, NOS, specimen too small, but acinic growth features noted
- Physician states two primaries, because one nodule more aggressive than other. Staged T1b (m)
- How many primaries?

Epidemiology – Long-Term Studies

- Incidence – counting primaries
- Errors caused by
  - Assumptions of new primary
    - When subsequent tumor is staged
    - When multiple tumors are staged (urinary tract)
    - When term "recurrence" is used
    - Difference in physician assessment

Mortality

- Follow rules
  - Count new primary when in situ followed by invasive
    - See specific rules for timing
  - If invasive not abstracted
    - Does not count as incidence (Exceptions: BB, bladder)
    - Mortality attributed to in situ tumor

Default Instructions

Number of Tumors – Which Module

- NEVER count metastatic lesions to determine which module
- "Metastatic lesions" include
  - Tumor deposits regional tissue/organ(s)
  - Distant metastases (separate lesions in distant organ/tissue)
- Disregard microscopic foci or focus same organ
- Multicentric/multifocal – see specific rules

Recurrence

- Physician statement "recurrence" not used to determine MP
  - Two definitions
    - True recurrence of original tumor
    - Had breast cancer before, now has breast cancer again
- Can code recurrence when slides compared (rare)
  - Same primary site
  - Same histology
  - Cannot use when no statement "slides compared"

New Primary VS Same Primary (Recurrence) Site-Specific

- First tumor invasive, subsequent in situ – recurrence
- First tumor in situ, subsequent invasive < 60 days from diagnosis – same primary
- First tumor in situ, subsequent invasive ≥60 days – new primary
- Timing instructions differ by site
  - Example: New tumor > 3 years from initial diagnosis is ALWAYS new primary

Hierarchy

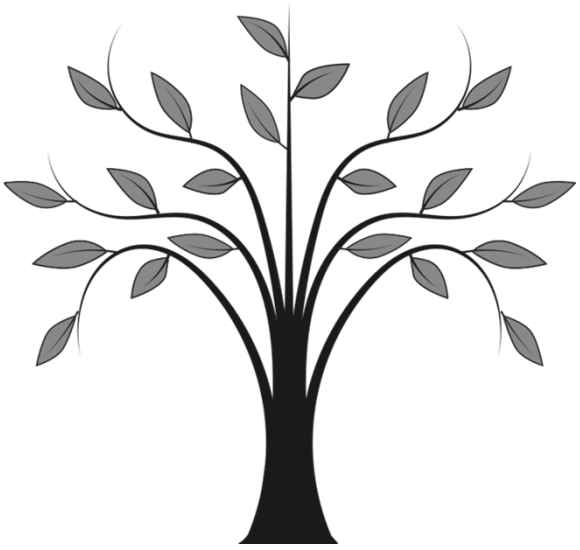
Hierarchical Rules

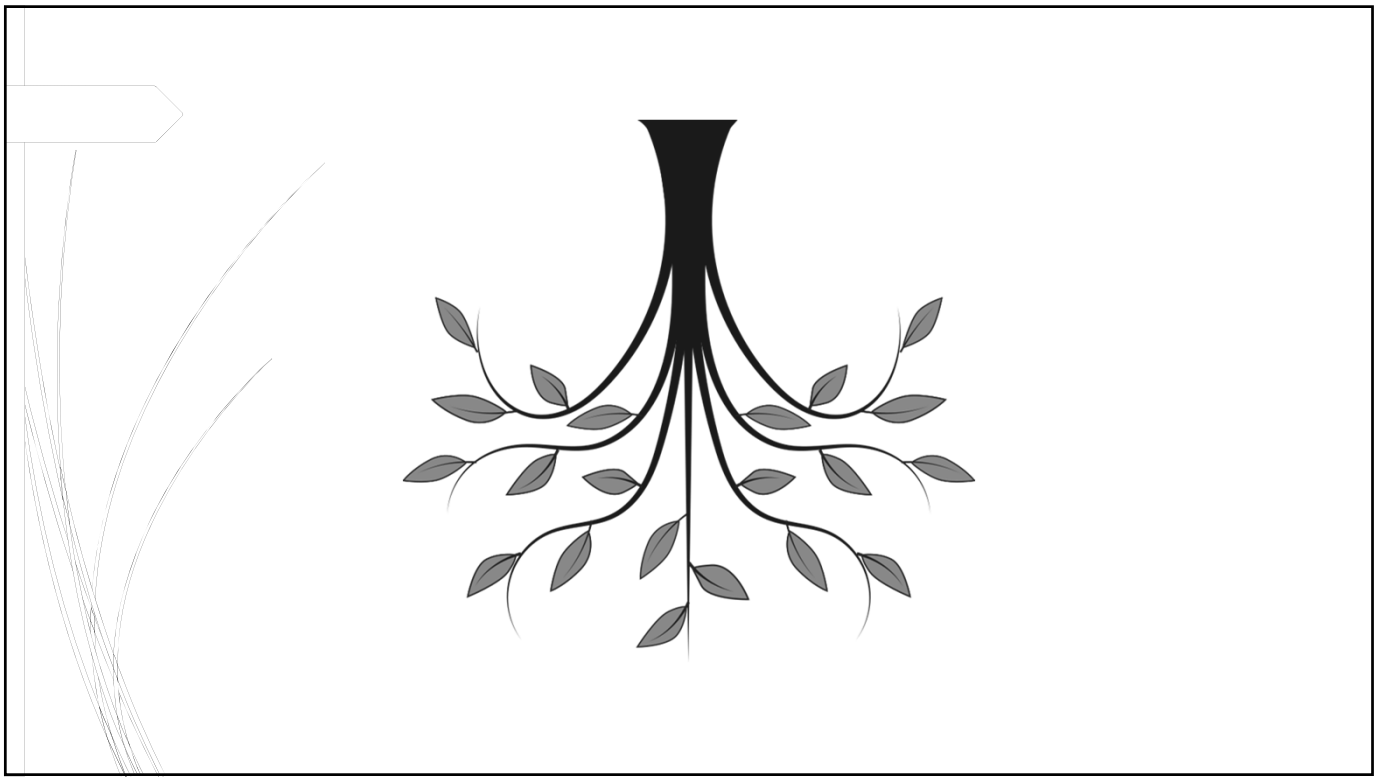
- Use in order
- "Shopping" causes errors
- ONLY use ICD-O histology code to determine
  - MP, histology when other rules do not apply
  - NOS and more specific when not in table
    - ICD-O numerical hierarchy ended with ED 1

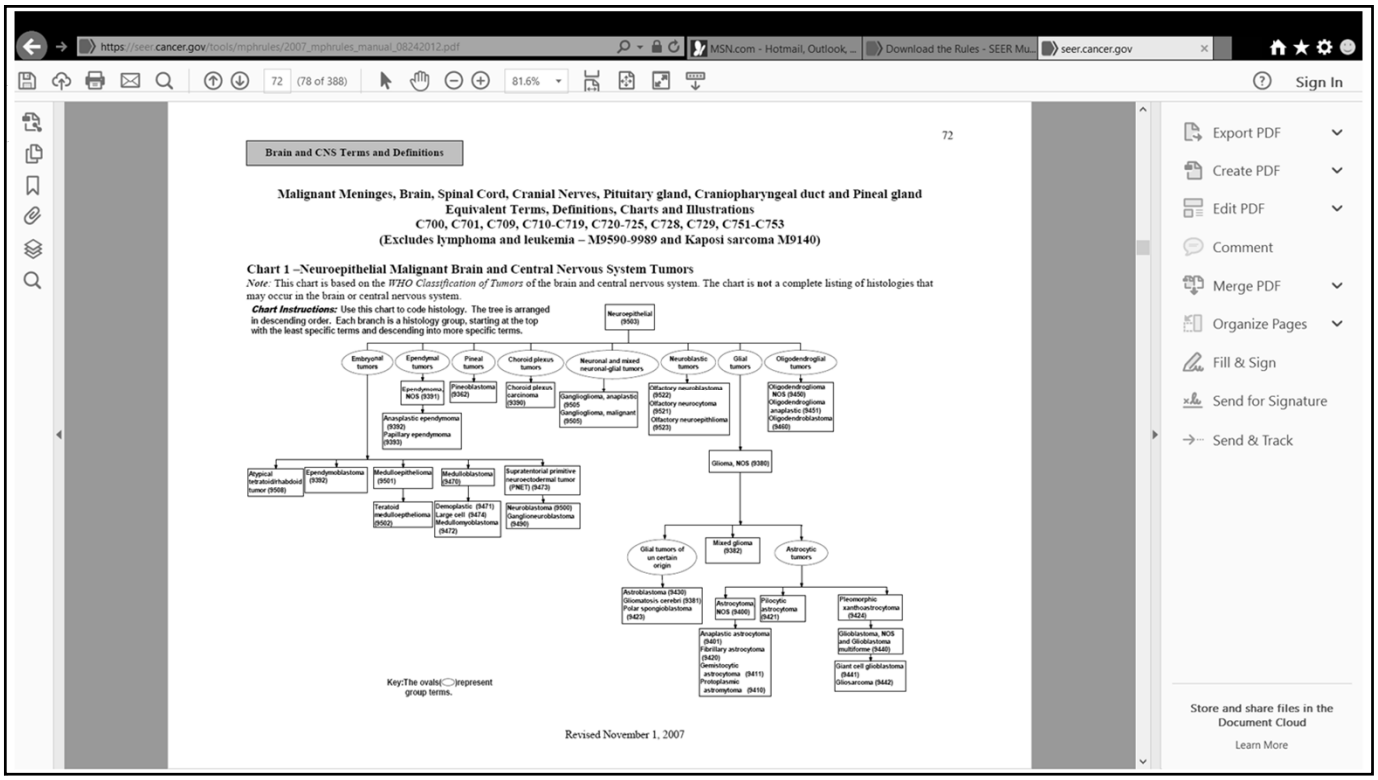
Using Trees (Charts) – Equivalent Terms and Definitions

Example from Malignant CNS Rules

Branches on Chart







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Brain and CNS Terms and Definitions

Malignant Meninges, Brain, Spinal Cord, Cranial Nerves, Pituitary gland, Craniopharyngeal duct and Pineal gland
Equivalent Terms, Definitions, Charts and Illustrations
C700, C701, C709, C710-C719, C720-725, C728, C729, C751-C753
(Excludes lymphoma and leukemia – M9590-9989 and Kaposi sarcoma M9140)

Chart 1 –Neuroepithelial Malignant Brain and Central Nervous System Tumors

Note: This chart is based on the *WHO Classification of Tumors* of the brain and central nervous system. The chart is **not** a complete listing of histologies that may occur in the brain or central nervous system.

Chart Instructions: Use this chart to code histology. The tree is arranged in descending order. Each branch is a histology group, starting at the top with the least specific terms and descending into more specific terms.

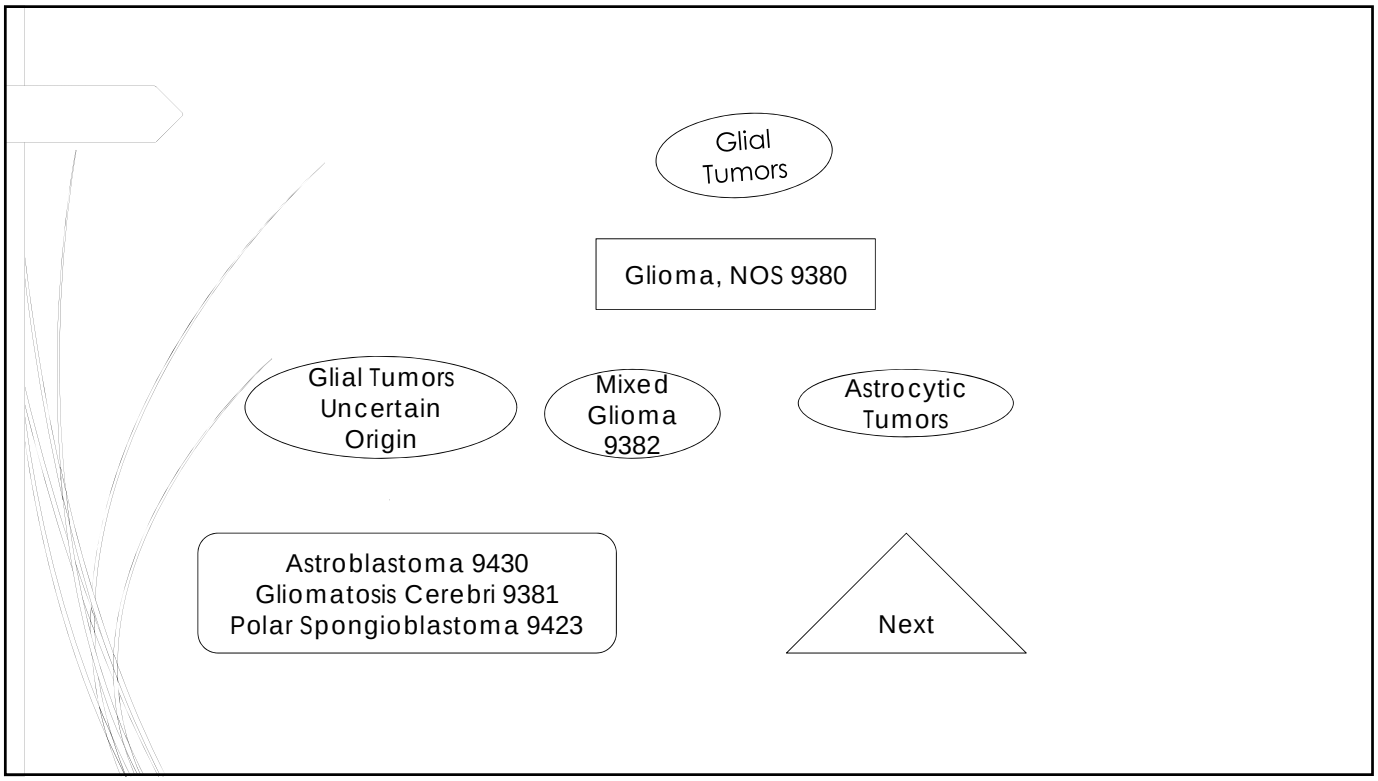
Revised November 1, 2007

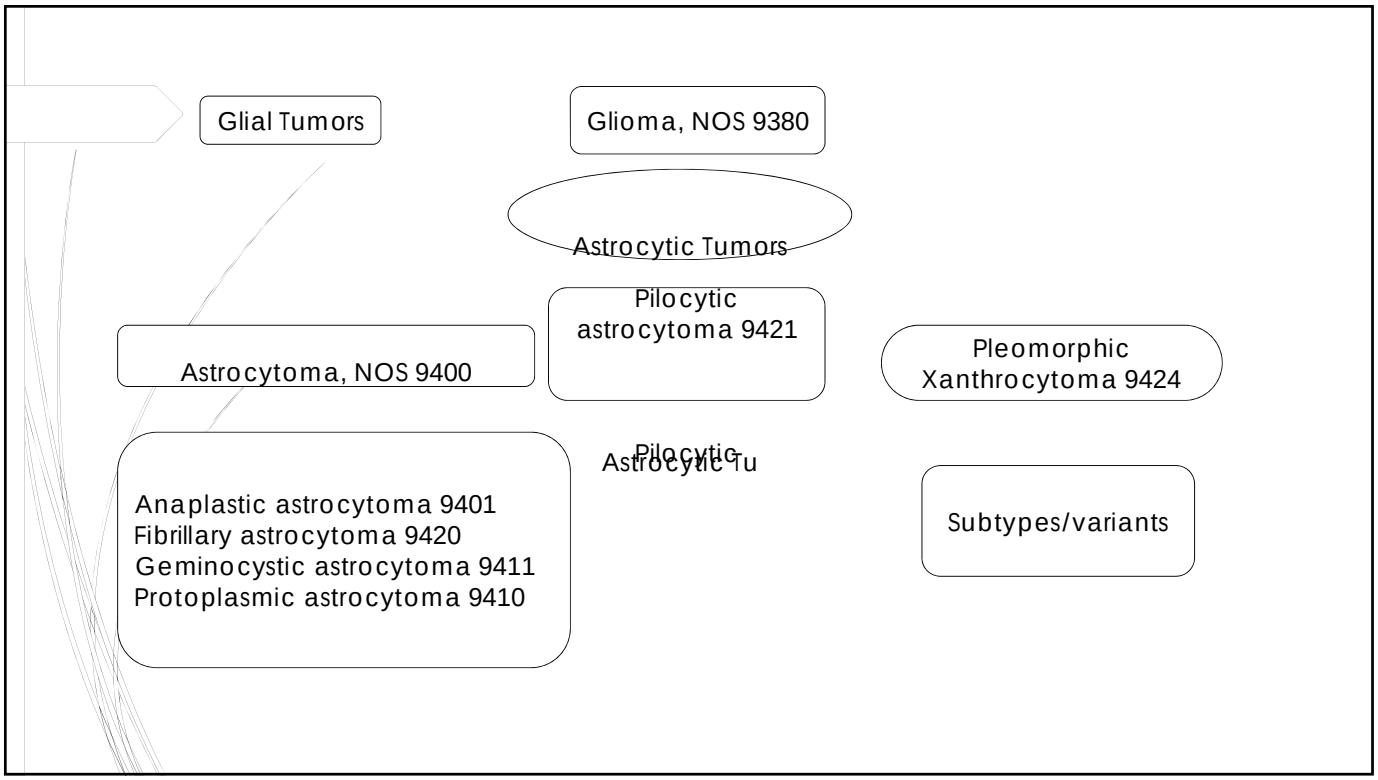
Rules – Single Tumor with Multiple Histologies

- Same branch – code the more specific histology
  - Lowest branch
- Different branches (not common)
  - Combination code when available
  - Code the more aggressive tumor
  - Code majority of tumor when "histology with ___ differentiation"
  - Check with pathologist and/or physician when possible

Rules – Multiple Tumors

- Different branches = multiple primaries
- Same branch = NOS and more specific OR
  - Combination code
  - NOS code (more to follow)


Glial Tumors
Glioma, NOS 9380
Glial Tumors Uncertain Origin
Mixed Glioma 9382
Astrocytic Tumors
Astroblastoma 9430
Gliomatosis Cerebri 9381
Polar Spongioblastoma 9423
Next


Glial Tumors
Glioma, NOS 9380
Astrocytic Tumors
Pilocytic astrocytoma 9421
Astrocytoma, NOS 9400
Pleomorphic Xanthrocytoma 9424
Pilocytic Astrocytic Tu
Anaplastic astrocytoma 9401
Fibrillary astrocytoma 9420
Geminocystic astrocytoma 9411
Protoplasmic astrocytoma 9410
Subtypes/variants

Questions

MPH 2007 Lung

Carol H Johnson BS, CTR (Retired)

Equivalent Terms And Definitions

Table 1: Combination/Mixed Codes for Lung Histologies

Column 1: Equivalent Terms	Column 2: Additional Required Terms	Column 3: ICD-O-3 Term	Column 4: ICD-O-3 Code
Combination at least 2 histologies Column 2	Bronchioalveolar carcinoma	Adenocarcinoma with mixed subtypes	8255
	Clear cell adeno-carcinoma		
	Papillary adeno-carcinoma		

Multiple Primary Rules

M6 (Multiple Tumor Module) Multiple Primaries

- A single tumor in each lung
  - Commonly, metastatic lesions are not single
  - Physicians treat as separate primaries
- Note: If both tumors resected/biopsied use pathology

M7 (Multiple Tumor Module) Multiple Primaries

- Multiple tumors both lungs ICD-O-3 histology codes differ at first Xxxx, second xXxx or third digit xxXx
  - Confirm not metastatic
- Biopsy/resection pathology confirms histology
  - Seldom resection

M8 (Multiple Tumor Module) Multiple Primaries

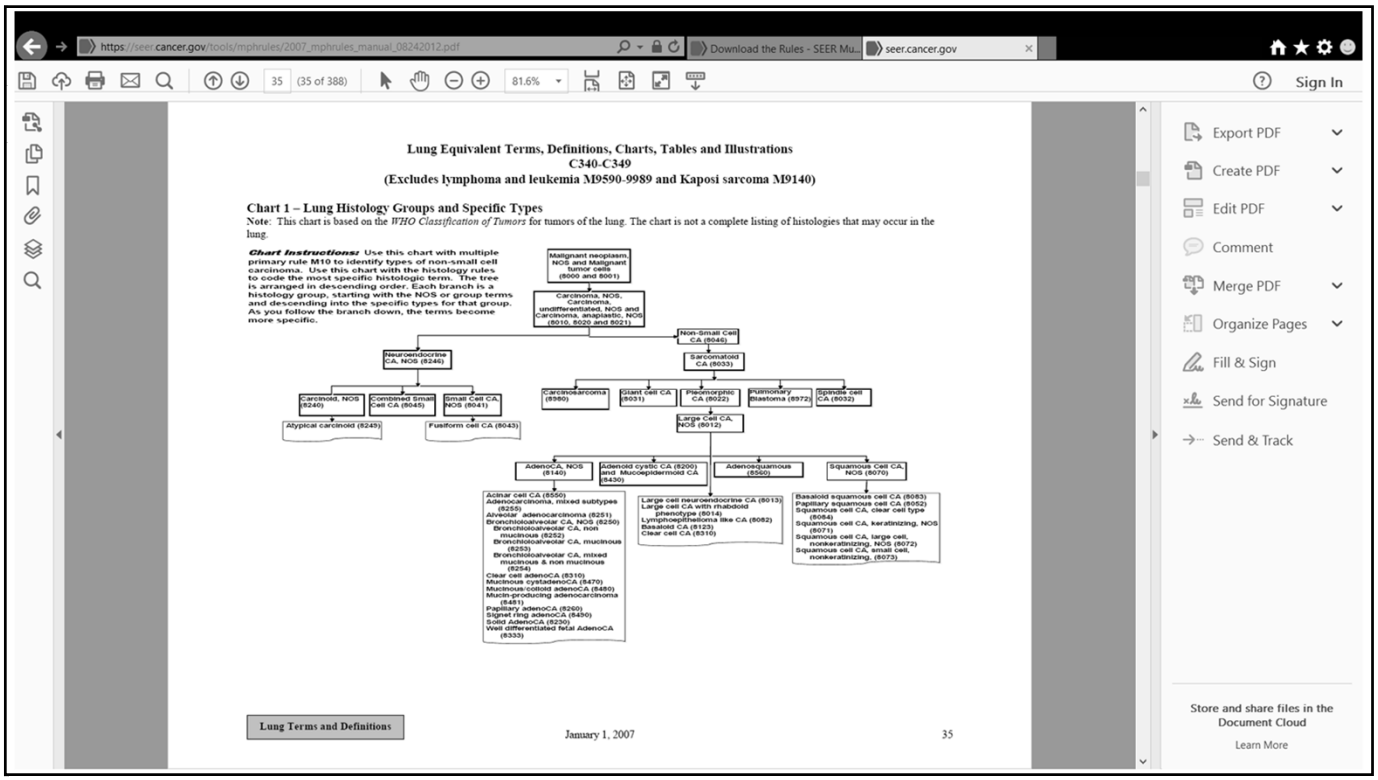
- Tumors diagnosed >3 years apart
  - Patient clinically NED for >3 years
  - Based on epidemiology of tumor recurrence
  - Timing conservative

Pop Quiz

- Primary site: right lower lung
- Two nodules, both in RLL
  - Nodule 1: 2.2 cm Pathology: Acinic cell adenocarcinoma
  - Nodule 2: 0.9 cm. Pathology: Adenocarcinoma, NOS, specimen too small, but acinic growth features noted
- Physician states two primaries, because one nodule more aggressive than other. Staged T1b (m)
- How many primaries?

One Primary

- Use rules, not physician statement/staging
- Rule M10 Tumors with non-small cell carcinoma, NOS (8046) and a more specific non-small cell carcinoma type (Chart 1) are a single primary



Lung Equivalent Terms, Definitions, Charts, Tables and Illustrations
C340-C349
(Excludes lymphoma and leukemia M9590-9989 and Kaposi sarcoma M9140)

Chart 1 – Lung Histology Groups and Specific Types

Note: This chart is based on the *WHO Classification of Tumors* for tumors of the lung. The chart is not a complete listing of histologies that may occur in the lung.

Chart Instructions: Use this chart with multiple primary rule M10 to identify types of non-small cell carcinoma. Use this chart with the histology rules to code the most specific histologic term. The tree is arranged in descending order. Each branch is a histology group, starting with the NOS or group terms and descending into the specific types for that group. As you follow the branch down, the terms become more specific.

Malignant neoplasm, NOS and Malignant tumor cells (8000 and 8001)
Carcinoma, NOS, Carcinoma, undifferentiated, NOS and Carcinoma, anaplastic, NOS (8010, 8020 and 8021)
Non-Small Cell CA (8046)
Neuroendocrine CA, NOS (8246)
Sarcomatoid CA (8033)
Carcinoid, NOS (8240)
Combined Small Cell CA (8045)
Small Cell CA, NOS (8041)
Atypical carcinoid (8249)
Fusiform cell CA (8043)
Carcinosarcoma (8980)
Giant cell CA (8031)
Pleomorphic CA (8022)
Pulmonary Blastoma (8972)
Spindle cell CA (8032)
Large Cell CA, NOS (8012)
AdenoCA, NOS (8140)
Adenoid cystic CA (8200) and Mucoepidermoid CA (8430)
Adenosquamous (8560)
Squamous cell CA, NOS (8070)
Acinar cell CA (8550)
Adenocarcinoma, mixed subtypes (8255)
Alveolar adenocarcinoma (8251)
Bronchioloalveolar CA, NOS (8250)
Bronchioloalveolar CA, non mucinous (8252)
Bronchioloalveolar CA, mucinous (8253)
Bronchioloalveolar CA, mixed mucinous & non mucinous (8254)
Clear cell adenoCA (8310)
Mucinous cystadenoCA (8470)
Mucinous/colloid adenoCA (8480)
Mucin-producing adenocarcinoma (8481)
Papillary adenoCA (8260)
Signet ring adenoCA (8490)
Solid AdenoCA (8230)
Well differentiated fetal AdenoCA (8333)
Large cell neuroendocrine CA (8013)
Large cell CA with rhabdoid phenotype (8014)
Lymphoepithelioma like CA (8082)
Basaloid CA (8123)
Clear cell CA (8310)
Basaloid squamous cell CA (8083)
Papillary squamous cell CA (8052)
Squamous cell CA, clear cell type (8084)
Squamous cell CA, keratinizing, NOS (8071)
Squamous cell CA, large cell, nonkeratinizing, NOS (8072)
Squamous cell CA, small cell, nonkeratinizing, (8073)

Lung Terms and Definitions
January 1, 2007
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Non-small cell CA 8046

Sarcomatoid CA 8033

Pleomorphic CA 8022

Large cell CA 8012

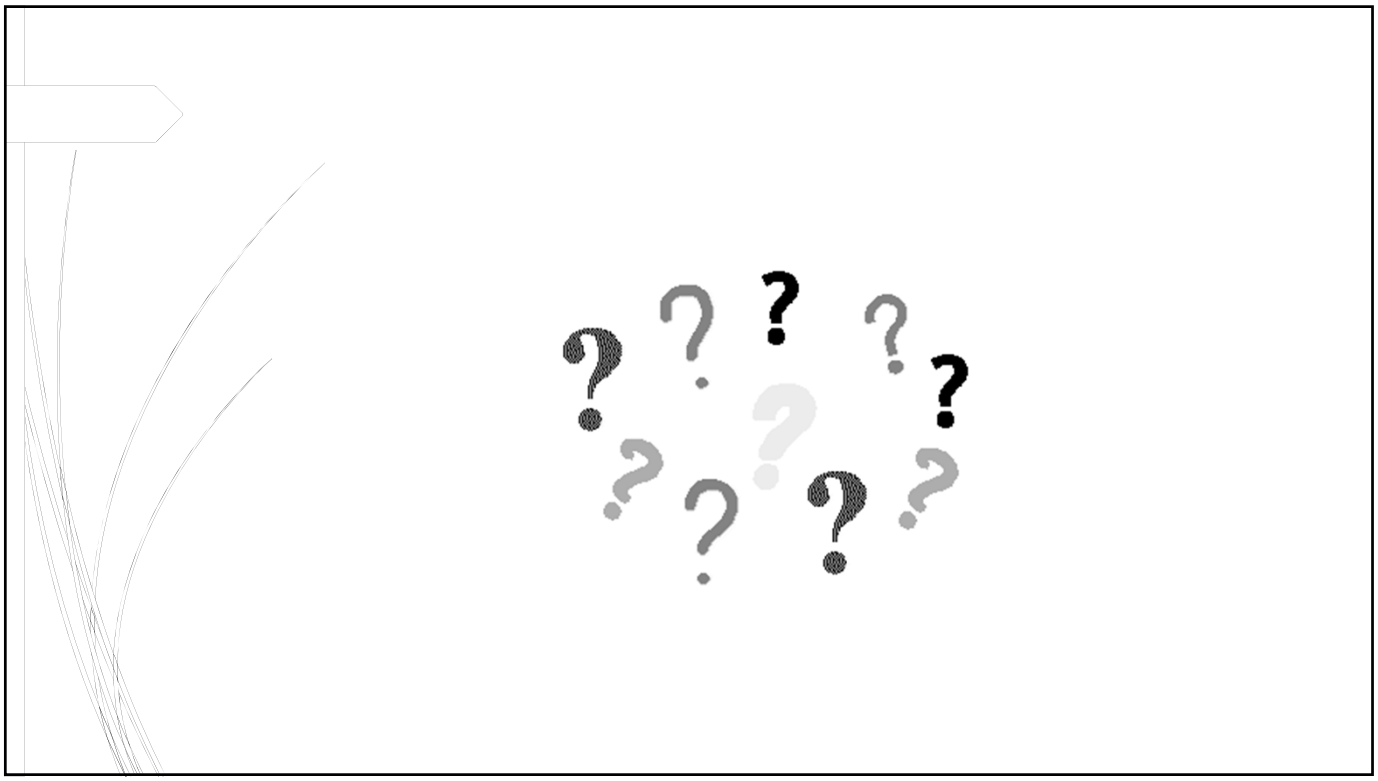
Adenocarcinoma, NOS 8140

Acinar (acinic) cell adenocarcinoma 8550
Multiple other subtypes/variants

Histology Rules

H1 (Single Tumor Module)

- Code the histology documented by the physician when there is no pathology/cytology specimen or the pathology/cytology report is not available
  - No biopsy, resection, or cytology OR
  - Biopsy, resection, or cytology done elsewhere AND copy of report is not on medical record



MPH 2007 Breast

Carol Hahn Johnson BS, CTR (Retired)

Equivalent Terms and Definitions

Tables 1 (Intraductal) and 2 (Invasive)

- Most frequent questions
- Are tables inclusive?
  - Answer: No
- All histologies on Table 1 limited to /2 (all Table 2 limited to /3)
  - Answer: No

Table 3: Combination Codes

Column 1: Required Histology	Column 2: Combined With	Column 3: Combination Term	Column 4: Code
Infiltrating duct AND one or more Column 2	Tubular	Infiltrating duct mixed with other types carcinoma	8523/3
	Apocrine		
	Mucinous		
	Secretory CA (more follows)		

Multiple Primary Rules

M7
Multiple Tumor Module

- Tumors in RT and LT breast multiple primaries
  - Physician may state "bilateral" breast cancer
  - Physician usually stages both tumors
  - Rule applies to all histologies
  - Only exception: Proven metastasis

M8
Multiple Tumor Module

- Invasive following in situ >60 days multiple primary
  - New abstract for invasive
  - Can be in same quadrant/same breast
  - Needed for epidemiology
- Conversely, Invasive following in situ ≤ 60 days single primary
  - Change original abstract to invasive behavior
  - Report change to central registry
- In situ following invasive – same primary

M10
Multiple Tumor Module

- Multiple tumors, lobular and intraductal or ductal single primary
  - May be multiple tumors with both lobular and duct histologies OR
  - Multiple tumors, one or more lobular and one or more duct
- Use duct/lobular or intraductal/lobular combination code

Pop Quiz

- Primary site: RT breast
- Procedure: Lumpectomy
  - Pathology: Two nodules same histology
    - First nodule 1.2 cm HER2nu positive
    - Second nodule no measurements, statement "very small" HER2nu negative
- Physician diagnosis: 2 primaries; one tumor more aggressive
- Multiple Primary Y/N

Answer/Rationale

- Multiple tumors abstracted as a single primary
- No rules allowing use of tumor markers
- Her-2/neu is an oncogene which predicts prognosis and determines treatment
- Part of staging – SSF
- Rule next slide

M13
Multiple Tumors Module

- Tumors that do not meet any of the above criteria are abstracted as a single primary
  - *Note 1:* When an invasive tumor follows an in situ tumor within 60 days, abstract as a single primary
  - *Note 2:* All cases covered by Rule M13 have the same first 3 numbers in ICD-O-3 histology code.

Histology Codes

Modules

- Single Tumor: In Situ Carcinoma Only
- Single Tumor: Invasive and In Situ Carcinoma
- Single Tumor: Invasive Carcinoma Only
- Multiple Tumors Abstracted as a Single Primary
- Start by determining whether single or multiple tumor(s)
  - When single, check pathology to see if in situ, in situ and invasive, or invasive. Go to appropriate module
  - When multiple tumors, go to Multiple Tumors module

All Modules Except Single Tumor: Invasive and In Situ

- First rule tells you what documentation to use when path not available/not done
  - Documented by the physician
    - ***Note 1:*** Priority::
    1. Documentation in the medical record that refers to pathologic or cytologic findings
    2. Physician's reference to type of cancer (histology) in the medical record
    - ***Note 2:*** Code the specific histology when documented.
- After determining which documentation to use, go to next rule

H4
Single Tumor Only: In Situ
Table 3

- 8501/2 (comedocarcinoma, non-infiltrating) when non-infiltrating comedocarcinoma and any other intraductal carcinoma
- Comedo greater chance behavior change

H5, H6
Single Tumor: In Situ
Table 3

- 8522/2 (intraductal and lobular) when combination of in situ lobular and intraductal carcinoma
- 8523/2 (intraductal carcinoma mixed with other types of in situ carcinoma)
  - Combination of intraductal carcinoma and two or more specific intraductal types OR
  - Two or more specific intraductal carcinomas..

H7, H8
Single Tumor: In Situ
Table 3

- 8524/2 (lobular mixed with other types carcinoma) when there is in situ lobular (8520) and any carcinoma <u>other than</u> intraductal
- 8255/2 (adenocarcinoma with mixed subtypes) combination of in situ/non-invasive histologies that <u>does not</u> include either intraductal or lobular

Breast pop quiz

- Breast 1-1-2014 the pt has an rt breast invas ductal ca (8500/3) with neg margins.
- Then 1-1-2016 the pt has a rt breast ca invas lobular ca (8520/3)?
- Is this one or two primaries?

Rule M10 Tumors that are **lobular** (8520) **and** intraductal or **duct** are a single primary. *

- ***Note***: Use Table 1 and Table 2 to identify intraductal and duct carcinomas

MPH 2007
Urinary

Urinary Sites

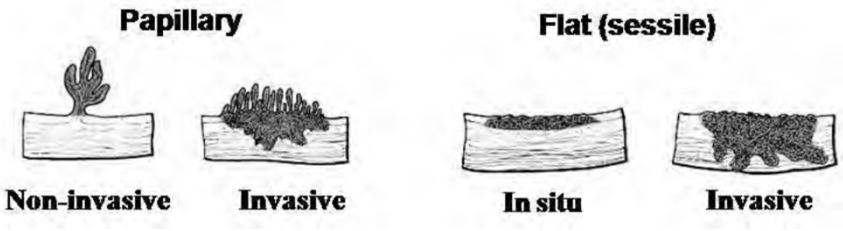
- Renal pelvis, bladder, ureters, urethra all "urinary system"
- Produce, store, and transport urine
- Urothelium term for urinary tract mucosa
- Transitional cell carcinoma most common >90%

Factoid

- One invasive urothelial <u>bladder</u> primary per lifetime
  - If in situ and subsequent invasive new primary
  - If invasive and subsequent in situ same primary (recurrence)
- Urothelial tumors frequently multifocal/multicentric
  - Field effect theory
  - Implantation theory
  - Creates issues coding primary site
- Bladder primaries: 90-95% urothelial CA

Common Error

- Ta: Non-invasive papillary carcinoma
- Tis: Non-invasive flat carcinoma (flat carcinoma in situ, or CIS)
- 70% of patients Ta; 10% with CA in situ (flat)



Papillary and Flat Carcinomas

- Pathology determines behavior /2 or /3
- AJCC two categories for /2 tumors Prognostically different
- Non invasive papillary (pTa) recurrence ≤80%
- Non invasive/flat (pTIS) progression ≤45%

Multiple Primary Rules

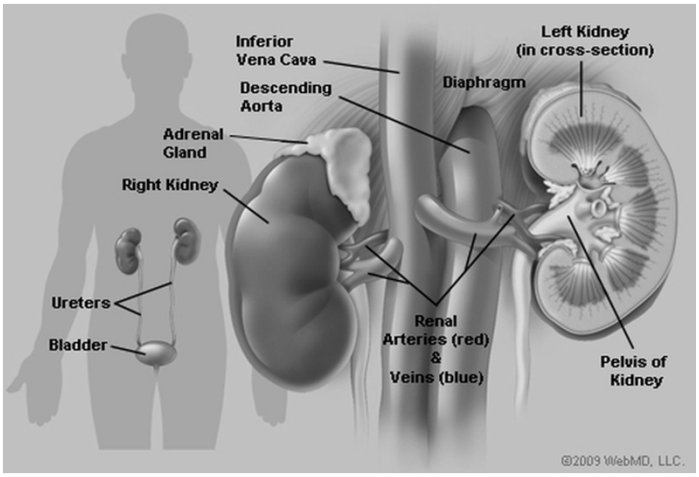
Factoids

- Multiple tumors may be single or multiple primaries
- Multifocal tumors common in urinary tract
- Multifocal: ≥2 tumors in urinary tract
- Do not count metastases when choosing module
  - Microscopic foci or focus within urinary tract
  - Direct extension to regional tissue/organ
  - Regional lymph nodes
  - Distant metastases

M3, M4 No Other Urinary Sites Involved Multiple Primaries

- RT and LT renal pelvis
- RT and LT ureters
  - Separate, non-contiguous tumors

Anatomy



M6, M7

- Single primary combination of any
  - Papillary, transitional cell, papillary transitional cell
- Tumors diagnosed >3 years apart multiple primary
  - Do not use this rule when original tumor is invasive, subsequent tumor in situ

M8
Single primary

- Tumors in ≥2 of following
  - Renal pelvis
  - Ureter
  - Bladder
  - Urethra/prostatic urethra

Epi Publication
Bladder Most Common Urothelial Site

- Bladder cancer 9th most common in world; 430,000 new cases diagnosed US in 2012
- 1985-2005, number of new bladder cancers in US ↑ over 50 percent
- http://www.uptodate.com/contents/epidemiology-and-risk-factors-of-urothelial-transitional-cell-carcinoma-of-the-bladder

M6
Multiple Primary Module

- **Rule M6** Bladder tumors with any **combination** of the following histologies: **papillary carcinoma** (8050), **transitional cell carcinoma** (8120-8124), **or papillary transitional cell carcinoma** (8130-8131), are a single primary
- Papillary is appearance not histology

Rules are Hierarchical

- **Rule M7 Tumors diagnosed more than three (3) years apart are multiple primaries**
- **Rule M8 Urothelial tumors in two or more of the following sites are a single primary (See Table 1)**
  - **Renal pelvis (C659)**
  - **Ureter(C669)**
  - **Bladder (C670-C679)**
  - **Urethra /prostatic urethra (C680)**

Pop Quiz

- 9/20/16 Left ureter & kidney resection: Invasive transitional cell carcinoma, 1 cm, left ureter
- 2/5/17 Excision of lesion right ureter: Noninvasive papillary transitional cell carcinoma, 6 mm.
- How many primary tumors does the patient have, and what M rule was used to determine that?

Coming Up….

- Collecting Cancer Data: Liver and Bile Ducts
  – 6/1/2017
- Clinical Outcomes and Quality Improvement: Dashboard Drivers
  – 7/13/17

And Our Fabulous Prizes Go To…

CE Certificate Quiz Survey

- Phrase

  Hierarchy
- Link

  http://www.surveygizmo.com/s3/3536703/MP-H-2017

Thank You!

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