

CANCER INFORMATION

Date of Initial Diagnosis (NAACCR Item #390) (FORDS pg. 93; SEER pgs. 49-52)

Description

The date of initial diagnosis is the earliest date this primary cancer is diagnosed clinically or microscopically 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:

a. YYYYMMDD - when the complete date is known and valid

Example: The patient has a CT on March 25, 2012 and the diagnosis is lung cancer. Code the diagnosis date as 20120325.

b. YYYYMM - when year and month are known and valid, and day is unknown.

Example:

A mammogram done in January 2012 shows that the patient has a malignancy in the upper outer quadrant of the right breast, but the day is unknown. Code the diagnosis date as 201201.

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.

Note: The Commission on Cancer does not recognize the BI-RADs schema for mammography as a case-finding source. However, if the radiologist states suspicious for malignancy (not neoplasm) in his/her impression, the case is reportable and the date of the mammogram would be considered the date of initial diagnosis for breast cancer.

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 read or created.

4. Refer to the *List of Ambiguous Terms* on page 37 for language that represents a diagnosis of cancer.

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 and document in the *Summary Stage Documentation* text field.

Examples:

a. The patient has an excision of a benign fibrous histiocytoma on January 3, 2012. 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 20120103.

Note: 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 2012 with pathologic diagnosis of papillary cystadenoma of the ovaries. On December 6, 2012 the patient is diagnosed with widespread metastatic papillary cystadenocarcinoma. The slides from June 2012 are not reviewed and there is no physician statement saying the previous tumor was malignant. The date of initial diagnosis should be coded 20121206.

Note: Remember to check with your 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.

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

7. Use the actual date of diagnosis for an in utero diagnosis (For cases diagnosed before January 1, 2009, assign the date of birth).

Example: An ultrasound done on 2/2/2012 to determine expected date of birth shows an unborn baby has a brain tumor. After the baby is born on 4/12/2012, resection shows malignant teratoma. Code the date of diagnosis 20120202.

8. Use the date therapy was started as the date of diagnosis if the patient receives first course of treatment before a definitive diagnosis.

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

10. Suspicious cytology alone is not diagnostic of cancer. Use the date of positive clinical, positive histologic, or positive cytologic confirmation as the date of diagnosis. Suspicious cytology alone is never used for case ascertainment.

Note: Cytology is the examination of cells rather than tissue. This would include sputum smears, bronchial brushings, bronchial washings, prostatic secretions, breast secretions, gastric fluids, spinal fluid, peritoneal fluid, urinary sediment, and cervical and vaginal smears.

11. In the absence of an exact date of initial diagnosis, record the best approximation. For vague dates, estimate the date of diagnosis for month and year using all available information. An approximate date is preferable to an unknown date of diagnosis. Refer to the table and examples below. Documentation that the exact date of diagnosis is not available in the medical record must be provided in *Summary Stage Documentation* text field.

12. Code the year and month of admission when there is no basis for estimation and document “Date of DX unknown” in the *Summary Stage Documentation* text field. *This should be used only as a last resort.*

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

Example:

Patient admitted to your facility on April 26, 2012 with recurrent melanoma but the original date of diagnosis is unknown. Code the date of diagnosis as 201204. Record in the *Summary Stage Documentation* text field “Date of DX Unknown.”

Documentation	Date Code/Description
Spring	Use April (04) for the month
Summer	Use July (07) for the month
Fall/Autumn	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 year and month of admission and leave the day blank. 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 (blank).
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 March 15, 2012. The History and Physical states the patient has prostate carcinoma diagnosed about two months ago. Record the date of diagnosis as 201201.

b. A patient was admitted to your facility on September 10, 2012. The History and Physical states the

patient has bone and brain metastasis from malignant melanoma diagnosed in the spring. Record the date of diagnosis as 201204.

c. On March 12, 2012, 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, 2012, the patient has an excisional breast biopsy that confirms infiltrating ductal carcinoma. Record the date of diagnosis as 20120312.

Morphology and Behavior (NAACCR Item #522, #523) (FORDS pgs. 96-98; SEER pgs. 69-72) (ICD-O-3)

Description

Identifies the microscopic structure of cells and the behavior of the tumor being reported.

Explanation

The histological (morphologic) 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

1. Record the morphology code using the Alphabetic Index (ICD-O-3 pages 105–218) and the Numerical Index (ICD-O-3 pgs. 69–104). Review both of these sections of the ICD-O-3 to ensure accurate coding.

Note: For primaries diagnosed prior to January 1, 2001 use ICD-O-2.

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

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.

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

Histology can be coded only after the determination of single vs. multiple primaries has been made. Refer to Multiple Primary and Histology (MP/H) rules in Appendix O of this manual to determine the number of primaries for solid tumors. For hematopoietic and lymphoid diseases refer to the *2012 Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual* at <http://seer.cancer.gov/tools/heme/index.html>.

MP/H Histology Coding Rules General Information

1. The 2007 histology coding rules replace all previous rules.
2. The rules are effective for cases diagnosed January 1, 2007 and after. Do not use these rules to abstract cases diagnosed prior to January 1, 2007.
3. The histology coding rules, found in Appendix O, are in text format. The rules are available in flowchart and matrix format on the SEER website:
<http://seer.cancer.gov/tools/mphrules/download.html>.
4. Rules are in hierarchical order within each section (Single Tumor and Multiple Tumors Abstracted as a Single Primary).

Note: Do not use these rules to determine case reportability, tumor grade, or behavior.

Note: For cases diagnosed prior to January 1, 2007 refer to Appendix D located on the TCR website:
<http://www.dshs.state.tx.us/tcr/2009crhb.shtm>.

Coding Instructions for Hematopoietic Primaries

Beginning with cases diagnosed in 2012, use the *2012 Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual* at <http://seer.cancer.gov/seertools/hemelymph/> for coding primary site, histology, and grade of hematopoietic and lymphoid tumors (M9590-9992). Use this manual to determine multiple primaries as well. For cases diagnosed between January 1, 2010 and December 31/2011 use the 2010 database at the same location.

For cases diagnosed prior to 2010 use the SEER table “Definitions of Single and Subsequent Primaries for Hematologic Malignancies” located in the 2009 TCR Cancer Reporting Handbook, Appendix E on the TCR website: <http://www.dshs.state.tx.us/tcr/2009crhb.shtm#Appxonline>.

Note: If the patient has a hematopoietic or lymphoid neoplasm diagnosed prior to 2010 and a new one diagnosed January 1, 2010 or later, use the 2010 or 2012 *Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual* as appropriate to determine multiple primaries.

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: The TCR does not accept cases coded with 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. See *ICD-O-3*, pg 27.

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 are reportable to TCR for cases diagnosed in **2004** and forward. (C700, C701, C709, C710-C719, C720-C725, C728, C729, C751-C753)
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 invasive /3 if any portion of the primary tumor is invasive no matter how limited.

Example:

Pathology from mastectomy specimen: Large mass composed of intraductal carcinoma with a single focus of microinvasion. Code the behavior as infiltrating duct carcinoma (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 an invasive /3 behavior code.
5. Code the behavior as invasive /3 if the pathology report describes the histology as invasive /3 and the ICD-O-3 histology code 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).
8. 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_)

Behavior Code	Fifth Digit Term	Example
2 cont'd	Terms synonymous with in situ	Intracystic, non-infiltrating
		Intraductal
		Intraepidermal, NOS
		Intraepithelial, NOS
		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_)
		Preinvasive
		Queyrat's erythroplasia (C60)
Stage 0 (except Paget's disease (8540/3) of breast and colon or rectal tumors confined to the lamina propria)		
VAIN III (C529)		
VIN III (C51_)		
3	Invasive	Invasive or microinvasive

Primary Site (NAACCR Item #400) (FORDS pg. 94; SEER pgs. 58-61)

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.

Refer to the Multiple Primary/Histology (MP/H) rules in Appendix O to determine the number of primaries for solid tumors. Use all of the available information to code the site.

Refer to the 2012 Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual at <http://seer.cancer.gov/seertools/hemelymph/> for hematopoietic and lymphoid neoplasms diagnosed January 1, 2012 and forward. For cases diagnosed between January 1, 2010 and December 31, 2011 use the 2010 manual at the same location.

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.

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)*. 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).**

Coding Instructions

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. 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 overlapping the base of tongue and anterior 2/3 of tongue. Code the

primary site to C028 (overlapping lesion of tongue).

Note: Do not use 8 when the primary site of origin is known or when more than one tumor is identified in different subsites.

Note: For lymphomas, if multiple lymph node chains are involved and the involved chains are in different lymph node regions, code C778 (lymph nodes of multiple regions). If the lymph nodes involved are in the same ICD-O-3 primary site code, code the primary site to lymph nodes of the specified nodal region. For example, if the only lymph node regions involved are the parotid, submandibular and supraclavicular lymph nodes, code the primary site C770.

3. 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 and the point of origin cannot be determined.

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 carcinoma 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).*

4. 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 different 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, C250, 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).*

5. 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).

Note: If at any time a specific primary site is identified, change the site code from Unknown Primary (C809) to the specified primary site. Check with the TCR regional office for the appropriate procedure if this case has already been submitted to the TCR.

6. 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 following table when the described histologies appear only with an ill-defined site description (such as “abdominal” or “arm”). Code to the tissue in which such tumors arise rather than the ill-defined region (C76_) of the body, which contains multiple tissues.

Histology	Description	Code to This Site
8720-8790	Melanoma	C44_, Skin
8800-8811, 8813-8830, 8840-8921, 9040-9044	Sarcoma except periosteal fibrosarcoma and dermatofibrosarcoma	C49_, Connective, Subcutaneous and Other Soft Tissues
8990-8991	Mesenchymoma	C49_, Connective, Subcutaneous, and Other Soft Tissues
9120-9170	Blood vessel tumors, lymphatic vessel tumors	C49_, Connective, Subcutaneous, and Other Soft Tissues
9580-9582	Granular cell tumor and alveolar soft part sarcoma	C49_, Connective, Subcutaneous and Other Soft Tissues
9240-9252	Mesenchymal chondrosarcoma and giant cell tumors	C40_, C41_ for Bone and Cartilage C49_, Connective, Subcutaneous and Other Soft Tissues
8940-8941	Mixed tumor, salivary gland type	C07_ for Parotid Gland C08_ for Other and Unspecified Major Salivary Glands

c. For other histologies use the NOS category for the organ system or the Ill Defined Sites (C760–C768) if the physician advisor cannot identify a primary site.

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

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 confirm the primary site.

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

Leukemia and Lymphoma Guidelines

Refer to *2012 Hematopoietic and Lymphoid Neoplasms Case Reportability and Coding Manual* at <http://seer.cancer.gov/seertools/hemelymph/> for cases diagnosed January 1, 2012 and forward. For cases diagnosed between January 1, 2010 and December 31, 2011 use the 2010 manual at the same location.

1. Code leukemia primaries to bone marrow (C421); blood cells originate in the bone marrow.
2. Malignant histiocytosis/Systemic histiocytosis is coded to bone marrow (C421).

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.

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.

Lymphoma Coding Instructions

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 to code CS data items.*

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. (See Module 7, rule PH36 in the *2012 Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual*)

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 to stage.*

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 nodes, NOS (C779). This situation will be very rare. (See Module 7, rule PH35 in the *2012 Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual*)

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 the surgery codes for that site should be used.** 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.**

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

a. Code retroperitoneal lymph nodes if described as retroperitoneal mass (C772)

b. Code inguinal lymph nodes if described as inguinal mass (C774)

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

See page A-93 for site-specific coding instructions for Esophagus.

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).

Melanoma Coding Instructions

Code to Skin, NOS (C449) if a patient is diagnosed with metastatic melanoma and the primary site is not identified.

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, soft tissue, NOS**, 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.

Mycosis Fungoides is coded to skin (C44_).

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. This code should **not** be used for colon and rectum primaries.

Grade of Tumor (NAACCR Item #440) (FORDS pg. 99; SEER pgs. 73-76)**Description**

Describes how much or how little the tumor cells resemble the parent tumor (organ of origin). It describes how well you can differentiate between normal cells and tumor cells. Well differentiated (Grade 1) is the most like normal tissue, and undifferentiated (Grade 4) is the least like normal tissue.

Explanation

Tumor grade is a system used to classify cancer cells in terms of how abnormal they look and how quickly they are likely to grow and metastasize.

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 the phenotype [T-cell and B-cell] for lymphomas and leukemias). 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

Note: When coding the ICD-O-3 morphology code, do not code the 6th digit. This is coded in the data item *Grade of Tumor*.

Coding Instructions

1. Code grade/differentiation according to the rules in the *ICD-O-3*, (pages 30-31, 67).
2. For instructions to code grade for hematopoietic and lymphoid neoplasms diagnosed January 1, 2012 and later refer to the *2012 Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual* at <http://seer.cancer.gov/seertools/hemelymph/>. For cases diagnosed between January 1, 2010 and December 31, 2011 use the 2010 manual at the same location.

Note: Do not use Table 13 on pages 16-17 of ICD-O-3 to determine grade for Hematopoietic and Lymphoid neoplasms. The table is outdated.

3. For sites other than breast, prostate and kidney, code the tumor grade using the following priority order: 1) terminology; 2) histologic grade; 3) nuclear grade.
4. If grade is not stated in the final pathology diagnosis, use the information in the microscopic section, addendum, or comment to code grade.
5. 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.

6. Code the grade from the primary tumor only, never from a metastatic site or a recurrence.
7. Code the grade for all unknown primaries to 9 (unknown grade) unless grade is explicit by histology, for example, anaplastic carcinoma (grade = 4).
8. 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).
9. Code the information from the consult if the specimen is sent to a specialty pathology department for a consult.
10. If there are multiple pathology consults, ask the pathologist or physician advisor to determine which information should be used.
11. Do not code the grade assigned to dysplasia; for example high grade dysplasia (adenocarcinoma in situ) would be coded to 9 (unknown grade).
12. FIGO (International Federation of Obstetrics and Gynecology) grades are not coded. For a diagnosis that includes a commonly used differentiation term with a FIGO grade, such as moderately differentiated FIGO grade II, disregard the FIGO grade and code according to the term moderately differentiated.
13. Code the grade or differentiation from the pathology report prior to any neoadjuvant treatment. If

there is no grade recorded prior to neoadjuvant treatment, assign code 9.

14. For the following sites see Appendix A for site specific coding instructions for grade. Site specific instructions take priority over general instructions.

- Colon
- Sarcoma
- Breast
- Kidney
- Prostate
- Brain (Astrocytoma)

Note: In 2012 CoC will not require coding of the field *Grade (Grade /Differentiation)* in some instances. TCR will continue to require coding of this field for all cases.

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).

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.

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
Cell Indicator 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

Terminology Conversion Table

Description	Grade	ICD-O-3 Morphology 6 TH Digit Code
Differentiated, NOS	I	1

Description	Grade	ICD-O-3 Morphology 6 TH Digit Code
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 6 TH 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 6 TH Digit Code
Low grade	1/3, I/III	2
Intermediate grade	2/3, II/III	3
High grade	3/3, III/III	4

Note: Do not use the Three-Grade Conversion Table for breast primaries.

Grade Path Value (NAACCR Item #441) (FORDS pg 102) (CS Manual Vs. 02.04 Part I Section 1 pg 84)

Description

This field documents the numerator or first number of a tumor grade reported in a 2, 3, or 4 grade system. It supplements but does not replace the field *Grade/Differentiation* (NAACCR Item #440), which is part of the ICD-O-3 morphology code structure and may be converted from another grading system or coded by a different set of rules. *Grade Path Value* is paired with *Grade Path System* to describe the original grade of the tumor.

Coding Instructions

1. Code the histologic grade or differentiation reported in the pathology report or a physician's statement in the medical record, in that order.
 - a. Code this field from the same tissue used to code the sixth digit of the ICD-O-3 morphology code (*Grade/Differentiation*). This field identifies how the original grade of the tumor was described.
 - b. Do not convert the terms well, moderately, or poorly differentiated, low/high, or anaplastic into codes in this field.
 - c. Code the histologic grade/differentiation in priority over a nuclear or architectural grade.

d. If grade is described in the medical record as a fraction (x/y), this data field is the numerator. In other words, this field is the first or upper number of a grade expressed in two parts.

Examples:

i. Synoptic report states grade ii of iii. *Code Grade Path Value as 2.*

ii. Final pathologic diagnosis listed as grade 1/4. *Code Grade Path Value as 1.*

iii. Microscopic description reports high grade III of III. *Code Grade Path Value as 3.*

e. Do not report grading systems such as Bloom-Richardson for breast or Fuhrman for kidney or Gleason for prostate or WHO grade as coded values in this field.

f. The code in this field cannot be greater than the corresponding code in *Grade Path System*.

g. For lymphomas and hematopoietic malignancies, this field is blank.

Code	Description
1	Recorded as Grade I or 1
2	Recorded as Grade II or 2
3	Recorded as Grade III or 3
4	Recorded as Grade IV or 4
Blank	No 2, 3, or 4 grade system available Unknown

Grade Path System (NAACCR Item #449 (FORDS pg 101) (CS Manual Vs. 02.04 Part I Section 1 pg 85))

Description

This field documents the denominator or second number of a tumor grade reported in a 2, 3, or 4 grade system. It supplements but does not replace the field *Grade/Differentiation* (NAACCR Item #440), which is part of the ICD-O-3 morphology code structure and may be converted from another grading system or coded by a different set of rules. *Grade Path System* is paired with *Grade Path Value* to describe the original grade of the tumor.

Explanation

This item is used to show whether a two, three or four grade system was used in the pathology report to describe the grade. This item is used in conjunction with *Grade Path Value* (NAACCR Item #441)

Coding Instructions

1. Code the grading system reported in the medical record. Do not convert the grade described in the pathology report.

a. Code this field from the same tissue used to code the sixth digit of the ICD-O-3 morphology code (*Grade/Differentiation*). This field identifies how the original grade of the tumor was described.

b. If grade is described in the medical record as a fraction (x/y), this data field is the denominator

Examples:

i. Synoptic report states grade ii of iii. *Code Grade Path System as 3.*

ii Final pathologic diagnosis listed as grade 1/4. *Code Grade Path System as 4.*

iii. Microscopic description reports high grade III of III. *Code Grade Path System as 3.*

c. Leave this field blank if another grading system is used in the pathology report. For example, do not report grading systems such a Bloom-Richardson for breast or Fuhrman for kidney or Gleason for prostate or WHO graded as coded values in this field.

d. For lymphomas and hematopoietic malignancies, this field is blank.

Code	Description
2	Recorded as Grade II or 2
3	Recorded as Grade III or 3
4	Recorded as Grade IV or 4
Blank	No 2,3, or 4 grade system available Unknown

Laterality (NAACCR Item #410) (FORDS pg. 95; SEER pgs. 62-64)

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 and later, laterality is coded for specified invasive, benign, and borderline primary intracranial and CNS tumors. See Paired Organ Sites Table beginning on page 104.

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 the disease originated in a paired site, but the laterality is unknown.

Example:

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.

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.

8. Assign code 5 for a midline tumor of a paired site.

Note: Midline for code 5 refers to the point where the right and left sides of paired organs come into direct contact and a tumor forms at that point such as skin of trunk (C445). Most paired sites cannot develop midline tumors.

Example:

A melanoma of the skin of back is described as midline. Record laterality as 5.

9. Non-paired sites may be coded right or left, if appropriate. Otherwise, code non-paired sites 0.

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 at time of diagnosis, lateral origin unknown for a single primary; or: Both ovaries simultaneously involved with a single histology Bilateral retinoblastomas Bilateral Wilms' tumors
5	Paired site: midline tumor
9	Unknown site; paired site, lateral origin unknown

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 1–5 or 9 for all of the sites listed in the following table:

Paired Organ Sites - Alphabetic 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
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

Paired Organ Sites - Alphabetic Order	
Primary Site	ICD-O-3 Codes
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 5]	C443
Skin of upper limb and shoulder	C446
Skin of lower limb and hip	C447
Skin of trunk [midline code 5]	C445
Spermatic cord	C631
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

Paired Organ Sites - Numerical Order	
ICD-O-3	Primary Site
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 5]
C445	Skin of trunk [midline code 5]
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]

Paired Organ Sites - Numerical Order	
ICD-O-3	Primary Site
C740–C749	Adrenal gland [cortex, medulla]
C754	Carotid body

Notes:

- a. A laterality code of 1–5 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 malignant 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. Code 4 is seldom used EXCEPT for the following diseases:
 - i. Both ovaries involved simultaneously, single histology
 - ii. Bilateral retinoblastoma
 - iii. Bilateral Wilms tumors

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 [Final Diagnosis (Primary, Laterality)], #2590 [Final Diagnosis (Morphology, Behavior, Grade)])

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 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, frontal-parietal lobe

d. **Morphology:** Intermediate grade large cell carcinoma

Primary Site: Left lung lower lobe

Lymph-Vascular Invasion (NAACCR Data Item 1182) (FORDS pg 103) (CS Manual Vs 02.04 Part 1 Section 1 pg 82)

Description

Indicates the presence or absence of tumor cells in lymphatic channels (not lymph nodes) or blood vessels within the primary tumor as noted microscopically by the pathologist.

Explanation

Lymph-vascular invasion is an indicator of prognosis. This field is used by the CS algorithm to map AJCC T for some primary sites.

Note: TCR collects this data item only for Penis (C60) and Testis (C62)

Coding Instructions

1. Code from pathology report(s). Code the absence or presence of lymph-vascular invasion as described in the medical record.

a. The primary sources of information about lymph-vascular invasion are the pathology check lists (synoptic reports) developed by the College of American Pathologists. If the case does not have a checklist or synoptic report, code from the pathology report or a physician's statement, in that order.

b. Do not code perineural invasion in this field.

c. Information to code this field can be taken from any specimen from the primary tumor.

d. If lymph-vascular invasion is identified anywhere in the resected specimen, it should be coded as present/identified.

2. Use of codes.

a. Use code 0 when the pathology report indicates that there is no lymph-vascular invasion. This

includes cases of purely in situ carcinoma, which biologically have no access to lymphatic or vascular channels below the basement membrane

b. Use code 1 when the pathology report or a physician's statement indicates that lymph-vascular invasion (or one of its synonyms) is present in the specimen.

Note: Synonyms for lymph-vascular invasion include LVI, lymphovascular invasion, vascular invasion, blood vessel invasion, and lymphatic invasion. Lymph node involvement is **not** the same as lymph-vascular invasion.

c. Use code 9 when

- i. there is no microscopic examination of a primary tissue specimen
- ii. the primary site specimen is cytology only or a fine needle aspiration
- iii. the biopsy is only a very small tissue sample
- iv. it is not possible to determine whether lymph-vascular invasion is present
- v. the pathologist indicates the specimen is insufficient to determine lymph-vascular invasion
- vi. lymph-vascular invasion is not mentioned in the pathology report.

Code	Description
0	Lymph-vascular invasion not present (absent)/Not identified
1	Lymph-vascular invasion present/Identified
8	Not applicable
9	Unknown if lymph-vascular invasion present Indeterminate

Diagnostic Confirmation (NAACCR ITEM #490) (FORDS pg. 104-106); SEER pgs. 65-68)

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 for Solid Tumors

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 at ANY TIME during the course of disease the patient has a diagnostic confirmation that has a higher priority. There is no time limit for this field.
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 even if the pathology report is not available.

Example:

A patient comes in for a bone scan for staging of a known prostate cancer. It is noted in the record that the patient had a prostate biopsy two weeks prior. Use diagnostic confirmation code 1, positive histology.

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

- a. Tissue specimens from biopsy, frozen section, surgery, autopsy or Dilatation & Curettage
- b. Bone marrow specimens (aspiration and biopsy)

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 **with** a clinical diagnosis for that specific cancer.

Examples:

a. The patient has elevated alpha-fetoprotein **with** a clinical diagnosis of liver cancer.

b. 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.

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.

12. 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.

13. Assign **code 9** when it is unknown how the diagnosis was confirmed. 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.**

Instructions for Coding Hematopoietic or Lymphoid Tumors (9590-9992)

1. There is no priority hierarchy for coding *Diagnostic Confirmation* for hematopoietic and lymphoid tumors. Usually the specific histologic type is diagnosed by immunophenotyping or genetic testing. For cases diagnosed January 1, 2012 and later see the *2012 Hematopoietic and Lymphoid Neoplasm*

Case Reportability and Coding Manual at <http://seer.cancer.gov/seertools/hemelymph/> for information on the definitive diagnostic confirmation code for specific types of neoplasm. For cases diagnosed between January 1, 2010 and December 31, 2011 use the 2010 manual at the same location.

2. **Code 1** when the microscopic diagnosis is based on tissue specimens from biopsy, frozen section, surgery, or autopsy or bone marrow specimens from aspiration or biopsy.

3. For leukemia only, **code 1** when the diagnosis is based only on the complete blood count (CBC), white blood count (WBC) or peripheral blood smear. Do not use code 1 if the diagnosis was based on immunophenotyping or genetic testing using tissue, bone marrow, or blood.
 4. Use **code 2** when the microscopic diagnosis is based on cytologic examination of *cells* (rather than tissue) including but not limited to spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, cervical smears and vaginal smears, or from paraffin block specimens from concentrated spinal, pleural, or peritoneal fluid. These methods are rarely used for hematopoietic or lymphoid tumors.
 5. Assign **code 3** when there is a histology positive for cancer AND positive immunophenotyping and/or positive genetic testing results. Do not use code 3 for neoplasms diagnosed prior to January 1, 2010
- Example:** Bone marrow examination is positive for acute myeloid leukemia(9861/3). Genetic testing shows AML with inv(16)(p13.1q22) (9871/3). Code the Diagnostic Confirmation 3, positive histology and positive genetic testing.
6. Assign **code 5** when the diagnosis of cancer is based on laboratory tests or marker studies which are clinically diagnostic for that specific cancer, but no positive histologic confirmation.
 7. Assign **code 6** when the diagnosis is based only on the surgeon's report from a surgical exploration or endoscopy or from gross autopsy findings without tissue or cytological findings.
 8. Assign **code 8** when the case was diagnosed by any clinical method that can not be coded as 6 or 7. A number of hematopoietic and lymphoid neoplasms are diagnosed by tests of exclusion where the tests for the disease are equivocal and the physician makes a clinical diagnosis based on the information from the equivocal tests and the patient's clinical presentation.

Codes

Code	Description	Definition
Microscopically Confirmed		
1	Positive histology	Histological confirmation (tissue microscopically examined). In situ behavior must be microscopically confirmed.
2	Positive cytology, no positive histology	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.

Code	Description	Definition
3	Positive histology PLUS - positive immunophenotyping AND/OR positive genetic studies (Used only for hematopoietic and lymphoid neoplasms 9590-9992)	Histology is positive for cancer, and there are also positive immunophenotyping and/or genetic test results. For example, bone marrow examination is positive for acute myeloid leukemia (98613). Genetic testing shows AML with inv(16)(p13.1q22) (98713).
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 but there is no histologic confirmation. This includes alpha-fetoprotein for liver cancer. 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 <i>Ambiguous Terminology List</i> . 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.

Changing Abstract Information

There are some circumstances under which the information originally coded in the abstract should be updated.

1. To correct coding or abstracting errors when identified.
2. When better information is available at a later date.
 - Earlier or more specific diagnosis date
 - Better histology or grade
 - More specific primary site
 - Lower diagnostic confirmation code

Example: At the time of diagnosis a patient is diagnosed with liver metastasis but primary site cannot be determined and the abstract is submitted as an unknown primary. At a later date the physician determines that the patient has a colon primary. Change the primary site from unknown to colon. Be sure to make any necessary changes in *Collaborative Stage* and *Surgery Codes*. Document the new information in the appropriate text fields.

Example: A patient is diagnosed with lung cancer by CT exam alone. An abstract is submitted with the histology of cancer (8000/3) and diagnostic confirmation code 7. At a later admit the H&P states that the patient has squamous cell carcinoma of the lung diagnosed by fine needle aspiration. The *Histology* should be changed from cancer to squamous cell carcinoma (8070/3), and the *Diagnostic Confirmation* should be changed to 2, cytology. These findings should also be documented in the text fields

Note: Contact 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.