

Solid Tumor Rules

Effective with Cases Diagnosed 1/1/2018 and Forward

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Solid Tumor Rules
Preface
(Excludes lymphoma and leukemia M9590 – M9992)

In Appreciation

NCI SEER gratefully acknowledges the dedicated work of Dr. Charles Platz who has been with the project since the inception of the 2007 Multiple Primary and Histology Coding Rules. We appreciate the support he continues to provide for the Solid Tumor Rules. The quality of the Solid Tumor Rules directly relates to his commitment.

NCI SEER would also like to acknowledge the Solid Tumor Work Group who provided input on the manual. Their contributions are greatly appreciated.

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The Solid Tumor Rules

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Preface

The 2007 Multiple Primary and Histology (MPH) Coding Rules have been revised and are now referred to as *the Solid Tumor Rules*. The 2007 Multiple Primary and Histology Coding Rules were developed to promote consistent and standardized coding by cancer registrars and the Solid Tumor Rules continue to provide coding instructions to ensure accurate data collection. It is important to note that eight site specific coding modules were updated for 2018. These site groups are: Benign Brain, Malignant CNS, Breast, Colon, Lung, Head & Neck, Kidney, and Urinary. Cutaneous melanoma was updated for 2021, and Other Sites is planned to be updated for 2023 (the 2007 MPH Other Sites applies to cases diagnosed 2007-2022).

The primary reference for both the 2007 MPH rules and Solid Tumor Rules are the WHO Classification of Tumors books (blue books). Since 2007, WHO has continued publishing updates to the WHO Classification of Tumors series. As part of each new edition, subject matter experts review current literature and make recommendations regarding current practices in histology terminology and diagnosis. The College of American Pathologists (CAP) has adopted the new histologic terminology and diagnosis criteria into the site-specific 2018 CAP Protocols. The Solid Tumors Rules have been revised to reflect current CAP and WHO practices.

As part of the revisions to the 2007 MPH rules, the editors and Solid Tumor Committee reviewed issues and questions NCI SEER received since the implementation of the MPH rules. These questions provided valuable information as to what clarifications were needed in the form of additional rules, tables, examples, and notes.

The Solid Tumor Committee has members who represent all the standard setters including NCI SEER, American College of Surgeons (ACoS), Commission on Cancer (CoC), American Joint Commission on Cancer (AJCC), the Centers for Disease Control and Prevention (CDC), National Program of Cancer Registries (NPCR), North American Association of Central Cancer Registries (NAACCR), the Canadian Cancer Registry (CCR), and central and hospital cancer registries.

Physician guidance by specialty pathologists and clinicians was integral to the review and revision process. Regular consultation with the editors of the WHO Classification of Tumors series and AJCC physicians ensured that the new rules accurately reflect the editors' intent and purpose.

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What You Need to Know About the Solid Tumor Rules

There are specific instructions preceding each set of histology rules that define terms which may be used to code histology as well as terms which may not be used to code histology. These changes are in accordance with current WHO and CAP guidelines.

Eight site groups were revised for 2018. The Solid Tumor General Instructions apply to the revised sites listed below:

- Head & Neck
- Colon (includes rectosigmoid and rectum for cases diagnosed 1/1/2018 forward)
- Lung
- Breast
- Kidney
- Urinary sites
- Non-malignant CNS
- Malignant CNS and Peripheral Nerves

Cutaneous Melanoma was updated for 2021. The Solid Tumor General Instructions apply to cutaneous melanoma cases diagnosed January 1, 2021 and forward.

The 2007 Multiple Primary & Histology rules and the 2007 General Instructions are to be used for cases diagnosed 1/1/2007 to 12/31/2022 for the following site group:

- Other Sites
 - Primary sites excluded are:
 - Rectosigmoid and rectum which are included in the Solid Tumor Colon rules
 - Peripheral nerves which are included in the Solid Tumor Malignant Brain rules
 - Other Sites rules will be revised for 2023 implementation. The Solid Tumor Task Force has identified the need to expand the rules to include GYN, soft tissue, thyroid as well as other site-specific solid tumors

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SUBMITTING QUESTIONS

Submit technical questions and suggestions related to this manual to [Ask a SEER Registrar](#) on the SEER website. SEER regions may also submit technical questions to NCI SEER inquiry system using the web-based [SINQ system](#). When submitting questions, make sure you select the correct category (2007 MPH rules or 2018 Solid Tumor Rules) AND **always include primary site and diagnosis year.**

General Equivalent or Equal Terms

These terms can be used interchangeably:

- And; with
Note: “And” and “with” are used as synonyms when **describing multiple histologies** within a **single tumor**.
- Adenocarcinoma; glandular carcinoma; carcinoma
- De novo; new tumor; frank (obsolete term)
- Multicentric; multifocal
- Simultaneous; synchronous; at the same time; prior to first course treatment
- Topography; site code
- Tumor; mass; tumor mass; lesion; neoplasm; nodule
 - The terms tumor, mass, tumor mass, lesion, neoplasm and nodule are **not** used in a **standard manner** in clinical diagnoses, scans, or consults. **Disregard** the terms unless there is a **physician’s statement** that the term is **malignant/cancer**
 - These terms are used **ONLY** to determine multiple primaries
 - **Do not** use these terms for casefinding or determining reportability
- Type; subtype; variant

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How to Navigate the Solid Tumor Rule Modules

The PDFs must be opened in Adobe Reader for complete functionality of content controls. If the PDF document opens in your browser by default, contact your IT department to change the settings for your browser.

The following functions will help you maneuver within site groups.

1. **Navigating between hyperlinks:** When you use a hyperlink to go to another place in the rules, use the PREVIOUS VIEW button to return to your starting point. For example, a hyperlink in the Equivalent Terms and Definitions sends you to the [Histology Rules](#). When you are finished with the histology rules, click the PREVIOUS VIEW button to return to the location of the hyperlink in the Equivalent Terms and Definitions.
Note 1: **To enable this button**, right click on the toolbar, select Page Navigation and click Previous View. A left-pointing arrow will appear on the toolbar.
Note 2: If you scroll through multiple pages after using a hyperlink, the Previous View button returns to the most recently viewed page. This means that you must click the Previous View button **multiple times** to return to your starting point.
2. **Bookmarks:** In the left panel, use the bookmarks to quickly jump between sections and subsections.
 - A. Click the [+] to expand a bookmark level, showing all of the sub-levels.
 - B. Click the [-] to collapse a bookmark level, showing a main level.
3. **Footer links:** Alternatively, there are links in the footer of every page that go to the first page of other sections within a site group.
4. **The Search Function:** Pressing CTRL + F will display a search box. Enter the desired term in the search box and press ENTER or NEXT. When there are multiple occurrences of the term:
 - A. Use the NEXT button to view consecutive occurrences of the term.
 - B. Use the PREVIOUS button go back to the most recently viewed term.
5. **Adobe Reader/Acrobat Updates:** Be sure to keep your version of Adobe up to date. The above functions may not work on outdated versions. You may need to consult your IT department to obtain the latest versions.
6. For full performance on mobile operating systems, it is recommended that you download the free Adobe Reader app from the Apple App Store or Google Play Store.

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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 1/1/2021 forward:
 - Cutaneous Melanoma
5. Use the following site-specific rules for tumors diagnosed 1/1/2007 through 12/31/2022:
 - Other Sites (not updated for 2018) for solid tumors which occur in primary sites not covered by the site-specific rules.
6. 2007 MPH Rules, 2018 Solid Tumor Rules, and 2021 Cutaneous Melanoma rules are used based on **date of diagnosis**. See the site-specific rules for instruction on which rules to use.
 - 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
 - A melanoma diagnosed before 1/1/2021 and a subsequent melanoma diagnosed 1/1/2021 or later: Use the 2021 Cutaneous Melanoma Rules
7. 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 #7B.

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- iv. If multiple primaries, follow the priority order in #7B 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
- 8. The Solid Tumor Rules are available in text format.
- 9. **Notes** and **examples** are included with some of the rules to highlight key points or to add clarity to the rules.
- 10. Rules are in **hierarchical** order within each module. Use the first rule that applies and

STOP

How to Use the Equivalent Terms and Definitions

The Equivalent Terms and Definitions contain the following:

- Changes from the 2007 Multiple Primary and Histology Rules
- Equivalent and equal terms
- Terms that are not equivalent or equal
- Tables for coding
 - Primary site codes
 - Combination histologies
 - Reportable histologies and subtypes/variants
 - Not reportable histologies
 - Paired sites
- Illustrations

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Multiple Primary Rules Do NOT Apply to Tumors Described as Metastases

Each Multiple Primary Rule section begins with a note that reads, “These rules are **NOT** used for tumor(s) described as metastases.” This means that a tumor in a **metastatic site** is **not counted** when deciding which module to use in the Multiple Primary Rules (**Unknown if Single or Multiple Tumors, Single Tumor or Multiple Tumors**).

How to Use the Multiple Primary Rules

1. To choose the appropriate module (Unknown if Single or Multiple Tumors, Single Tumor, Multiple Tumors), determine the **number of tumors**.
 - A. Do not count **metastatic** lesions when determining which module to use.
 - B. When the number of tumors is **unknown/not documented**, use the “Unknown if Single or Multiple Tumors” module.
 - i. When there is a tumor or tumors with separate microscopic foci, ignore the microscopic foci.
 - C. When the patient has a **single tumor**, use the “Single Tumor” module.
 - D. When the patient has **multiple tumors**, use the “Multiple Tumors” module.
2. When the rules return a single primary, prepare one abstract.
3. When the rules return multiple primaries, prepare two or more abstracts.
4. For those sites/histologies which have recognized **biomarkers**, the biomarkers frequently identify the histologic type. Currently, there are clinical trials being conducted to determine whether these biomarkers can be used to identify multiple primaries. Follow the Multiple Primary Rules; do not code multiple primaries based on biomarkers.
5. Do not use physician staging to determine multiple primaries.

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Timing Rules

Each Solid Tumor site group includes timing rules in the Multiple Primary Rules. It is important to remember that timing rules differ by site. Examples of timing rules include:

- Abstract **multiple primaries** when the patient has a subsequent tumor after being **clinically disease-free** for **greater than X years** after the original diagnosis or last recurrence.
- Abstract a **single primary** (the invasive) when an **invasive** tumor is diagnosed **less than or equal to 60 days after** an **in-situ** tumor

One year = 365 days

Example: A tumor diagnosed 1/1/2018 and second tumor diagnosed 1/1/2019 occur exactly one year apart.

Less than one year = Less than 365 days

More than one year = 366 days or more

Example: A tumor diagnosed 1/1/2018 and second tumor diagnosed 1/2/2019 occur more than one year apart.

- **Clinically disease-free** means that there was **no evidence** of recurrence on follow-up.
- When there is a recurrence less than or equal to X years of diagnosis, the “**clock**” starts over. The time interval is calculated from the **date of last recurrence**. In other words, the patient must have been disease-free for greater than X years from the date of the last recurrence.
- When it is **unknown/not documented** whether the patient had a recurrence, default to **date of diagnosis** to compute the time interval.
- Use the Multiple Primary Rules as written to determine whether a subsequent tumor is a new primary or a recurrence. The **ONLY exception** is when a **pathologist compares slides** from the subsequent tumor to the “original” tumor and documents the subsequent tumor is a recurrence of the previous primary. Never code multiple primaries based only on a physician’s statement of “recurrence” or “recurrent”.
- No evidence of disease (NED) means complete response to treatment.

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Histologic Type ICD-O-3

Item Length: 4
NAACCR Item #: 522
NAACCR Name: Histologic Type ICD-O-3

The data item Histologic Type ICD-O-3 describes the microscopic composition of cells and/or tissue for a specific primary. The tumor type or histology is a basis for staging and determination of treatment options. Histology affects treatment decisions, prognosis and course of the disease.

The *International Classification of Diseases for Oncology*, Third Edition (ICD-O-3) is the standard reference for histology codes for tumors diagnosed in 2001 and later. Do not record the ‘M’ that precedes the histology code. See sections *Coding Guidelines for Topography and Morphology* and *Summary of Principal Rules for Using the ICD-O*, Third Edition for guidance in using the ICD-O-3.

Important Information for Coding Histologic Type for Cases Diagnosed 1/1/2018 Forward

The North American Association of Central Registries (NAACCR) have released the 2018 Guidelines for ICD-O-3 Histology Code and Behavior Update effective for cases diagnosed 1/1/2018 forward, 2021 Guidelines for ICD-O-3 Histology Code and Behavior Update, effective for cases diagnosed 1/1/2021 forward, and 2022 Guidelines for ICD-O-3.2 Histology Code and Behavior Update, effective for cases diagnosed 1/1/2022 forward. The updates include:

- New ICD-O codes
- Changes in behaviors for existing ICD-O codes
- New preferred terminology

The Solid Tumor Editors recommend coding histology using:

- The Solid Tumor Rules
- The 2021 Cutaneous Melanoma Solid Tumor Rules
- Updated ICD-O histology codes and terms which can be found at: <https://seer.cancer.gov/icd-o-3/>
- The ICD-O-3.2

When a histology code cannot be identified using the above recommendations, submit a question to [Ask a SEER Registrar](#).

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How to Use the Histology Rules

Note 1: Do not use these rules to determine case reportability.

Note 2: Refer to the [How to Use the Solid Tumor Rules](#) for instructions on the order in which to use the rules.

1. Rules are divided into two sections: Single Tumor and Multiple Tumors Abstracted as a Single Primary
 - A. Each section is a complete set of rules.
 - B. Within each section, the rules are hierarchical. Use the first rule that applies and **STOP**. Do not continue through the rules.
2. Code the histology diagnosis prior to **neoadjuvant therapy**. Neoadjuvant therapy can change the histological profile of the tumor.
See site-specific modules for exceptions to this rule.
3. Code the histology assigned by the physician. **Do not change histology** in order to make the case applicable for **staging**.
4. A list of terms which can be used and terms which cannot be used to code histology precede each set of histology rules.
5. Code a histology when described by ambiguous terminology **ONLY** when:
 - Histology is clinically confirmed by a physician (attending, pathologist, oncologist, etc.)
 - Patient is treated for the histology described by an ambiguous term
 - Case is accessioned (added to your database) based on a single histology described by ambiguous terminology and no other histology information is available/documented

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.

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Priority Order for Using Documentation to Code Histology

For each site, priorities include tissue/histology, cytology, radiography/scans, and physician diagnoses, and biomarkers. **You must use the priority order that precedes the histology rules for each site.**

- Priority order will differ by site. Tissue pathology (and/or biomarkers, if applicable) always takes precedence.
- The specific types of radiography/scans also differ by site.

Which document to use when there is conflicting information between the final diagnosis, synoptic report, or CAP protocol:

When there are discrepancies between the final diagnosis and synoptic report, use the document that provides the more specific histology. This will likely be found in the synoptic report. The CAP Protocol should be used only when a final diagnosis or synoptic report are not available. Definitions for CAP Protocol, final diagnosis, and synoptic report can be found in the Definitions section.

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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.

CAP Protocol: The CAP Cancer Reporting Protocols provide guidelines for collecting the essential data elements for complete reporting of malignant tumors and optimal patient care. The protocol is a check list which allows the pathologist to note their observations while reviewing the slides and/or gross specimen. CAP Protocols include all relative data elements including site, surgical procedure, tumor size, histology, grade, margins, lymph node status, and staging along with other site specific elements. The protocols are multiple pages.

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.

Final Diagnosis: The final diagnosis is found in the pathology report. The findings from the CAP Protocol are consolidated into paragraph format.

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 group of cells that can be **seen only by a microscope**. The cells are noticeably different from the surrounding tissue either by their appearance, chemical stain, or other testing.

Laterality: Indication of which side of a **paired organ/site** a tumor is located. (See Paired organ/site)

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Multiple primaries: More than one reportable case.

NED: Acronym for “no evidence of disease”; disease free

Non-contiguous: Not touching along the boundary; not being in actual contact

Overlapping tumor: A single tumor which has spread from the primary site to adjacent organs or tissue. Adjacent organs/tissue are next to each other.

Paired organ/site: There are two organs, one on the left side of the body and one on the right side of the body. (See Laterality)

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”.

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Synoptic Report: All core and conditionally required data elements outlined on the surgical case summary from the cancer protocol must be displayed in synoptic report format. Synoptic format is defined as:

- Data element: followed by its answer (response).
- The data element should be represented in the report as it is listed in the case summary. The response for any data element may be modified from those listed in the case summary, including “Cannot be determined” if appropriate.
- Each diagnostic parameter pair (Data element: Response) is listed on a separate line or in a tabular format to achieve visual separation. The following exceptions are allowed to be listed on one line:
 - Anatomic site or specimen, laterality, and procedure
 - Pathologic Stage Classification (pTNM) elements
 - Negative margins, as long as all negative margins are specifically enumerated where applicable
- The synoptic portion of the report can appear in the diagnosis section of the pathology report, at the end of the report or in a separate section, but all Data element: Responses must be listed together in one location

Unilateral: Relating to one side of the body or one side of a body structure

WHO/IARC: The International Agency for Research on Cancer (IARC) is a specialized cancer agency at the World Health Organization (WHO). WHO’s primary role is to direct international health within the United Nations system and to lead partners in global health responses. IARC is responsible for the WHO Classification of Tumours, also known as the Blue Books.