## CANCER INFORMATION

### DATE OF INITIAL DIAGNOSIS (NAACCR Item #390) (FORDS pgs. 89–90; SEER pgs. 65–68)

**Definition**
The date of initial diagnosis is the earliest date this primary cancer is diagnosed by a recognized medical practitioner, regardless of whether the diagnosis was made at the reporting facility or elsewhere.

**Explanation**
The date of initial diagnosis is essential in the analysis of staging and treatment of the cancer, for epidemiology purposes, and for outcomes analysis.

**Coding Instructions**

1. Date format is MMDDCCYY. The first and second digits are the month, the third and fourth digits are the day, the fifth and sixth digits are the century and the seventh and eighth digits are the year.

2. The initial diagnosis date may be from a clinical diagnosis, for example, when a radiologist views a chest x-ray and the diagnosis is lung carcinoma. If later confirmed by a pathology specimen, the diagnosis date remains the date of the initial clinical diagnosis

3. The date of diagnosis based on a pathology report should be the date the specimen was taken, not the date the pathology report was created.

4. Refer to the *List of Ambiguous Terms* on page 27 to aid in determining reportability for cases diagnosed prior to 2007. For cases diagnosed on or after 1/1/2007, refer to the list of ambiguous terms in Appendix O.

5. If a recognized medical practitioner states that, in retrospect, the patient had cancer at an earlier date, record the date of diagnosis as the earlier date. If later documentation shows the diagnosis was an earlier date, record the earlier date. Check with the TCR regional office for the appropriate procedure if this case has already been submitted to the TCR.

6. For autopsy-only and death-certificate only cases the date of initial diagnosis will be the date of death.

7. Positive tumor markers alone are not diagnostic of cancer. Use the date of clinical, positive histologic or positive cytologic confirmation as the date of diagnosis. Positive tumor markers alone are never used for case ascertainment.

8. Suspicious cytology alone is not diagnostic of cancer. Use the date of clinical, positive histologic or positive cytologic confirmation as the date of diagnosis. Suspicious cytology alone is never

used for case ascertainment.

9. If a recognized medical practitioner states that, in retrospect, the patient had cancer at an earlier date, code the date of diagnosis as the earlier date.

10. If the initial pathology slides are reviewed and the reviewing pathologist documents cancer, code the diagnosis date as the date the original slides were made.

**Examples:**

a. The patient has an excision of a benign fibrous histiocytoma in January 2005. Six months later, a wide re-excision was positive for malignant fibrous histiocytoma. The pathologist reviews the original slides and documents that the previous tumor (benign fibrous histiocytoma) was malignant. Code the diagnosis date as January 2005.

   Do not back date if there is no review of previous slides with a revised physician statement of diagnosis of cancer or reportable tumor.

b. The patient had a total hysterectomy and bilateral salpingo oophorectomy (BSO) in June 2005 with pathology diagnosis of papillary cystadenoma of the ovaries. In December 2005 the patient is diagnosed with widespread metastatic papillary cystadenocarcinoma. The slides from June 2005 are not reviewed and there is no physician statement saying the previous tumor was malignant. The date of initial diagnosis is December 2005.

**In the absence of an exact date of initial diagnosis, record the best approximation.** If the year is known and the month and day are not known, record 9's for the month and day and record the year of diagnosis, for example, 99992005. Document in the final diagnosis field "Date of DX Unknown" along with the primary site, histology and behavior information.

> ***Note:*** *Every resource available at the reporting facility must be reviewed in order to determine the date of diagnosis.*

For vague dates, estimate the date of diagnosis for month and year. An approximate date is preferable to an unknown date of diagnosis. Refer to the table and examples on the next page.

Code the month and year of admission when there is no basis for estimation.

**Example:**

Patient admitted to your facility on April 26, 2006. Date of diagnosis is unknown. Code the date of diagnosis as 04992006 and document in the final diagnosis field "Date of DX Unknown."

***Note:*** *Estimating both the month and year: Use whatever information is available to best estimate the month and year of diagnosis.*

| DOCUMENTATION | DATE CODE/DESCRIPTION |
|---|---|
| Spring | Use April (04) for the month |
| Summer | Use July (07) for the month |
| Fall | Use October (10) for the month |
| Winter | Determine if this means the beginning or the end of the year. Use December (12) or January (01) for the month as determined. |
| Early in Year | Use January (01) for the month |
| Middle of Year | Use July (07) for the month |
| Late in Year | Use December (12) for the month |
| Recently | Use the month and year of admission and unknown day (99) for the day. If patient was admitted during the first week of a month, use the previous month. |
| Several Months Ago | If the patient was not previously treated or if first course treatment started elsewhere was continued at the reporting facility, assume the case was first diagnosed three months before admission with day unknown. |
| A Couple of Years | Code to two years earlier |
| A Few Years | Code to three years earlier |

**Examples:**

a. A patient was admitted to your facility on January 15, 2006. The History and Physical states the patient has prostate carcinoma diagnosed approximately two months ago. Record the date of diagnosis as 11992005.

b. A patient was admitted to your facility on September 10, 2005. The History and Physical states the patient has bone and brain metastasis from malignant melanoma diagnosed in the fall, four years ago. Record the date of diagnosis as 10992001.

c. On March 12, 2006, a mammogram reveals a mass in the upper outer quadrant of the patient's right breast. The radiologist's impression states: compatible with carcinoma. On March 20, 2006, the patient has an excisional breast biopsy that confirms infiltrating ductal carcinoma. Record the date of diagnosis as 03122006.

***Note:** Remember to check with the TCR health service regional office regarding the appropriate procedure to follow when there is updated information on an abstract already submitted to the TCR. **Do NOT resubmit the abstract**. These cases will result in duplicate records and require manual resolution.*

## MORPHOLOGY AND BEHAVIOR (NAACCR Item #522, #523) (FORDS pgs. 93–94; SEER pgs. 83–90) (ICD-O-3)

### Description

Identifies the microscopic structure of cells and the behavior of the tumor being reported. For all cases diagnosed prior to January 01, 2001, the International Classification of Diseases for Oncology, 2nd Edition (IDC-0-2) **must** be used.

### Explanation

The histological (morphology) type helps to determine staging and treatment options. It also assists in determining the disease course and prognosis, and in identifying multiple primaries. The behavior code is used by pathologists to describe whether tissue samples are benign (0), borderline (1), in situ (2), or malignant (3).

### Coding Instructions

### Morphology:

Record the morphology code using the Alphabetic Index (ICD-O-3 pages 105–218) and the Numerical Index (ICD-O-3 pgs. 69–104). It is important to review both parts of the ICD-O-3 to **ensure accurate coding.**

Follow the coding rules outlined on pages 20–40 of *ICD-O-3*.

The term [obs] in *ICD-O-3* indicates a diagnosis for which a better diagnostic term(s) is available but which may still be used to code the cancer in certain circumstances. Obsolete terms are retained in *ICD-O-3* for historical reference.

Adequate text documentation must be provided to support coding. Auto coding of the ICD-O-3 code description is not considered adequate text documentation.

Use all pathology reports available to code the cell type of the tumor. Generally, the pathology report from a resection or an excision is most representative of the tumor's histology; however, the pathology report from an incisional biopsy is adequate if the tumor is not resected. The final pathologic diagnosis should be reviewed for specific information relating to the cell type of the tumor.

The words **cancer (8000)** and **carcinoma, NOS (8010)** are **not** interchangeable. Record the appropriate histology code from the physician documentation.

**Carcinoma, NOS** (8010) and **adenocarcinoma** (8140) are interchangeable (see cross-references in the *alphabetic index of ICD-O-3*).

**Histology can be coded only after the determination of single vs. multiple primaries has been made.** Refer to *"Determining Multiple Primaries"* in *Appendix D and E* of this manual to determine the number of primaries. Use all of the information for a single primary to code the histology.

Code the **final** pathologic diagnosis. Use the histology stated in the **final diagnosis** from the pathology report. Use the pathology report from the procedure that resected the majority of the primary tumor.

> ***EXCEPTION:*** *If a more specific histologic type is definitively described in the microscopic portion of the pathology report or the comment, code the more specific diagnosis.*

> ***EXCEPTION:*** *If the final diagnosis is "Not Otherwise Specified" (carcinoma, NOS; melanoma, NOS; sarcoma, NOS; lymphoma, NOS; or malignant tumor, NOS), then code the histology from the microscopic description or comment if it identifies a more specific histologic type (higher ICD-O-3 code) such as adenocarcinoma, amelanotic melanoma, spindle cell sarcoma.*

If there is no tumor specimen, code the morphology described by the medical practitioner.

**Examples:**

a. The patient has a CT scan of the brain with a final diagnosis of glioblastoma multiforme (9440). The patient refuses all further workup or treatment. Code the histology to glioblastoma multiforme (9440).

b. If the physician says that the patient has carcinoma, code carcinoma, NOS (8010).

**Lymphomas** may be classified by the **WHO** Classification, **REAL** system, **Rappaport classification**, **Working Formulation**, or other lymphoma classification. The WHO Classification is the current preferred terminology. See page 13 in the *ICD-O-3* for a discussion of hematologic malignancies.

Definitions:

**Synonyms and Equivalent Terms:** Mixed and combined, can usually be used interchangeable in histologic descriptions. Either term indicates the presence of different cell types in a single tumor.

**Complex (mixed or combined) histology:** When the pathologist uses **multiple histologic terms** to describe a tumor. The histologic terms are frequently connected by the word "and" (e.g., ductal and lobular carcinoma).

**Same histology:** when the first three digits of the ICD-O-3 histology code are identical.

**Different histology**: when the first three digits of the ICD-O-3 histology code are different.

**Different subtypes:** The NOS morphology codes can have various subtypes; for example, scirrhous adenocarcinoma (8143), adenocarcinoma, intestinal type (8144), and linitis plastica (8141) are subtypes of Adenocarcinoma, NOS (8140). When a subtype is reported, code the subtype.

**Behavior Codes:**

**0** Benign (Reportable for intracranial and CNS sites only)
**1** Uncertain whether benign or malignant, borderline malignancy, low malignant potential, and uncertain malignant potential (Reportable for intracranial and CNS sites only)
**2** Carcinoma in situ; intraepithelial; noninfiltrating; noninvasive
**3** Malignant, primary and/or metastatic site (invasive)

***Note:*** *Cases reported to the TCR cannot have a metastatic (/6) behavior code. If the only pathology specimen is from a metastatic site, code the appropriate histology code and the malignant behavior code /3. The primary site and its metastatic site(s) have the same basic histology.*

**Example:**

A patient is diagnosed with metastatic brain tumors and a fine needle aspiration biopsy shows that the tumor is metastatic small cell carcinoma (8041/6). The pathology report indicates that the tumor originated in the lung. Code the primary site as lung and the morphology as small cell carcinoma (8041/3)

**Behavior Coding Instructions**

1. Behavior codes benign /0 and borderline /1 are reportable for intracranial and CNS sites only. These tumors have always been reportable to the TCR.

2. Clinical evidence alone cannot identify the behavior as in situ; the code must be based on pathologic examination and documentation.

3. Code the behavior as malignant /3 if any portion of the primary tumor is invasive no matter how limited; such as microinvasion.

**Example**:
Pathology from mastectomy specimen: Large mass composed of intraductal carcinoma with a single focus of invasion. Code the behavior as malignant (8500/3).

4. Code the behavior as in situ /2 if the pathology report describes the histology as in situ/2 and the ICD-O-3 histology is listed only with a malignant /3 behavior code.

5. Code the behavior as malignant /3 if the pathology report describes the histology as malignant /3 and the ICD-O-3 histology codes is listed only with an in situ /2 behavior.

6. Certain histologies will never have in situ behaviors (8000–8005, 8020, 8021, 8331, 8332, 8800–9055, 9062, 9082, 9083, 9110–9493, 9501–9989).

7. If more than one behavior is reported, select the morphology code with the higher behavior code (the invasive tumor). Refer to the following table.

| BEHAVIOR CODE | FIFTH DIGIT TERM | EXAMPLE |
|---|---|---|
| 2 | In situ and/or carcinoma in situ | Adenocarcinoma in an adenomatous polyp with no invasion of stalk |
| | | Bowen disease (not reportable for C440–C449) |
| | | Clark's Level I for melanoma (limited to epithelium) |
| | | Comedocarcinoma, noninfiltrating (C50_) |
| 2 | Terms synonymous with in situ | Confined to epithelium |
| | | AIN III (C211) |
| | | Behavior code /2 |
| | | Hutchinson's melanotic freckle, NOS (C44_) |
| | | Intracystic, non-infiltrating |
| | | Intraductal |
| | | Intraepidermal, NOS |
| | | Intraepithelial |
| | | Involvement up to, but not including the basement membrane |
| | | Lentigo maligna (C44_) |
| | | Lobular, noninfiltrating(C50_) |
| | | Noninfiltrating |
| | | Noninvasive |
| | | No stromal invasion/involvement |
| | | Papillary, non-infiltrating or intraductal |
| | | Precancerous melanosis (C44_)<br>Preinvasive |
| | | Queyrat's erythroplasia (C60) |
| | | Stage 0 (except Paget's disease (8540/3) of breast and colon or rectal tumors confined to the lamia propria) |
| | | VAIN III (C529) |
| | | VIN III (C51_) |
| 3 | Invasive | Invasive or microinvasive |

**Histology Coding Rules for a Single Tumor:**

- The rules are in hierarchical order. Rule 1 has the highest priority.
- Use the rules in priority order.
- Use the first rule that applies to the case. (Do not apply any additional rules).

**Rule 1:** Code the histology if only one type is mentioned in the pathology report.

**Rule 2:** Code the **invasive histology** when both invasive and in situ tumor are present.

**Examples:**

a. Pathology report reads infiltrating ductal carcinoma and cribriform ductal carcinoma in situ. *Code the invasive histology (8500/3).*

***EXCEPTION:*** *If the histology of the invasive component is an 'NOS' term (e.g., carcinoma, adenocarcinoma, melanoma, sarcoma), then code the histology of the specific term associated with the in situ component and an invasive behavior code.*

b. The pathology report states squamous cell carcinoma in situ (8070/2) and papillary squamous cell carcinoma (8052/3). Code as papillary squamous cell carcinoma (8052/3).

c. The pathology report states squamous cell carcinoma in situ (8070/2) with areas of invasive carcinoma (8010/3). Code as squamous cell carcinoma (8070/3).

**Rule 3:** Use a **mixed** or **combination** histology code if one exists.

**Examples** of mixed codes: (This is not a complete list, these are examples only).

8490 Mixed tumor, NOS
9085 Mixed germ cell tumor
8855 Mixed liposarcoma
8990 Mixed mesenchymal sarcoma
8951 Mixed mesodermal tumor
8950 Mixed Mullerian tumor
9362 Mixed pineal tumor
8940 Mixed salivary gland tumor, NOS
9081 Teratocarcinoma, mixed embryonal carcinoma and teratoma
8255 Renal cell carcinoma, mixed clear cell and chromophobe types
8523 Infiltrating duct carcinoma mixed with other types of carcinoma
8524 Infiltrating lobular carcinoma mixed with other types of carcinoma
8560 Adenosquamous carcinoma
8045 Combined small cell carcinoma, combined small cell-large cell

**Rule 4:** Code the **more specific term** when one of the terms is 'NOS' and the other is a more specific description of the same histology.

**Examples:**

a. Pathology report reads poorly differentiated carcinoma, probably squamous in origin. Code the histology as squamous cell carcinoma rather than the non-specific term "carcinoma."

b. The pathology report from a nephrectomy reads renal cell carcinoma (8312) (renal cell identifies the affected organ system rather than the histologic cell type) in one portion of the report and clear cell carcinoma (8310) (a histologic cell type of kidney cancer) in another section of the report. Code clear cell carcinoma (8310); renal cell carcinoma (8312) refers to the renal system rather than the cell type, so renal cell is the less specific code.

**Rule 5:** Code the **majority** of tumor.

a. Based on the pathology report description of the tumor.

b. Based on the use of majority terms. See definition for majority terms below:

**Majority of Tumor:**

| TERMS THAT MEAN THE MAJORITY OF TUMOR | TERMS THAT DO NOT MEAN THE MAJORITY OF TUMOR |
|---|---|
| Predominantly | With foci of |
| With features of | Focus of/focal |
| Major | Areas of |
| Type | Elements of |
| With .... Differentiation | Component |
| Pattern (only if written in College of American Pathologists [CAP] Protocol) | |
| Architecture (only if written in College of American Pathologists [CAP] Protocol) | |

***Note:*** *Examples of CAP protocols for specific primary sites may be found on the web site: www.cap.org/apps/docs/cancer_protocols/protocols_intro.html.*

**Examples:**

a. Duct carcinoma, **desmoplastic** type, code to 8514/3.

b. Duct carcinoma, predominantly **medullary,** code to 8510/3.

c. Duct carcinoma with features of **comedocarcinoma**, code to 8501/3.

**Rule 6:** Code the histology type of a single tumor with two modifying adjectives with different codes to the numerically higher code when there is no combination code available. This is the rule with the lowest priority and should be used infrequently.

**Examples:**

a. Mixed transitional cell carcinoma and squamous cell carcinoma, code to 8120/3.

b. Poorly differentiated carcinoma with squamous and neuroendocrine differentiation, code to 8246/3.

c. Carcinoma was trabecular and acinar pattern, code to 8550/3.

d. The pathology report states transitional cell epidermoid carcinoma. Transitional cell carcinoma, NOS is coded to 8120/3 and epidermoid carcinoma, NOS is coded to 8070/3. Code the numerically higher code, 8120/3.

**Histology Coding Rules for MULTIPLE Tumors in the Same Organ With Different Behaviors Reported as a Single Primary**

**Rule 1:** Code the histology of the invasive tumor when one lesion is in situ /2 and the other is invasive /3.

**Example:**

At mastectomy for removal of a 2 cm invasive ductal carcinoma, an additional 5 cm area of intraductal carcinoma was noted. Code histology and behavior as invasive ductal carcinoma (8500/3).

**Histology Coding Rules for MULTIPLE Tumors in Same Organ Reported as a Single Primary**

**Rule 1:** Code the histology when multiple tumors have the same histology.

**Rule 2:** Code the histology to adenocarcinoma (8140/_; in situ or invasive) when there is an adenocarcinoma and an adenocarcinoma in a polyp (8210/_, 8261/_, 8263/_) in the same segment of the colon or rectum.

**Rule 3:** Code the histology to carcinoma (8010/_; in situ or invasive) when there is a carcinoma and a carcinoma in a polyp (8210/_) in the same segment of the colon or rectum.

**Rule 4:** Use a **combination** code for the following:

Bladder: Papillary and urothelial (transitional cell) carcinoma (8130)

Breast: Paget disease and duct carcinoma (8541)
Breast: Duct carcinoma and lobular carcinoma (8522)
Thyroid: Follicular and papillary carcinoma (8340)

**Rule 5:** Code the more specific term when one of the terms is 'NOS' and the other is a more specific description of the same histology.

**Rule 6:** Code all other multiple tumors with different histologies as different primaries.

***Note:*** *See Appendix D (prior to 2007) and Appendix O (on or after 1/1/2007) for specific instructions and examples for determining single versus multiple primaries for solid tumors.*

**How to Determine Same versus Different Histologies for Benign and Borderline Primary Intracranial and CNS Tumors (C700–C729, C751–C753) Based on Histologic Groupings**

When there are **multiple tumors**, use the following table to determine if the tumors are the same or different histologies.

**Histologic Groupings to Determine Same Histology for Non-Malignant Brain Tumors:**

| | |
|---|---|
| Choroid Plexus neoplasms | 9390/0, 9390/1 |
| Ependyomas | 9383, 9394, 9444 |
| Neuronal and neuronal-glial neoplasms | 9384, 9412, 9413, 9442, 9505/1, 9506 |
| Neurofibromas | 9540/0, 9540/1, 9541, 9550, 9560/0 |
| Neurinomatosis | 9560/1 |
| Neurothekeoma | 9562 |
| Neuroma | 9570 |
| Perineurioma, NOS | 9571/0 |

***Note:*** *Refer to Appendix D, page 13–16 for specific instructions and examples for determining single versus multiple primaries for non-malignant CNS tumors and refer to Appendix E for determining multiple primaries for hematopoietic and lymphatic primaries.*

***Note: The new 2007 multiple primary and histology rules (Appendix O) do not apply to hematopoietic primaries (lymphoma and leukemia) of any site or to the reportable benign or borderline intracranial or CNS tumors.***

**PRIMARY SITE** (NAACCR Item #400) (FORDS pg. 91; SEER pgs. 73–77)

**Description**
Identifies the primary site of the cancer.

**Explanation**
The primary site helps to determine stage and treatment options and shapes disease course and prognosis.

**Site-Specific Topography Terms:**

(See the *Coding Guidelines for Topography and Morphology* in the introduction of the *ICD-O-3* for additional details). Primary site codes may be found in the *ICD-O-3 Topography, Numerical List Section* (*ICD-O-3*, page 43) and in the *Alphabetic Index* (*ICD-O-3*, page 105).

**Refer to *"Determining Multiple Primaries"*** in the *Multiple Primaries Section* (*Appendix D* and *Appendix E*) to determine the number of primaries. Use all of the information for a single primary to code the site.

**Adequate text documentation must be provided to support coding**. Auto coding of the ICD-O-3 code description is not considered adequate text documentation. In general, when a primary site is preceded by *carcinoma of...*, or *malignancy of...*, code to that primary site.

**Coding Instructions**

The *ICD-O-3* has topography codes listed in two sections; the first is a numeric listing by code number, the second is an alphabetic listing by anatomic site. The topography code consists of an initial character (the letter 'C') followed by two numeric digits, a decimal point, and one additional numeric digit. The decimal point is not entered as part of the code.

**Example:**

The pathology report says the primary site is the cardia of the stomach. The code (C160) is found in the *Alphabetic Index* under either "stomach" or "cardia." Enter the code as (C160); do not record the decimal point.

***Note:*** *The exact location of the primary tumor is not always stated in the pathology report or discharge diagnosis. It is necessary to review the entire medical record in order to obtain the most precise description of the primary site.*

**Example:**

The pathology report states right breast resection specimen. The discharge diagnosis states carcinoma in the right breast. The History and Physical states examination of the right breast reveals a mass in the upper outer quadrant. *Code to the more detailed description from the History and Physical, upper outer quadrant of the right breast (C504).*

1. Code the site in which the primary tumor originated, even if it extends into an adjacent "subsite."

**Examples:**

a. Final diagnosis is adenocarcinoma of the upper lobe of the right lung. *Code the topography to lung, upper lobe (C341).*

b. Pathology report shows adenocarcinoma arising in an ectopic patch of endometriosis on the sigmoid colon. *Code primary site to sigmoid colon (C187) where the cancer originated.*

c. Patient has a right branchial cleft cyst; the pathology report identifies an adenocarcinoma arising in an ectopic focus of thyroid tissue within the branchial cleft cyst. Thyroidectomy pathology is negative. *Code primary site to branchial cleft (C104).*

d. The patient had a total hysterectomy with a bilateral salpingo-oophorectomy ten years ago for non-cancer reasons. She now has widespread cystadenocarcinoma in the peritoneum. *Code the primary site to peritoneum, NOS (C482).* (The chart may or may not state that the patient has extra-ovarian or primary peritoneal carcinoma).

e. The patient has a 4 cm tumor in the right breast. The tumor originated in the upper inner quadrant and extends into the lower inner quadrant. *Code primary site to upper inner quadrant of breast (C502).*

2. Use the *SEER Site Grouping Table* in the Rules for *Determining Multiple Primaries Section (Appendix D)* to code the primary site specified in the table in those rare cases when:

   a. A single tumor overlaps adjacent sites in the same group.

   b. Multiple tumors reported as a single primary involve adjacent sites in the same group.

**Example**:

The patient has a 5 cm tumor overlapping the base of tongue and anterior 2/3 of tongue. Use the *SEER Site Grouping Table* to determine the correct code for the primary site, Tongue, NOS (C029).

3. Code the last digit of the primary site code to 8 when a **single tumor overlaps** an adjacent **subsite**(s) of an organ and the point of origin cannot be determined.

**Example**:

The patient has a 5 cm tumor that involves the dorsal surface and anterior 2/3 of tongue.
*Code the primary site to overlapping lesion of tongue (C028).*

4. Code the last digit of the primary site code to 9 for single primaries, when **multiple tumors arise in different subsites** of the same anatomic site, unless the subsite is defined in one of the site groups listed in the *SEER Site Grouping Table*. For cases **diagnosed prior to 2007**, refer to the table in the section *Multiple Primaries (Appendix D)* to determine the primary site code for specified groups.

**Examples:**
a. During a TURB, the physician describes multiple papillary tumors in the bladder neck

(C675) and the lateral wall of the bladder (C672). *Code the primary site as bladder, NOS (C679).*

b. Patient has an infiltrating duct tumor in the upper outer quadrant (C504) of the right breast and another infiltrating duct carcinoma in the lower inner (C503) quadrant of the right breast. *Code the primary site as breast, NOS (C509).*

5. Some histology/behavior terms in *ICD-O-3* have **a related site code** in parenthesis; e.g., hepatoma (C220).

***Note:*** *Code the site as documented in the medical record and ignore the suggested ICD-O-3 code when a primary site is specified in the medical record.*

**Example:**

The pathology report says "infiltrating duct carcinoma of the head of the pancreas." The listing in *ICD-O-3* is infiltrating duct carcinoma 8500/3 (C50). Code the primary site to head of pancreas, NOT to breast as suggested by the *ICD-O-3*.

***Note*:** *Use the site code suggested by ICD-O-3 when the primary site is the same as the site code suggested or the primary site is unknown.*

**Examples:**

a. The biopsy is positive for hepatoma, but there is no information available about the primary site. *Code the primary site to liver (C220) as suggested by ICD-O-3.*

b. The patient has an excision of the right axillary nodes which reveals metastatic infiltrating duct carcinoma. The right breast is negative. The *ICD-O-3* shows duct carcinoma (8500) with a suggested site of breast (C50_). *Code the primary site as breast, NOS (C509).*

6. Code the primary site, not the metastatic site. If a tumor is metastatic and the primary site is unknown, code the primary site as unknown (C809).

**Common Metastatic Sites:**

If the final diagnosis reflects carcinoma of one of the common metastatic sites listed below, carefully review documentation in the medical record to identify the actual primary site.

Bone
CNS Sites (brain, spinal cord, meninges)
Liver
Lymph Nodes (excluding lymphoma)
Pericardium (excluding mesothelioma)

Pleura (excluding mesothelioma)
Peritoneum
Retroperitoneum

When the medical record does **not** contain **enough information** to assign a primary site:

a. Consult a physician advisor to assign the site code.

b. Use the NOS category for the organ system or the Ill Defined Sites (C760–C768) if the physician advisor cannot identify a primary site.

c. Code Unknown Primary Site (C809) if there is not enough information to assign an NOS or Ill-Defined Site category.

d. Refer to pages 81–84 for primary sites with very specific guidelines.

**Guidelines for the four character site codes:**

According to *ICD-O-3*, each of the following four-character site codes is a separate primary:

colon (C180–C189)
rectum, anus, and anal canal (C199, C209, C210–C218)
bone (C400–C419)
connective tissue (C490–C499)
peripheral nerves (C470–C479)
melanoma of the skin (C440–449)

**Example**:

Separate tumors in the cecum (C180) and ascending colon (C182) would be considered two separate primaries unless one is stated to be metastatic from the other.

***Note:*** *All other four-character site codes are sub-sites of a major site and are not separate primaries.*

**Example:**

Upper-inner quadrant of the breast (C502) is a sub-site of the breast (C50_).

**Leukemia Coding Instructions:**

1. Code leukemia primaries to bone marrow (C421); blood cells originate in the bone marrow.

2. Malignant histiocytosis is coded to bone marrow (C421).

**Lymphoma Coding Instructions:**

Refer to *Determining Multiple Primaries for Lymphatic and Hematopoietic Diseases (Appendix E)* for further instructions.

**Definitions:**

**Nodal lymphoma:** A lymphoma originating in lymph nodes.

**Extranodal lymphoma**: Lymphoma originating in tissue or organ other than lymph nodes. Lymphatic system organs may be extranodal, for example, spleen is a lymphatic system organ and is also extranodal.

**Extralymphatic:** Originating in tissue or an organ that is not a part of the lymphatic system, for example, lymphoma of the stomach or colon. The terms extranodal and extralymphatic may be used interchangeably when coding primary site.

**Lymphatic system**: An umbrella term that includes all lymphoid tissues: lymph nodes, spleen, thymus, tonsils, Waldeyer's ring, and Peyer's patches of the small intestine.

1. When a single lymph node chain is involved, code that chain as the primary site.

2. When multiple lymph node chains are involved at the time of diagnosis, do not simply code the lymph node chain that was biopsied.

    a. If it is possible to determine where the disease originated, code the primary site to that lymph node chain.

    b. If multiple lymph node chains are involved and all involved chains are located in the same ICD-O-3 primary site code, code the primary site to lymph nodes of the specified nodal region (C77_).

    c. If multiple lymph node chains are involved and the involved chains are in different lymph node regions, code C778 (lymph nodes of multiple regions).

3. When the lymphoma is **extranodal** and is:

    a. Confined to the organ of origin, code the organ of origin.

**Example:**

Pathology from a stomach resection shows lymphoma. No other pathologic or clinical disease is identified. *Code the primary site as stomach, NOS (C16.9), use the surgery codes for stomach (C16.9) and use the Lymphoma CS schema.*

b. Present in an **extranodal organ/site and** in that organ/site's **regional lymph nodes** code the extranodal organ/site as the primary site.

Lymphomas that are primary in an extranodal organ/site may metastasize to that organ/site's regional lymph nodes. In rare cases a lymphoma may spread from the lymph node to an extranodal site or extralymphatic organ by direct extension.

**Example:**
Lymphoma is present in the lung and hilar lymph nodes. *Code the primary site to lung (C34.9), use the surgery codes for lung (C34.9) and use the Lymphoma CS schema.*

c. Present in **extranodal organ(s)/site and non-regional lymph nodes**, consult the physician to determine the primary site. If a site cannot be determined, code primary site to lymph node, NOS (C779). This situation will be very rare.

*Note: Approximately 25% of lymphomas originate in extra-nodal sites such as the stomach, intestine, or breast.* ***A lymphoma primary originating in an organ or extra-nodal site should be coded to the organ or extra-nodal site and use the surgery codes for that site.*** *The code for the primary site, in some cases, may not be the biopsy site.* ***Always use the Lymphoma CS schema even if the lymphoma did not originate in the lymph nodes.*** *If a specific lymph node is the primary site, code accordingly.*

4. If the primary site is unknown or not given:

a. Code retroperitoneal lymph nodes if described as retroperitoneal mass
b. Code inguinal lymph nodes if described as inguinal mass
c. If the primary site is unknown code lymph nodes, NOS (C779)

***EXCEPTION:*** *Code unknown primary site (C809) only when there is no evidence of lymphoma in lymph nodes and/or the medical record documents that the physician suspects that it is an extranodal lymphoma. This situation will be very rare.*

**Esophagus Coding Instructions:**

There are two systems that divide the esophagus into sub-sites. The first system divides the esophagus into the upper third, middle third, and lower third. The second system describes the sub-sites as the cervical esophagus, the thoracic esophagus and the abdominal esophagus. The sub-sites for these two different systems are not identical. Assign the ICD-O-3 topography code that describes the primary site documented in the medical record. See the *SEER Self Instructional Manual for Tumor Registrars, Book 4* for illustrated descriptions of each system.

**Kaposi Sarcoma Coding Instructions:**

Kaposi sarcoma is a rare condition. When not AIDS-related, it usually presents as localized disease with an easily recognized primary site.

AIDS-related Kaposi sarcoma usually presents as a disseminated disease with involvement of **mucosal surfaces, visceral surfaces of organs, and skin**. It is important to review consecutive records carefully to determine the extent of involvement at diagnosis. Review of a single record may reveal only the site being treated during that admission.

1. Code Kaposi Sarcoma to the **site in which it arises.**
2. If the Kaposi Sarcoma is present in the **skin and another site** simultaneously, code to the specified skin site, (C44_).
3. If the **primary site is unknown** or cannot be determined, code **skin, NOS (C449).**

**Sarcoma Coding Instructions:**

The majority of sarcomas arise in mesenchymal or connective tissues that are located in the musculoskeletal system. The musculoskeletal system includes the fat, muscles, blood vessels, deep skin tissues, nerves, bones and cartilage. The default code for sarcomas of unknown primary site is C499 rather than C809. Sarcomas may also arise in the walls of hollow organs and in the viscera covering an organ. Code the primary site to the organ of origin.

**Example**:
The pathology identifies a leiomyosarcoma of the uterus. Code the site to uterus, NOS (C559).

**Additional Guidelines for Coding Primary Site:**

*A subareolar/retroareolar carcinoma is coded to the central portion of the breast (C501), which indicates that the tumor arose in the breast tissue beneath the nipple, not the nipple itself.*

*Melanoma, NOS is coded to skin, NOS (449).*

*Mycosis Fungoides is coded to skin (C44_) unless a specific site is stated to be the primary.*

*Intestinal type adenocarcinoma (8144) is a gastric histology term and is not listed in the WHO Histological Classification of Tumors of the Colon and Rectum.*

## GRADE OF TUMOR (NAACCR Item #440) (FORDS pg. 96–97; SEER pgs. 91–97)

**Definition**
Describes how much or how little the tumor cells resemble normal tissue. Well differentiated (Grade 1) is the most like normal tissue, and undifferentiated (Grade IV) is the least like normal tissue. This data item is useful for determining prognosis.

**Explanation**
The more undifferentiated the tumor, the greater the incidence of metastasis and the more rapid the clinical course. The terms "grade" and "differentiation" are used synonymously.

## Coding Instructions

1. Code grade/differentiation according to the rules in the *ICD-O-3*, (pages 30–31, 67).

2. For sites other than breast, prostate and kidney (see below), code the tumor grade using the following priority order: 1) terminology; 2) histologic grade; 3) nuclear grade.

| CODE | GRADE | DESCRIPTION |
|---|---|---|
| 1 | Grade I | Well differentiated; differentiated, NOS |
| 2 | Grade II | Moderately differentiated, moderately well differentiated, intermediate differentiation, partially well differentiated, partially differentiated, low grade NOS |
| 3 | Grade III | Poorly differentiated, dedifferentiated, moderately undifferentiated, relatively undifferentiated, slightly undifferentiated, medium grade NOS |
| 4 | Grade IV | Undifferentiated; anaplastic, high grade NOS |
| **FOR LEUKEMIAS AND LYMPHOMAS** | | |
| 5 | | T-cell; T-precursor |
| 6 | | B-cell; pre-B; B-precursor |
| 7 | | Null cell; non T-non- B |
| 8 | | NK (natural killer) cell |
| **FOR USE IN ALL HISTOLOGIES** | | |
| 9 | | Grade/differentiation not determined, not stated, not applicable; cell type not determined, not stated, not applicable |

***Note**: Terms such as "anaplastic," "well differentiated," and "undifferentiated" are sometimes essential parts of morphologic terms for neoplasms in ICD-O-3 (as well as those used to describe lymphomas). These terms must be reported with the appropriate grade code.*

**Examples:**

8020/34 Carcinoma, undifferentiated
8021/34 Carcinoma, anaplastic
8331/31 Follicular adenocarcinoma, well differentiated
8332/31 Follicular carcinoma, well differentiated
8332/32 Follicular adenocarcinoma, moderately differentiated
8332/32 Follicular carcinoma, moderately differentiated
8585/31 Thymic carcinoma, well differentiated
8631/33 Sertoli-Leydig cell tumor, poorly differentiated
8634/33 Sertoli-Leydig cell tumor with heterologous elements, poorly differentiated
8805/34 Sarcoma, undifferentiated
8851/31 Liposarcoma, NOS, well differentiated
9062/34 Seminoma, anaplastic

| | |
|---|---|
| 9082/34 | Malignant teratoma, undifferentiated |
| 9082/34 | Malignant teratoma, anaplastic |
| 9083/32 | Malignant teratoma, intermediate type |
| 9187/31 | Intraosseous osteosarcoma, well differentiated |
| 9362/32 | Pineal parenchymal tumor, intermediate differentiation |
| 9382/34 | Oligoastrocytoma, anaplastic |
| 9390/34 | Choroid plexus papilloma, anaplastic (synonym of malignant) |
| 9392/34 | Ependymoma, anaplastic |
| 9401/34 | Astrocytoma, anaplastic |
| 9451/34 | Oligodendroglioma, anaplastic |
| 9505/34 | Ganglioglioma, anaplastic |
| 9511/31 | Retinoblastoma, differentiated type |
| 9512/34 | Retinoblastoma, undifferentiated |
| 9530/34 | Meningioma, anaplastic |
| 9591/32 | Nodular lymphocytic lymphoma, intermediate differentiation [obs] |
| 9591/33 | Diffuse lymphocytic lymphoma, poorly differentiated [obs] |
| 9591/34 | Non-Burkitt lymphoma, anaplastic *[**note:** phenotype (B-cell) takes precedence over differentiation]* |
| 9670/31 | Diffuse lymphocytic lymphoma, well differentiated |
| 9673/32 | Diffuse lymphocytic lymphoma, intermediate differentiation [obs] |
| 9680/36 | Large B-cell lymphoma, anaplastic *[**note:** phenotype (B-cell) takes precedence over differentiation]* |
| 9687/34 | Burkitt type lymphoma, undifferentiated [obs] |
| 9695/33 | Nodular lymphocytic lymphoma, poorly differentiated [obs] |
| 9698/31 | Nodular lymphocytic lymphoma, well differentiated [obs] |
| 9714/34 | CD30+ large cell lymphoma, anaplastic |
| 9714/37 | Large cell lymphoma, T cell and null cell type, anaplastic *[**note:** a combination of phenotypes is coded to higher code and takes precedence over differentiation]* |
| 9718/34 | Primary cutaneous large cell lymphoma, anaplastic |

## Coding Instructions

1. The site-specific schemas in *Appendix A* provide specific coding guidelines for grade for the breast, prostate, kidney, bladder, lymphoma, leukemia, brain, and sarcoma as a reminder when coding those specific primaries.

2. Code the grade from the final diagnosis in the pathology report. If there is more than one path report and the grades in the final diagnoses differ, code the highest grade for the primary site from any pathology report.

   ***Note**: Grade is best determined from the specimen obtained at resection of the primary site. If this is unavailable, the grade from a biopsy of the primary site or cytology should be used.*

3. If grade is not stated in the final pathology diagnosis, use the information in the microscopic section, addendum, or comment to code grade.

4. If more than one grade is recorded for a single tumor, code the highest grade, even if it is a focus.

**Example:**

Pathology report reads: Grade II adenocarcinoma with a focus of undifferentiated adenocarcinoma. Code the tumor grade as grade 4.

5. Code the grade from the **primary tumor** only, **never from a metastatic site or a recurrence.**

6. Code the grade for all **unknown primaries** to 9 (unknown grade) unless grade is explicit by histology, for example, anaplastic carcinoma (grade = 4).

7. Code the grade of the invasive component when the tumor has **both in situ** and **invasive** portions. If the **invasive** component **grade** is **unknown**, code the grade as 9 (unknown).

8. Code the information from the **consult** if the specimen is sent to a specialty pathology department for a consult.

9. If there are **multiple pathology consults**, ask the pathologist or physician advisor to determine which information should be used.

10. Do **not code** the grade assigned to **dysplasia**; for example high grade dysplasia (adenocarcinoma in situ) would be coded to 9 (unknown grade).

11. FIGO (International Federation of Obstetrics and Gynecology) grades are not coded.

**Coding Grade for Cases without Pathology or Cytology Confirmation:**

Code the grade of tumor stated on a Magnetic Resonance Imaging (MRI) or Positron Emission Tomography (PET) report if there is no tissue diagnosis (pathology or cytology report). Use the MRI or PET grade only when there is no tissue diagnosis.

**In situ Tumors:**

In situ tumors are not usually graded. Code the grade if it is specified for an in situ lesion unless there is an invasive component. Do not code the in situ grade if the tumor has both in situ and invasive components.

**Terminology Conversion Table:**

| DESCRIPTION | GRADE | ICD-O-3 MORPHOLOGY 6TH DIGIT CODE |
|---|---|---|
| Differentiated, NOS | I | 1 |
| Well differentiated | I | 1 |
| | | |
| Fairly well differentiated | II | 2 |
| Intermediate differentiation | II | 2 |
| Low grade | I–II | 2 |
| Mid differentiated | II | 2 |
| Moderately differentiated | II | 2 |
| Moderately well differentiated | II | 2 |
| Partially differentiated | II | 2 |
| Partially well differentiated | I–II | 2 |
| Relatively or generally well differentiated | II | 2 |
| | | |
| Medium grade, intermediate grade | II–III | 3 |
| Moderately poorly differentiated | III | 3 |
| Moderately undifferentiated | III | 3 |
| Poorly differentiated | III | 3 |
| Relatively poorly differentiated | III | 3 |
| Relatively undifferentiated | III | 3 |
| Slightly differentiated | III | 3 |
| Dedifferentiated | III | 3 |
| | | |
| High grade | III–IV | 4 |
| Undifferentiated, anaplastic, not differentiated | IV | 4 |
| Non-high grade | | 9 |

**Two-Grade System:**

Some cancers are graded using a two-grade system, for example, colon cancer. If the grade is listed as 1/2 or as low grade, assign code 2. If the grade is listed as 2/2 or as high grade, assign code 4.

**Two-Grade Conversion Table:**

| DIFFERENTIATION/ DESCRIPTION | GRADE | ICD-O-3 MORPHOLOGY 6TH DIGIT CODE |
|---|---|---|
| Low grade | 1/2, I/II | 2 |
| High grade | 2/2, II/II | 4 |

**Three-Grade System:**

There are several sites for which a three-grade system is used, such as peritoneum, endometrium, fallopian tube, prostate, bladder and soft tissue sarcoma. The patterns of cell growth are measured on a scale of 1, 2, and 3 (also referred to as low, medium, and high grade). This system measures the proportion of cancer cells that are growing and making new cells and how closely they resemble the cells of the host tissue. Thus, it is similar to a four-grade system, but simply divides the spectrum into 3 rather than 4 categories (see *Three-Grade Conversion Table* below). The expected outcome is more favorable for lower grades.

If a grade is written as 2/3 that means this is a grade 2 of a three-grade system. Do not simply code the numerator. Use the following table to convert the grade to SEER codes:

**Three-Grade Conversion Table:**

| DIFFERENTIATION / DESCRIPTION | GRADE | ICD-O-3 MORPHOLOGY 6TH DIGIT CODE |
|---|---|---|
| Low grade | 1/3, I/III | 2 |
| Intermediate grade | 2/3, II/III | 3 |
| High grade | 3/3, III/III | 4 |

**Breast Coding Instructions:**

Code grade in the following priority order:

1. Bloom-Richardson scores 3–9 converted to grade (see following table)
2. Bloom Richardson grade (low, intermediate, high)
3. Nuclear grade only
4. Terminology: Differentiation (well differentiated, moderately differentiated, etc)
5. Histologic grade: Grade 1/I/i, grade 2/II/ii, grade 3/III/iii, grade 4/IV/iv

**Breast Grading Conversion Table:**

| BR SCORES | BR GRADE | NUCLEAR GRADE | TERMINOLOGY | HISTOLOGIC GRADE | ICD-O-3 MORPHOLOGY 6TH DIGIT CODE |
|---|---|---|---|---|---|
| 3, 4, 5 | Low | 1/3 | Well differentiated | I/III; 1/3 | 1 |
| 6, 7 | Intermediate | 2/3 | Moderately differentiated | II/III; 2/3 | 2 |
| 8, 9 | High | 2/2; 3/3 | Poorly differentiated | III/III; 3/3 | 3 |

**Bloom-Richardson (BR):**

1. **BR** may **also** be **called**: modified Bloom-Richardson, Scarff-Bloom-Richardson, SBR grading, BR grading, Elston-Ellis modification of Bloom Richardson score, the Nottingham modification of Bloom Richardson score, Nottingham-Tenovus, or Nottingham grade.
2. BR may be expressed in **scores** (range 3–9).
3. The score is based on three morphologic features of "invasive no-special-type" breast cancers (degree of tubule formation/histologic grade, mitotic activity, nuclear pleomorphism of tumor cells).
4. Use the Breast Grading Conversion Table to convert the score, grade or term into the ICD-O-3 morphology 6th Digit code.
5. BR may be expressed as a **grade** (low, intermediate, high).
6. BR grade is derived from the BR score. Note that the conversion of low, intermediate, and high for breast is different from the conversion used for all other tumors.

**Kidney Coding Instructions:**

Code grade in the following priority order:

1. Fuhrman grade
2. Nuclear grade
3. Terminology (well diff, mod diff)
4. Histologic grade (grade 1, grade 2)

These prioritization rules do not apply to Wilms tumor (8960). Use the general rules for coding grade for Wilms tumor.

**Prostate Coding Instructions:**

Code grade in the following priority order:

1. Gleason grade (Use the table to convert Gleason grade information into the appropriate code)
2. Terminology: Differentiation (well differentiated, moderately differentiated, etc.)
3. Histologic grade: Grade 1/I/i, grade 2/II/ii, grade 3/III/iii, grade 4/IV/iv
4. Nuclear grade only

**Gleason Pattern**

Prostate cancers are commonly graded using the Gleason score or pattern. Gleason grading is based on five well-defined histologic patterns. The pathologist will evaluate the tissue to determine the primary (majority) and secondary (background) patterns for the tumor. The pattern is written with the majority pattern appearing first and the secondary pattern as the last number.

**Example:**

A Gleason pattern of 2 + 4 means that the primary pattern is 2 and the secondary pattern is 4.

**Gleason Score**

The patterns are added together to create a score.

***Notes:***

a. *If the pattern is 2 + 4, the pattern score is 6 (the sum of 2 and 4).*

b. *If the pathology report contains only **one number**, and that number is **less than or equal to 5,** it is a pattern.*

c. *If the pathology report contains only **one number**, and that number is **greater than 5**, it is a score.*

d. *If the pathology report specifies a specific **number out of a total of 10**, the first number given is the score.*

**Examples:**

a. The pathology report says "Gleason's 3/10." The Gleason score would be 3.

***Note:** If there are **two numbers other than 10**, assume they refer to two patterns. The first number is the primary pattern and the second is the secondary pattern.*

b. The pathology report says "Gleason's 3 + 5." The Gleason's score is 8, the sum of 3 and 5.

Use the table below to convert Gleason's pattern or score into the ICD-O-3 morphology 6th digit codes:

**Gleason Conversion Table:**

| GLEASON SCORE | GLEASON PATTERN | HISTOLOGIC GRADE | TERMINOLOGY | ICD-O-3 MORPHOLOGY 6TH DIGIT CODE |
|---|---|---|---|---|
| 2, 3, 4 | 1, 2 | I | Well differentiated | 1 |
| 5, 6 | 3 | II | Moderately differentiated | 2 |
| 7, 8, 9, 10 | 4, 5 | III | Poorly differentiated | 3 |

***Note:** Gleason score 7 was previously coded to moderately differentiated (2). Effective with cases diagnosed 1/1/2003, Gleason's score 7 is coded to poorly differentiated (3).*

**Astrocytoma Coding Instructions:**

Grade astrocytomas according to ICD-O-3 rules.

| MORPHOLOGY TERM | GRADE |
|---|---|
| Astrocytoma, anaplastic | 4 |
| Astrocytoma, low grade | 2 |

1. Do not use the **WHO grade** to code this field.

2. Do not automatically code **glioblastoma multiforme** as grade IV. If no grade is given, code unknown, 9.

3. If **no grade** is given, code unknown, 9.

**Lymphoma and Leukemia Coding Instructions:**

1. Do not use the terms "high grade," "low grade," and "intermediate grade" to code differentiation. These terms refer to Working Formulation categories, not grade.

2. The designation of T-cell, B-cell, null cell, or NK cell phenotype has **precedence** over any statement of differentiation.

   a. Code ANY statement of **T-cell, B-cell, null cell,** or **NK cell.**

**Lymphoma and Leukemia Grade:**

| T-CELL (CODE 5) | B-CELL (CODE 6) | NULL-CELL (CODE 7) | NATURAL KILLER CELL (CODE 8) | UNKNOWN CELL TYPE (CODE 9) |
|---|---|---|---|---|
| Cortical T | B-cell phenotype | Null-Cell | N/K cell | Combined B and T cell |
| Mature T | B-precursor | Non-T-non-B | NK/T cell | |
| Pre-T | Pre-B | Common cell | | |
| Pro-T | Pre-pre-B | | | |
| T-cell phenotype | Pro-B | | | |
| T-precursor | | | | |

   b. Use any source in the patient record to code information on cell type whether or not marker studies are documented. Do not code the phenotype from the ICD-O-3 numeric list headings.

   **Example:**

   The history portion of the medical record documents that the patient has a T-cell lymphoma. There are no marker studies on the chart. *Code the grade as T-cell.*

**Sarcoma Coding Instructions:**

If sarcomas are graded low, intermediate or high grade by the pathologist use the three-grade system table.

## LATERALITY (NAACCR Item #410) (FORDS pg. 92; SEER pgs. 78–80)

**Description**
Identifies the side of a paired organ or the side of the body where the tumor originated.

**Explanation**
Aids in staging and extent of disease information, and may indicate the number of primaries.

**Coding Instructions**

1. Starting with cases diagnosed January 1, 2004 laterality is coded for specified invasive, benign, and borderline primary intracranial and CNS tumors. See *Paired Organ Sites Table* beginning on page 94.

2. Non-paired sites are coded to 0.

3. Unknown (C809) and Ill-defined (C760–C768) sites are coded to 0.

4. Assign code 9 when there is a midline tumor or when the disease originated in a paired site, but the laterality is unknown.

**Examples:**

a. Admitting history says patient was diagnosed with lung cancer based on positive sputum cytology. Patient is treated for painful bony metastases. There is no information about laterality in the diagnosis of this lung cancer. Assign code 9.

b. Patient has an excision of a melanoma located just above the umbilicus. Assign code 9 for a midline tumor.

5. **Do not** code metastatic sites as bilateral involvement.

**Example:**

Patient is diagnosed with adenocarcinoma of the left lung and the physician states patient has metastasis to the right lung. Assign laterality code 2, left origin of primary.

6. For primaries of in situ behavior, if laterality is not known, code to 3 (only one side involved, right or left origin of primary not indicated). Laterality for in situ behavior cannot be coded to 9 or 4.

7. Assign code 3 if laterality is unknown but the tumor is confined to a single side of a paired organ.

**Example**:

Pathology report: Patient has a 2 cm carcinoma in the upper pole of the kidney. Code

laterality as 3 because there is documentation that the disease exists in only one kidney, but it is unknown if the disease originated in the right or left kidney.

***NOTE:*** *Code laterality to 9 if stage is no longer localized.*

| CODES | DESCRIPTION |
|---|---|
| 0 | Not a paired site |
| 1 | Right origin of primary |
| 2 | Left origin of primary |
| 3 | Only one side involved, right or left origin of primary not indicated |
| 4 | Bilateral involvement; side of origin unknown; stated to be a single primary includes:<br>• Both ovaries simultaneously involved with a single histology<br>• Bilateral retinoblastomas<br>• Bilateral Wilms' tumors |
| 9 | Unknown site; paired site, lateral origin unknown; midline tumor |

## BILATERAL SITES

- Laterality must be recorded for the following bilateral sites. Only major headings are listed. Laterality should be recorded for all anatomic sub-sites included in *ICD-O-3* unless specifically excluded. Such exclusions are coded 0.

- Code laterality using codes 1–4 or 9 for all of the sites listed in the following table:

| PAIRED ORGAN SITES - ALPHABETICAL ORDER | |
|---|---|
| **PRIMARY SITE** | **ICD-O-3 CODES** |
| Acoustic nerve | C724 |
| Adrenal gland [cortex, medulla] | C740–C749 |
| Breast | C500–C509 |
| Carotid body | C754 |
| Cerebral meninges, NOS | C700 |
| Cerebrum | C710 |
| Conjunctiva, lacrimal gland, orbit, cornea, retina, choroid, ciliary body, iris, sclera, lens, eyeball | C690 |
| Connective, subcutaneous and other soft tissues of lower limb & hip | C492 |
| Connective, subcutaneous and other soft tissue of upper limb & shoulder | C491 |
| Cranial nerve, NOS | C725 |
| Epididymis | C630 |
| Fallopian tube | C570 |

| PAIRED ORGAN SITES - ALPHABETICAL ORDER | |
|---|---|
| **PRIMARY SITE** | **ICD-O-3 CODES** |
| Frontal lobe | C711 |
| Frontal sinus | C312 |
| Kidney, NOS | C649 |
| Long bones of upper limb, scapula and associated joints | C400 |
| Long bones of lower limb and associated joints | C402 |
| Lung | C341–C349 |
| Main bronchus [excluding carina] | C340 |
| Maxillary sinus [antrum] | C310 |
| Middle ear [tympanic cavity] | C301 |
| Nasal cavity [excluding nasal cartilage and nasal septum code 0] | C300 |
| Occipital lobe | C714 |
| Olfactory nerve | C722 |
| Optic nerve | C723 |
| Ovary | C569 |
| Overlapping lesion of the eye and adnexa; Eye, NOS; Eye and lacrimal Gland | C690–C699 |
| Parietal lobe | C713 |
| Parotid gland | C079 |
| Pelvic Bones and associated joints [excluding sacrum, coccyx and symphysis pubis - code 0] | C414 |
| Peripheral nerves and autonomic nervous system of lower limb and Hip | C472 |
| Peripheral nerves and autonomic nervous system of upper limb and shoulder | C471 |
| Pleura | C384 |
| Renal pelvis | C659 |
| Rib, clavicle, and associated joints [excluding sternum - code 0] | C413 |
| Short bones of upper limb and associated joints | C401 |
| Short bones of lower limb and associated joints | C403 |
| Skin of external ear | C442 |
| Skin of eyelid | C441 |
| Skin of other and unspecified parts of face [midline code 9] | C443 |
| Skin of upper limb and shoulder | C446 |
| Skin of lower limb and hip | C447 |
| Skin of trunk [midline code 9] | C445 |
| Spermatic cord | C631 |

| PAIRED ORGAN SITES - ALPHABETICAL ORDER | |
|---|---|
| **PRIMARY SITE** | **ICD-O-3 CODES** |
| Sublingual gland | C081 |
| Submandibular gland | C080 |
| Temporal lobe | C712 |
| Testis | C620–C629 |
| Tonsil, NOS and Overlapping lesion of Tonsil | C098–C099 |
| Tonsillar fossa | C090 |
| Tonsillar pillar | C091 |
| Ureter | C669 |

| PAIRED ORGAN SITES - NUMERICAL ORDER | |
|---|---|
| **ICD-O-3** | **PRIMARY SITE** |
| C079 | Parotid gland |
| C080 | Submandibular gland |
| C081 | Sublingual gland |
| C090 | Tonsillar fossa |
| C091 | Tonsillar pillar |
| C098 | Overlapping lesion of tonsil |
| C099 | Tonsil, NOS |
| C300 | Nasal cavity [excluding nasal cartilage and nasal septum code 0] |
| C301 | Middle ear [tympanic cavity] |
| C310 | Maxillary sinus [antrum] |
| C312 | Frontal sinus |
| C340 | Main bronchus [excluding carina] |
| C341–C349 | Lung |
| C384 | Pleura |
| C400 | Long bones of upper limb, scapula, and associated joints |
| C401 | Short bones of upper limb and associated joints |
| C402 | Long bones of lower limb and associated joints |
| C403 | Short bones of lower limb and associated joints |
| C413 | Rib and clavicle [excluding sternum code 0] |
| C414 | Pelvic bones [excluding sacrum, coccyx, and symphysis pubis code 0] |
| C441 | Skin of eyelid |
| C442 | Skin of external ear |
| C443 | Skin of other and unspecified parts of face [midline code 9] |
| C445 | Skin of trunk [midline code 9] |

| PAIRED ORGAN SITES - NUMERICAL ORDER | |
|---|---|
| **ICD-O-3** | **PRIMARY SITE** |
| C446 | Skin of upper limb and shoulder |
| C447 | Skin of lower limb and hip |
| C471 | Peripheral nerves and autonomic nervous system of upper limb and shoulder |
| C472 | Peripheral nerves and autonomic nervous system of lower limb and hip |
| C491 | Connective, subcutaneous, and other soft tissues of upper limb and shoulder |
| C492 | Connective, subcutaneous, and other soft tissues of lower limb and hip |
| C500–C509 | Breast |
| C569 | Ovary |
| C570 | Fallopian tube |
| C620–C629 | Testis |
| C630 | Epididymis |
| C631 | Spermatic cord |
| C649 | Kidney, NOS |
| C659 | Renal pelvis |
| C669 | Ureter |
| C690–C699 | Eye and adnexa |
| C700 | Cerebral meninges , NOS |
| C710 | Cerebrum [effective with cases diagnosed 01/01/2004] |
| C711 | Frontal lobe [effective with cases diagnosed 01/01/2004] |
| C712 | Temporal lobe [effective with cases diagnosed 01/01/2004] |
| C713 | Parietal lobe [effective with cases diagnosed 01/01/2004] |
| C714 | Occipital lobe [effective with cases diagnosed 01/01/2004] |
| C722 | Olfactory nerve [effective with cases diagnosed 01/01/2004] |
| C723 | Optic nerve [effective with cases diagnosed 01/01/2004] |
| C724 | Acoustic nerve [effective with cases diagnosed 01/01/2004] |
| C725 | Cranial nerve, NOS [effective with cases diagnosed 01/01/2004] |
| C740–C749 | Adrenal gland [cortex, medulla] |
| C754 | Carotid body |

***Notes:***

a. *A laterality code of 1–4 or 9* ***must*** *be assigned for the above sites except as noted. If the site is not listed on the table, assign code 0 for laterality.*

b. *All primary brain and CNS tumors diagnosed prior to 2004 are coded laterality 0, not a paired site.*

c. *Never use code 4 for bilateral primaries for which separate abstracts are prepared, or when the side of origin is **known** and the tumor has spread to the other side.*

**Example:**

A left breast primary with metastasis to the right breast is coded to 2 (left). This would **not** be coded to 4 (bilateral).

***Note:** Sometimes the physician may describe the site of the tumor in an organ as right or left. This is a descriptive term and does not refer to a bilateral site or organ.*

**Example:**

Patient admitted for surgical resection of tumor in right colon. Code to 0, Not a paired site. Do not code to 1. Right colon refers to the ascending colon. The colon is not a paired site.

## FINAL DIAGNOSIS – MORPHOLOGY/BEHAVIOR, GRADE, PRIMARY SITE, AND LATERALITY DOCUMENTATION (NAACCR ITEMS #2580, 2590)

Text to support morphology/behavior, grade, primary site, and laterality codes **must** be provided.

**Documenting Instructions**

1. Record the morphology/behavior, grade, primary site, and laterality descriptions.

2. Do not use the generic ICD-9-CM code statement found on the face/attestation sheet.

**Examples:**

a. **Morphology:** Moderately well differentiated mucin-producing adenocarcinoma
**Primary Site:** Colon, ascending

b. **Morphology:** Grade 3, infiltrating ductal and lobular carcinoma
**Primary Site:** Right breast, upper outer quadrant

c. **Morphology:** Anaplastic astrocytoma
**Primary Site:** Brain, temporal-parietal lobe

d. **Morphology:** Intermediate grade large cell carcinoma
**Primary Site:** Left lung lower lobe

## DIAGNOSTIC CONFIRMATION (NAACCR ITEM #490) (FORDS pg. 99; SEER pgs. 81–82)

**Description**
Indicates the most accurate diagnostic method of the reportable tumor being reported at any time in the patient's lifetime.

**Explanation**
This field does not have a time restriction. It is the best method of confirmation at any time during the entire course of the disease. This field is used to calculate the percentage of microscopically confirmed cancers.

**Coding Instructions**

1. The codes are in **priority order**; code 1 has the highest priority. Always code the procedure with the lower numeric value when presence of cancer is confirmed with multiple diagnostic methods.

2. Change to a lower code, if ANY TIME during the course of disease the patient has a diagnostic confirmation that has a higher priority.

3. If diagnosed elsewhere, copies of the previous pathology or radiology reports included in the medical record may be used to code this field.

4. All diagnostic reports in the medical record must be reviewed to determine the most definitive method used to confirm the diagnosis of cancer. This review must cover the entire medical history in regard to the primary tumor. If diagnosed prior to admission to the reporting facility, review the history section of the record to identify information regarding previous diagnostic tests and treatments.

5. If the information in the medical record indicates a biopsy or resection of the tumor has been performed, assume the diagnostic confirmation is histological.

6. Assign **code 1** when the microscopic diagnosis is based on:

   a. Tissue specimens from biopsy, frozen section, surgery, autopsy or D&C

   b. Bone marrow specimens (aspiration and biopsy)

   c. For all hematopoietic disease (leukemia, multiple myeloma, etc.) positive findings including peripheral blood smears, CBCs and WBCs.

7. Assign **code 2** when the microscopic diagnosis is based on:

   a. Examination of cells (rather than tissue) including but not limited to: sputum smears, bronchial brushings, bronchial washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid,

peritoneal fluid, pleural fluid, urinary sediment, cervical smears and vaginal smears.

b. Paraffin block specimens from concentrated spinal, pleural, or peritoneal fluid

8. Assign **code 4** when there is information that the diagnosis of cancer was microscopically confirmed, but the type of confirmation is unknown.

9. Assign **code 5** when the diagnosis of cancer is based on laboratory tests or marker studies, which are clinically diagnostic for that specific cancer.

**Examples:**

a. The presence of alpha-fetoprotein for liver cancer.

b. An abnormal electrophoretic spike for multiple myeloma or Waldenstrom macroglobulinemia.

c. If the workup for a prostate cancer patient is limited to a highly elevated PSA and the physician diagnoses and/or treats the patient based only on that PSA, code the diagnostic confirmation to 5.

10. Assign **code 6** when the diagnosis is based only on:

    a. The surgeon's operative report from a surgical exploration or endoscopy such as colonoscopy, mediastinoscopy, or peritoneoscopy and no tissue was examined.

    b. Gross autopsy findings (no tissue or cytologic confirmation).

11. Assign **code 7** when the only confirmation of malignancy was diagnostic imaging such as computerized axial tomography (CT scans), magnetic resonance imaging (MRI scans), or ultrasounds/sonography. Assign **code 8** when the case was diagnosed by any clinical method not mentioned in preceding codes. The diagnostic confirmation is coded 8 when the only confirmation of disease is a physician's clinical diagnosis.

12. Assign **code 9** when it is unknown if the diagnosis was confirmed microscopically. Death certificate only cases will be assigned **code 9**.

***Note:*** *The diagnostic code must be changed to the lower (more specific) code if a more definitive code confirms the diagnosis during the course of the disease,* ***regardless of time frame.***

**Examples:**

a. Mammography indicates a lesion suspicious for cancer. The diagnostic confirmation code

is 7. Two weeks later a biopsy confirms infiltrating ductal carcinoma. The correct diagnostic confirmation code is 1.

b. MRI originally diagnosed a patient with a glioblastoma. The diagnostic confirmation code is 7. A year later a surgical biopsy is obtained. The diagnostic confirmation code would be changed to 1.

c. A thoracentesis is performed for a patient who is found to have a large pleural effusion. Cytology reveals malignant cells consistent with adenocarcinoma. The diagnostic confirmation code is 2.

d. CAT scan of abdomen reveals metastatic deposits in the liver and a large lesion in the ascending colon. Biopsy and later resection of the colon lesion revealed mucin-producing adenocarcinoma. The diagnostic confirmation code is 1.

e. Fine needle aspiration (FNA) is positive for malignant cells. The diagnostic confirmation code is 2.

***EXCEPTION:*** *If an aspiration biopsy of bone marrow is performed for diagnosing leukemia, the diagnostic confirmation code is 1. Code the diagnostic confirmation field to 1 (positive histology) for all hematopoietic diseases diagnosed by either peripheral blood or bone marrow biopsy.*

| CODE | DESCRIPTION | DEFINITION |
|---|---|---|
| | **MICROSCOPICALLY CONFIRMED** | |
| 1 | Positive histology | Histological confirmation (tissue microscopically examined). Includes positive hematological findings relative to leukemia and bone marrow specimens (including aspiration biopsies). In situ staged cases must be microscopically confirmed. |
| 2 | Positive cytology | Cytological confirmation (no tissue microscopically examined; fluid cells microscopically examined). Includes pap smears, bronchial brushings, FNA and peritoneal fluid, cervical and vaginal smears, diagnoses based on paraffin block specimens from concentrated spinal, pleural or peritoneal fluid. |
| 4 | Positive microscopic confirmation, method not indicated | Diagnosis is stated to be microscopically confirmed but the method is not specified. |

| | | |
|---|---|---|
| **NOT MICROSCOPICALLY CONFIRMED** | | |
| 5 | Positive laboratory test/marker study | A clinical diagnosis of cancer is based on laboratory tests/marker studies that are clinically diagnostic for cancer. This includes alpha-fetoprotein for liver cancer and abnormal electrophorectic spike for multiple myeloma. Elevated PSA is non-diagnostic of cancer. If the physician uses the PSA as a basis for diagnosing prostate cancer with no other work-up, code to 5. (Adapted from SEER). |
| 6 | Direct visualization without microscopic confirmation | The tumor was visualized during a surgical/endoscopic procedure, with no specimen for microscopic exam. |
| 7 | Radiography and other imaging techniques without microscopic confirmation | The physician diagnosed the tumor from an imaging technique only. |
| 8 | Clinical diagnosis only (other than 5, 6, or 7) | The physician documented the tumor in the medical record. ***Note:*** Refer to *Ambiguous Terminology List*. For cases diagnosed on or after 1/1/2007, refer to Appendix O. |
| **CONFIRMATION UNKNOWN** | | |
| 9 | Unknown whether or not microscopically confirmed | There is a statement of tumor in the medical record, but there is no indication of how it was diagnosed. Includes death certificate only cases. |

## TUMOR SIZE (NAACCR ITEM #780) (FORDS pgs. 100–101; SEER EOD pgs. 3–6)

***Notes:***

a. This data field is coded only for cases diagnosed prior to 2004.

b. Code tumor size using CS tumor size (NAACCR Item #2800) for cases diagnosed on or after January 1, 2004. For specific CS tumor size coding instructions, refer to *Appendix A*.

**Description**
The tumor size is the largest dimension or the diameter of the primary tumor recorded in *millimeters*.

**Explanation**
Tumor size aids in determining prognosis and making treatment decisions.

**Coding Instructions**

Record the size of the tumor from the pathology report, if available. Information on tumor size from imaging/radiographic techniques can be used to code size, but should be taken as a lower priority.

1. Code the exact size of the primary tumor in millimeters. To convert centimeters (cm) to millimeters (mm) move the decimal point one digit to the right or multiply the centimeters by 10.

**Example:**

3.2 **cm** tumor is recorded as 032 mm.

2. Code to 001 for tumors less than 1 mm in size.

**Example:**

A 0.5 **mm** tumor is recorded as 001.

3. Round the size of the tumor off to the nearest millimeter.

**Examples:**

a. A 4.8 **mm** tumor is recorded as 005.

b. A 4.2 **mm** tumor is recorded as 004.

4. Code the largest dimension or diameter of the tumor, whether it is from an excisional biopsy specimen or the complete resection of the primary tumor.

**Examples:**

a. The colonoscopy with biopsy revealed a 1cm tumor. Two days later the pathology report from a sigmoid colon resection described a 3.5 x 2.6 cm carcinoma. Record the tumor size as 035.

b. The pathology report from an excisional biopsy describes the tumor size as 3 x 4.4 x 2.5 cm. The resection revealed a residual 1.0 cm tumor. Record the tumor size as 044.

5. Code the tumor size as stated in the pathology report for true in situ tumors. When a tumor has both an in situ and an invasive component and each is measured, code to the size of the invasive component, even if it is smaller.

**Examples:**

a. The pathology report states an excisional biopsy was performed that contained a 2 cm in situ tumor with clear margins. Record the tumor size as 020.

b. The pathology report describes a breast mass as 2 x 1.5 cm intraductal carcinoma and 1 cm of infiltrating ductal carcinoma. Record the tumor size as 010.

6. Code tumor size to 000 if no mass or tumor is found.

**Example:**

A tumor of a stated primary is not found, but the tumor has metastasized, **code to 000**.

***EXCEPTION: Do not** code tumor size to 000 when a tumor is not visible in physical exam or by imaging, but the tumor is found microscopically.*

7. Code to 998 when the following terms describe tumor involvement for these specified sites.

a. Esophagus (C150–C155, C158, C159): Entire circumference

b. Stomach (C160–C166, C168, C169): Diffuse, widespread, ¾ or more, linitis plastica

c. Colorectal (C180–C209 with M-8220/8221 and /2 or /3): Familial/multiple polyposis

d. Lung and main stem bronchus (C340–C343, C348, C349): Diffuse, entire lobe or lung

e. Breast (C500–C506, C508, C509): Inflammatory carcinoma, diffuse, widespread, ¾ or more of breast

Code to 999 for the following scenarios:

a. If only one size is given for a tumor with mixed *in situ* **and** invasive components.

b. If the size of the tumor is unknown or tumor size is not documented in the medical record.

c. If only a needle biopsy or incisional biopsy specimen was performed.

d. For morphologies or sites where size is not applicable: Hematopoietic, reticuloendithelial, immunoproliferative, or myeloproliferative disease (C420, C421, C423, C424 and/or M-9750, 9760–9764, 9800–9820, 9826, 9831–9920, 9931–9964, 9980–9989)

e. Letterer-Siwe disease (M-9754)

f. Multiple myeloma (M-9732)

g. Unknown and ill-defined primary (C760–C768, C809)

**Do not** code the size of polyps, ulcers, cysts, or metastases.

**Do not** add pieces, chips, or slices together to create a whole; they might not be from the same location or might represent only a small portion of a larger tumor.

**EXCEPTION:** If the pathologist states an aggregate or composite size (determined by piecing the tumor together and measuring it), record that size **if** the tumor has been completely excised. If patient received neoadjuvant radiation therapy or systemic therapy (chemotherapy, hormone therapy, or immunotherapy), code the tumor size prior to the start of any treatment.

**Guidelines for Coding Site-Specific Tumor Sizes:**

1. For Kaposi's sarcoma, SEER requires information on HIV status instead of tumor size. **The TCR does not collect this information.** *Code the tumor size to 999.*

2. For mycosis fungoides and Sezary disease of skin, vulva, penis, and scrotum, SEER requires information on peripheral blood involvement instead of tumor size. **The TCR does not collect this information.** *Code the tumor size to 999.*

3. **Depth of invasion or thickness of tumor** is recorded instead of size for melanoma of skin, vulva, penis, scrotum, and conjunctiva.

**Tumor Size:**

| CODE | DESCRIPTION |
|---|---|
| 000 | No mass or tumor found |
| 001–988 | Exact size in millimeters |
| 989 | 989 millimeters or larger, melanomas greater than or equal to 9.89 mm in depth |
| 990 | Microscopic focus or foci only, no size is given |
| 998 | Tumor involvement of specified esophageal, stomach, colorectal, lung and mainstem bronchus, and breast primaries (see coding instructions) |
| 999 | Unknown; size not stated; not stated in patient record; not applicable |

***NOTE:*** *The physician or pathologist may describe the tumor size in descriptive terms of an object. The following chart lists examples of some of the most common descriptive terms and the millimeter equivalent:*

| DESCRIPTIVE TERM | MILLIMETER EQUIVALENT | DESCRIPTIVE TERM | MILLIMETER EQUIVALENT | DESCRIPTIVE TERM | MILLIMETER EQUIVALENT |
|---|---|---|---|---|---|
| EGG | | MISCELLANEOUS FOOD | | VEGETABLE | |
| Bantam | 040 | Doughnut | 090 | Bean | 010 |
| Goose | 070 | Lentil | 009 | Bean, lima | 020 |
| Hen | 030 | Millet | 009 | Pea | 009 |
| Pigeon | 030 | | | Pea, split | 009 |
| Robin | 020 | | | | |

| FRUIT | | NUTS | | MISCELLANEOUS ITEMS | |
|---|---|---|---|---|---|
| Apple | 070 | Almond | 030 | Ball, golf | 040 |
| Apricot | 040 | Chestnut | 040 | Ball, ping-pong | 030 |
| Cherry | 020 | Chestnut, horse | 040 | Ball, tennis | 060 |
| Date | 040 | Hazel | 020 | Baseball | 070 |
| Fig (dried) | 040 | Hickory | 030 | Fist | 090 |
| Grape | 020 | Peanut | 010 | Marble | 010 |
| Grapefruit | 100 | Pecan | 030 | Match head | 009 |
| Kumquat | 050 | Walnut | 030 | Microscope focus | 001 |
| Lemon | 080 | **MONEY** | | Pencil eraser | 009 |
| Olive | 020 | Dime | 010 | | |
| Orange | 090 | Dollar, half | 030 | | |
| Peach | 060 | Dollar, silver | 040 | | |
| Pear | 090 | Nickel | 020 | | |
| Plum | 030 | Quarter | 020 | | |
| Tangerine | 060 | Penny | 010 | | |

**REGIONAL LYMPH NODES POSITIVE** (NAACCR ITEM #820) (FORDS pg. 103; SEER pg. 146, CS MANUAL pg. I-45)

**Description**
Describes the total number of regional lymph nodes examined by the pathologist and reported as containing malignant cells.

**Explanation**
This item is necessary for pathologic staging and helps determine treatment methods.
***Note:*** *This field has been moved to CS in Appendix A for consistency with national standards that became effective in 2004.*

**Coding Instructions**

1. Record the total number of regional lymph nodes removed (as part of the first course of treatment) and examined and reported as containing malignant cells by the pathologist. Involved distant lymph nodes should be coded in *CS Mets at DX (NAACCR Item #2850).*

2. The number of regional lymph nodes positive is cumulative from all procedures that removed lymph nodes through the completion of surgeries in the first course of treatment.

3. This field is to be recorded regardless of whether the patient received preoperative treatment.

4. This field is based on pathologic information only. If no lymph nodes were removed for examination, or if a lymph node drainage area was removed but no lymph nodes were found, code as 98.

5. The number of regional lymph nodes positive **must be** equal to or less than the number nodes recorded in *Regional Lymph Nodes Examined* (NAACCR Item #830).

6. Code as 95 when the lymph nodes are not removed, but cytology or histology from a regional lymph node aspiration is positive for malignant cells.

7. Code to 99 for morphologies or sites where regional lymph node examination is not applicable:

   a. Placenta (C589)

   b. Brain and cerebral meninges (C700, C710–C719

   c. Other parts of Central Nervous System (C701, C709, C720–C725, C728–C729)

   d. Hodgkin and non-Hodgkin lymphoma (M-959–972) **EXCEPT** 9700/3 and 9701/3

   e. Hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative neoplasms (M-9731–9734, 9740–9742, 9750–9758, 9760–9762, 9764–9769, 9800–9801, 9805, 9820, 9823, 9826–9827, 9831–9837, 9840, 9860–9861, 9863, 9866–9867, 9870–9876, 9891, 9895–9897, 9910, 9920, 9930–9931, 9940, 9945–9946, 9948, 9950, 9960–9964, 9970, 9975, 9980, 9982–9987, 9989)

   f. Unknown and ill-defined primary sites (C809,C420–C424, C760–C765, C767–C768, C770–C775, C778–C779; Note: For C42_ and C77_ other than hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative neoplasms as listed above, Hodgkin and non-Hodgkin lymphomas as listed above, and Kaposi sarcoma 9140/3

***EXCEPTION:*** *The field Lymph Nodes Positive is always coded 99 for* ***both*** *nodal and extranodal lymphomas.*

***NOTE:*** *Table may also be found in the Standard Table Quick Reference.*

| CODE | DESCRIPTION |
|---|---|
| 00 | All lymph nodes examined are negative. |
| 01–89 | 1–89 regional lymph nodes are positive. (Code exact number of regional lymph nodes positive) |
| 90 | 90 or more regional lymph nodes are positive. |
| 95 | Positive aspiration or core biopsy of lymph node(s) was performed. |
| 97 | Positive regional nodes are documented, but the number is unspecified. |

| CODE | DESCRIPTION |
|---|---|
| 98 | No regional nodes were examined |
| 99 | Unknown whether regional lymph nodes are positive; not applicable; not stated in patient record |

**REGIONAL LYMPH NODES EXAMINED** (NAACCR Item #830) (FORDS pg. 102; SEER pgs. 148–149, CS MANUAL pg. I-46)

**Description**
Describes the total number of regional lymph nodes examined by the pathologist.

**Explanation**
This item is necessary for pathologic staging and helps determine treatment methods.

***Note:*** *In SCL, this field has been moved to CS in Appendix A for consistency with national standards that became effective in 2004.*

**Coding Instructions**

1. Record the total number of regional lymph nodes removed (as part of the first course of treatment) and examined by the pathologist.

2. Code only **regional** nodes in this field. Refer to the *SEER Summary Staging Manual 2000* for site-specific identification of regional lymph nodes.

3. This field is to be recorded regardless of whether the patient had preoperative treatment.

***Note:*** *Removal of the primary tumor and a regional lymph node dissection may or may not be done in one surgical procedure.*

4. The number of regional lymph nodes examined **must be** equal to or greater than the number of nodes recorded in *regional lymph nodes positive* (NAACCR Item #820).

5. Code to 99 for morphologies or sites where regional lymph node examination is not applicable:

a. Placenta (589)

b. Brain and cerebral meninges (C70.0, C71.0–C71.9)

c. Other parts of central nervous system (C701, C709, C720–C725, C728–C729)

d. Hodgkin and non-Hodgkin lymphoma (M-959–972) EXCEPT 9700/3 and 9701/3

e. Hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative neoplasms (M-9731–9734, 9740–9742, 9750–9758, 9760–9762, 9764–9769, 9800–9801, 9805, 9820, 9823,

9826–9827, 9831–9837, 9840, 9860–9861, 9863, 9866–9867, 9870–9876, 9891, 9895–9897, 9910, 9920, 9930–9931, 9940, 9945–9946, 9948, 9950, 9960–9964, 9970, 9975, 9980, 9982–9987, 9989)

f. Unknown and ill-defined primary sites (C809,C420–C424, C760–C765, C767–C768, C770–C775, C778–C779; ***Note:*** *For C42_ and C77_ other than hematopoietic, reticuloendothelial, Immunoproliferative, or myeloproliferative neoplasms as listed above, Hodgkin and non-Hodgkin lymphomas as listed above, and Kaposi sarcoma 9140/3.*

***EXCEPTION****: The field Lymph Nodes Positive is always coded 99 for* ***both*** *nodal and extranodal lymphomas.*

6. Do **not** code *distant* lymph nodes removed in this field.

***Note****: Table may also be found on Standard Table Quick Reference.*

| CODE | DESCRIPTION |
|---|---|
| 00 | No lymph nodes were examined. |
| 01–89 | 1–89 lymph nodes were examined. (Code exact number of regional lymph nodes examined.) |
| 90 | 90 or more lymph nodes were examined. |
| 95 | No regional lymph nodes were removed, but aspiration or core biopsy of regional lymph nodes was performed. |
| 96 | Regional lymph node removal was documented as a sampling, and the number of nodes is unknown/not stated. |
| 97 | Regional lymph node removal was documented as a dissection, and the number of nodes is unknown/not stated. |
| 98 | Regional lymph nodes were surgically removed, but the number of nodes is unknown/not stated and not documented as a sampling or dissection; nodes were examined, but the number is unknown. |
| 99 | It is unknown whether regional lymph nodes were examined; not applicable or negative; not stated in patient record. |

**Examples:**

a. Pathology report states: Right lobectomy and lymph node dissection performed. Nine of twenty-two hilar nodes are positive for metastatic adenocarcinoma.

**Code:**
Regional nodes positive: 09
Regional nodes examined: 22

**Document in text:**
9/22 hilar nodes

b. Physical exam revealed a large lesion in the UOQ of the right breast. Incisional biopsy confirmed infiltrating ductal carcinoma. Patient refused work-up or treatment.

**Code:**
Regional nodes positive: 98
Regional nodes examined: 00

**Document in text:**
No nodes removed or examined

c. Pathology report states: Moderately differentiated mucinous adenocarcinoma of the cecum. Two of 10 right colic lymph nodes are positive for metastasis.

**Code:**
Regional nodes positive: 02
Regional nodes examined: 10

**Document in text:**
2/10 right colic nodes

d. Pathology report states: All regional nodes examined are negative.

**Code:**
Regional nodes positive: 00
Regional nodes examined: 98.

**Document in text:**
Regional nodes neg., # examined unknown

e. During work-up of a prostate carcinoma, CT of the pelvis revealed probable metastatic iliac lymph nodes.

**Code:**
Regional nodes positive: 98
Regional nodes examined: 00

**Document in text:**
Per CT probable metastatic iliac nodes

f. Patient was diagnosed with multiple myeloma.

**Code:**
Regional nodes positive: 99
Regional nodes examined: 99