

# NEW ABTRACTOR'S TRAINING

Day 2



# CANCER THERAPY ABSTRACTORS TRAINING

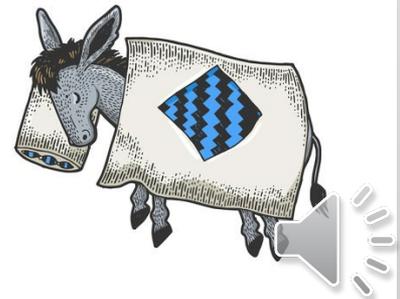
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# First Course of Therapy

## Treatment Plan

- All cancer-directed treatments specified in the physician(s) treatment plan and delivered to the patient after initial diagnosis are ***First Course of Therapy***
- Describes type(s) of treatment(s) intended to modify or control the malignancy
- Documentation is frequently found in several different sources (Ex: medical record, clinic record, consultation reports, outpatient records)
- Treatment plan must be documented in the TEXT fi



# Recording/Abstracting Cancer Therapy

- All Kentucky registries and registries that are part of ACoS-accredited cancer programs are **required** to record complete *first course of therapy* for analytic cases accessioned into CPDMS.net
- Complete reporting of first course of therapy is vital to researchers for determining treatment outcomes and developing more effective treatment and improving outcomes
- Complete reporting of first course of therapy impacts cancer patient survival



# Time Period

- **First course of therapy** includes all cancer-directed treatment planned by the physician(s) during or after the first diagnosis of cancer
- Planned therapy may include multiple modes of therapy, and may encompass intervals of a year or more
- *No treatment or active surveillance* may be a planned treatment option, and **is** considered first course of therapy
- If a treatment plan is not available, evaluate the therapy and the time it started
  - If the therapy is part of an established protocol or within accepted management guidelines for the disease, it is first course of therapy



## Time Period (continued)

- Consult the attending physician (Ex: surgeon, medical oncologist, radiation oncologist) or your registry's physician advisor if protocols or management guidelines are not available
- If there is no treatment plan, established protocol or management guidelines, and you cannot consult with a physician, use the principle, "first course of treatment must begin within four months of the date of initial diagnosis"



# Non-Definitive Treatment

## Non-definitive procedures include diagnostic procedures and supportive care

- Non-definitive treatment is mainly used for diagnosis of cancer
- This can also be used to prolong the patient's life, make the patient comfortable, or prepare the patient for definitive therapy
- Not cancer-directed
  - Not meant to reduce the size of the tumor or delay the spread of disease
- Generally, not used in statistical analysis of treatment



## Examples of non-definitive treatment:

- Surgical procedures:
  - Incisional biopsies (core biopsy)
  - Exploratory procedures with or without biopsies
- Supportive care/symptom relief:
  - Pain medication
  - Oxygen
  - Antibiotics administered for an associated infection
  - Transfusions\*
  - Intravenous therapy to maintain fluid or nutritional balance
  - Laser therapy directed at relieving symptoms

\* Excludes hematopoietic neoplasms



# Hematopoietic Diseases

## Code as directed in Hematopoietic and Lymphoid Neoplasm Coding Manual

For many of the reportable hematopoietic diseases, the standard treatment is either supportive care, observation, or another type of treatment that does not meet the usual definition of treatment that “modifies, controls, removes or destroys proliferating cancer tissue.”

- Such treatments include:
  - phlebotomy
  - aspirin
  - supportive care
  - observation
- These treatments are recorded as first course *Other Treatment* (code 1)
- For the hematopoietic diseases **ONLY**
- Record a complete description of the treatment plan in the text field



Hematopoietic treatments such as: phlebotomy or aspirin are coded under “**Other Therapy**”

**Do not code blood transfusion as treatment for hematopoietic neoplasms**

**Rationale:** Blood transfusions may be used for any medical condition that causes anemia. It would be virtually impossible for the registrar to differentiate between blood transfusions used for a co-morbidity (i.e., anemia) from those given as prophylactic treatment of a hematopoietic neoplasm



# Definitive Treatment

- **The definition of definitive is something that is complete or final**
- The goal with definitive treatment is to remove the tumor completely and be the final steps in treatment process
- Definitive treatment modifies, controls, removes, or destroys proliferating cancer tissue
- May be directed toward either the primary site or to metastatic sites
- Administered to minimize the size of the tumor or to delay the spread of disease
- **Important:**
- Only definitive therapy should be included in statistical analyses of treatment
- Surgery codes 00-07, and 'Other' treatment code 0 are not considered definitive therapy and must be excluded from analyses



# Palliative Treatment

**Palliative treatment improves the patient's quality of life by preventing or relieving suffering**

- Palliative therapy is part of the first course of therapy **only** when it destroys or modifies cancer tissue
- Palliative care may include definitive treatment procedures, as well as non-definitive patient care procedures

**Example:** Patient diagnosed with stage IV unresectable colon cancer with extensive liver metastasis. Chemotherapy is administered in hopes of shrinking the tumors and relieving symptoms.

- This chemotherapy is palliative, because it was administered to shrink the tumors and relieve symptoms

**AND**

- This chemotherapy is definitive therapy, because it destroyed proliferating cancer tissue

Record any palliative therapy that modifies or destroys cancer tissue if planned as part of first course definitive therapy



# Adjuvant Treatment

Definitive therapy (chemotherapy, radiation therapy, hormone therapy, immunotherapy, etc) given as part of planned first course of therapy after surgical resection

- Goal is to destroy any cancer cells that might remain after surgical resection

## **Where you might see this done:**

- Chemotherapy for cancers where there is lymph node involvement
- Radiation to the tumor bed after tumor is resected



# Neoadjuvant Treatment

Definitive therapy (chemotherapy, radiation therapy, hormone therapy, immunotherapy, etc) given as part of planned first course of therapy **before** surgical resection is called 'neo-adjuvant' therapy

- Goal is to destroy cancer cells and to shrink the size of the tumor before surgical resection

## **Where you might see this done:**

- Large tumors within the colon
- Tumors involving the liver
- Breast tumors that are close to the surface of the skin



# Neoadjuvant Therapy

NAACCR #1632

- Neoadjuvant Therapy, effective for cases diagnosed 01/01/2021 or later
- Records whether the patient had neoadjuvant therapy prior to planned definitive surgical resection of the primary site
- This data item provides information related to the quality of care and describes whether a patient had neoadjuvant therapy
- For the purposes of this data item, neoadjuvant therapy is defined as systemic treatment (chemotherapy, endocrine/hormone therapy, targeted therapy, immunotherapy, or biological therapy) and/or radiation therapy before intended or performed surgical resection to improve local therapy and long-term outcomes during first course of treatment



Code	Description
0	No neoadjuvant therapy, no treatment before surgery, surgical resection not part of first course of treatment plan Autopsy only
1	Neoadjuvant therapy completed according to treatment plan and guidelines
2	Neoadjuvant therapy started, but not completed OR unknown if completed
3	Limited systemic exposure when the intent was not neoadjuvant; treatment did not meet the definition of neoadjuvant therapy
9	Unknown if neoadjuvant therapy performed Death certificate only (DCO)

### For purposes of this data item, the criteria for neoadjuvant therapy are:

- A physician's treatment plan and/or statement of patient completing neoadjuvant therapy must be used
- Treatment must follow the recommended treatment guidelines for the type and duration of treatment for that primary site and/or histology
- The length of a full course of neoadjuvant systemic therapy may vary depending on the primary site and/or histology, often from 4-6 months, but could be shorter, of neoadjuvant systemic therapy and/or radiation
- Neoadjuvant therapy may include systemic therapy alone, radiation alone, or combinations of radiation and systemic therapy (for example, with rectal cancer, esophageal cancer, head and neck cancer)
- Neoadjuvant therapy data items are coded based on treatment/procedures that occur during first course of therapy
- Neoadjuvant therapy may be given as part of a clinical trial



- Code neoadjuvant therapy in the corresponding treatment data items even when the treatment is partial (i.e., less than a full course of neoadjuvant therapy is administered) or limited (i.e., limited exposure to systemic therapy)
  - Radiation Sequence and Surgery (if radiation given prior to surgical resection) as part of limited neoadjuvant therapy
  - Systemic Treatment/Surgery Sequence (if systemic treatment given prior to surgical resection) as part of limited neoadjuvant therapy
  - The appropriate treatment data items (Chemotherapy, Immunotherapy, Hormone Therapy, Hematologic Transplant and Endocrine Procedures, Radiation Treatment Modality--Phase I, II, III), and the associated date data item for each treatment type



# Neoadjuvant – Clinical Response

NAACCR #1633

Neoadjuvant Therapy--Clinical Response, effective for cases diagnosed 01/01/2021 and later, records the clinical outcomes of neoadjuvant therapy prior to planned surgical resection

- This data item provides information related to the quality of care and describes the clinical outcomes after neoadjuvant therapy.
- This data item records the clinical outcomes of neoadjuvant therapy as determined by the managing physician (oncologic surgeon, radiation oncologist or medical oncologist).
- For the purposes of this data item, neoadjuvant therapy is defined as systemic treatment (chemotherapy, endocrine/hormone therapy, targeted therapy, immunotherapy, or biological therapy) and/or radiation therapy given to shrink a tumor before surgical resection



Code	Description
0	Neoadjuvant therapy not given
1	Complete clinical response (CR) (per managing/treating physician statement)
2	Partial clinical response (PR) (per managing/treating physician statement)
3	Progressive disease (PD) (per managing/treating physician statement)
4	Stable disease (SD) (per managing/treating physician statement)
5	No response (NR) (per managing/treating physician statement)
	Not stated as progressive disease (PD) or stable disease (SD)
6	Neoadjuvant therapy done, managing/treating physician interpretation not available, treatment response inferred from imaging, biomarkers, or yc stage
7	Complete clinical response based on biopsy results from a pathology report (per pathologist assessment)
8	Neoadjuvant therapy done, response not documented or unknown
9	Unknown if neoadjuvant therapy performed
	Death certificate only (DCO)

- Use this data item to record the clinical response (outcomes) to neoadjuvant therapy
- Neoadjuvant Therapy-Clinical Response is evaluated after primary systemic and/or radiation therapy is completed and prior to surgical resection
  - It is based on clinical history, physical examination, biopsies, imaging studies, and other diagnostic work up
- Do not use information from the surgical pathology report to code this data item
- Code this data item based on the managing/treating physician's interpretation/statement of the response to neoadjuvant therapy, whenever this interpretation/statement is available
- This data item is related to Neoadjuvant Therapy [NAACCR #1632]



# Neoadjuvant Therapy--Treatment Effect

## NAACCR #1634

- Neoadjuvant Therapy--Treatment Effect, effective for cases diagnosed 01/01/2021 or later
- Record the pathologist's statement of neoadjuvant treatment effect on the primary tumor or site, with or without lymph nodes and/or distant metastasis, from the surgical pathology report
- Whenever treatment effect definitions are recommended by, or available in, the College of American Pathologists (CAP) Cancer Protocols, this data item follows the CAP definitions indicating absent or present effect
- When site-specific CAP definitions are not available, use treatment effect codes for All Other Schemas in Appendix C. Site-specific codes are also included in Appendix C of this manual
- This data item provides information related to the quality of care and describes the pathological outcomes after neoadjuvant therapy
- Coding Structure See Appendix C for site-specific codes coding instructions of Neoadjuvant Therapy--Treatment Effect



- For purposes of this data item, neoadjuvant therapy is defined as systemic treatment (chemotherapy, endocrine/hormone therapy, targeted therapy, immunotherapy, or biological therapy) and/or radiation therapy given to shrink a tumor before surgical resection
- Surgical resection: For purposes of this data item, surgical resection is defined as the most definitive surgical procedure that removes some or all of the primary tumor or site, with or without lymph nodes and/or distant metastasis
- For many sites, this would be Surgical Codes 30-80; however, there are some sites where surgical codes less than 30 could be used, for example, code 22 for Breast (excisional biopsy or lumpectomy)



# Appendix C

## SEER Program Coding and Staging Manual 2022

Updated November 8, 2021

### Reporting Guidelines

Casefinding Lists

2022 SEER Coding and Staging Manual

Appendix C for 2022 Manual

Hematopoietic Project

ICD-O-3 Coding Materials

Solid Tumor Rules

The 2022 manual is to be used for cases diagnosed January 1, 2022 and forward.

- [SEER Program Coding and Staging Manual 2022](#) (PDF, 1.7 MB) (updated November 8, 2021)
- [Appendix A - County Codes](#) (PDF, 325 KB)
- [Appendix B - Country and State Codes](#) (PDF, 467 KB)
- [Appendix C - Site Specific Coding Modules](#)
- [Appendix D - Race and Nationality Descriptions from the 2000 Census and Bureau of Vital Statistics](#) (PDF, 109 KB)
- [Appendix E - Reportable and Non-reportable Examples](#): [PDF](#) (PDF, 173 KB) or [Excel](#) (XLSX, 25 KB)
- [Summary of Changes \(November 2021\)](#) (PDF, 308 KB) - provides the list of changes included in this release.

### Other Manuals



# Appendix C: Site Specific Coding Modules

2022 SEER Coding and Staging Manual

## Reporting Guidelines

Casefinding Lists

2022 SEER Coding and Staging Manual -

Appendix C for 2022 Manual

Hematopoietic Project +

ICD-O-3 Coding Materials

Solid Tumor Rules +

Historical Staging and Coding Manuals +

Grade Coding Instructions 2014

SEER Data Submission Requirements

COVID-19 Abstraction Guidance +

Appendix C brings together the site-specific instructions needed to abstract a case, facilitating efficiency and accuracy. The site-specific coding modules include SEER Coding Guidelines, Extent of Disease, Site-Specific Neoadjuvant Therapy Effect coding documents, and Surgery of Primary Site codes.<sup>1</sup>

General instructions in the main manual are applicable in the absence of site-specific instructions. All modules include the extent of disease and surgery codes, Site-Specific Neoadjuvant Therapy Effect coding documents, and solid tumor coding rules. Some modules include site-specific coding guidelines. Additional site-specific coding instructions are found in [SEER\\*RSA](#), the [SSDI manual](#) (PDF), and the [Grade manual](#) (PDF).

[Expand All](#) [Collapse All](#)

Oral Cavity, Tonsil, Oropharynx +

Parotid, Other and Unspecified Glands +

Pharynx, Hypopharynx, Nasopharynx, Pyriform Sinus +

Esophagus +

Stomach +

Small Intestine +



Retroperitoneum, Peritoneum



Breast



[Coding Guidelines: Breast](#) (PDF, 82 KB)

[Solid Tumor Rules: Breast](#) (PDF, 1.7 MB)

#### **SURGERY CODES**

- [Breast - \(C500-C509\)](#) (PDF, 61 KB)

#### **SITE-SPECIFIC CODES FOR NEOADJUVANT THERAPY TREATMENT EFFECT**

- [Breast](#) (PDF, 211 KB)
- [Thymus, Heart and Mediastinum, Retroperitoneum, Soft Tissue Abdomen and Thoracic, Soft Tissue Head and Neck, Soft Tissue Other, Soft Tissue Trunk and Extremities, GIST](#) (PDF, 214 KB) - Use these codes for sarcomas of the Breast

#### **EOD SCHEMAS**

- [Breast](#)

Vulva, Vagina



## Site-Specific Codes for Neoadjuvant Therapy Treatment Effect

### Schema: Breast

*Neoadjuvant Therapy--Treatment Effect* data item [NAACCR # 1634] is related to the *Neoadjuvant Therapy* data item [NAACCR # 1632]. This data item records the findings from the post neoadjuvant therapy **surgical pathology report ONLY** when surgery is performed after neoadjuvant therapy. This set of codes applies to the Breast schema.

**Note:** For **Breast only**, there are separate criteria for evaluating the primary tumor and lymph nodes. For purposes of this data item, record the information on the **primary tumor only**. If lymph node information is available, record this in the treatment text field.

Code	Description
0	Neoadjuvant therapy not given/no known presurgical therapy
1	No residual invasive carcinoma present in the breast after presurgical therapy Residual in situ carcinoma only Stated as Complete response (CR)
3	Probable or definite response to presurgical therapy in the invasive carcinoma Stated as Partial response (PR) Stated as minimal or near complete response
4	No definite response to presurgical therapy in the invasive carcinoma Stated as No response (NR) Stated as poor response
6	Neoadjuvant therapy completed and surgical resection performed, response not documented or unknown Cannot be determined
7	Neoadjuvant therapy completed and planned surgical resection not performed
9	Unknown if neoadjuvant therapy performed Unknown if planned surgical procedure performed after completion of neoadjuvant therapy Death Certificate only (DCO)

For purposes of this data item, **neoadjuvant therapy** is defined as systemic treatment (chemotherapy, endocrine/hormone therapy, targeted therapy, immunotherapy, or biological therapy) and/or radiation therapy given to shrink a tumor before surgical resection.

**Additional instructions are included for each schema**



# TREATMENT RELATED CODING FIELDS



# Treatment Status

NAACCR #1285

**Summarizes whether patient received any treatment or was under active surveillance (watchful waiting)**

This field may be left blank for cases diagnosed prior to 1/1/10

Treatment administered after a period of active surveillance is considered subsequent therapy and is not coded in this item

Code	Label	Definition
0	No treatment given	The patient did not receive any treatment
1	Treatment given	The patient received treatment
2	Active surveillance (watchful waiting)	The patient was under active surveillance or watchful waiting during the first course of treatment
9	Unknown if treatment given	It is unknown whether or not the patient received treatment



**Assign code 1 when the patient receives treatment collected in any of the following data items:**

- Surgery of Primary Site
- Surgical Procedure of Other Site
- Radiation Treatment Modality, Phase I, II, III
- Chemotherapy
- Hormone Therapy
- Immunotherapy
- Hematologic Transplant and Endocrine Procedures
- Other Therapy



## Assign code 2 when there is documentation that the patient is being monitored using:

- Active surveillance/watchful waiting
- Deferred therapy or
- Other similar options

However.....

### What if the patient changes their mind?

The patient is offered XRT, surgery, or active surveillance and initially chose watchful waiting. However, within the 1st year of diagnosis and with no documentation to indicate there is disease progression, the patient wants to proceed with XRT or surgery

### Answer

According to Dr. Winchester:

The rule of thumb is, if patient initially decided on active surveillance and the change was made before the patient's first follow-up doctor's visit, then it is a change in first course treatment

If the change occurs after the first follow-up visit, the switch is second course treatment



# Systemic Surgery Sequence

NAACCR #1639

**This data item records the sequence of any systemic therapy and surgery given as first course of therapy for those patients who had both systemic therapy and surgery**

**For the purpose of coding systemic treatment sequence with surgery, 'Surgery' is defined as:**

- Surgical Procedure of Primary Site (codes 10-90) or
- Scope of Regional Lymph Node Surgery (codes 2-7) or
- Surgical Procedure of Other Site (codes 1-5)

**Systemic therapy is defined as:**

- Chemotherapy
- Hormone therapy
- Biological response therapy/immunotherapy
- Bone marrow transplant
- Stem cell harvests
- Surgical and/or radiation endocrine therapy



<b>Code</b>	<b>Label</b>	<b>Definition</b>	<b>Example(s)/Notes</b>
0	No systemic therapy and/or surgical treatment; Unknown if surgery and/or systemic therapy given	The patient did not have both systemic therapy and surgery. It is unknown whether or not the patient had surgery and/or systemic therapy.	Example: Death certificate only (DCO) case
2	Systemic therapy before surgery	The patient had systemic therapy prior to surgery	
3	Systemic therapy after surgery	The patient had systemic therapy after surgery	
4	Systemic therapy both before and after surgery	Systemic therapy was administered prior to surgery and also after surgery	Note: Code 4 is intended for situations with at least two episodes or courses of systemic therapy.
5	Intraoperative systemic therapy	The patient had intraoperative systemic therapy	
6	Intraoperative systemic therapy with other systemic therapy administered before and/or after surgery	The patient had intraoperative systemic therapy and also had systemic therapy before and/or after surgery	Note: The systemic therapy administered before and/or after surgery does not have to be the same type as the intraoperative systemic therapy.
7	Surgery both before and after systemic therapy (effective for cases diagnosed 01/01/2012 and later)	Systemic therapy was administered between two separate surgical procedures	Example: Patient has LN dissection, followed by chemo, followed by primary site surgery.
9	Sequence unknown	The patient had systemic therapy and also had surgery. It is unknown whether the systemic therapy was administered prior to surgery, after surgery, or intraoperatively	



# Radiation/Surgery Sequence

NAACCR #1380

SEER Manual: Pg# 202-203

**This data item records the order in which surgery and radiation therapies were administered for those patients who had both surgery and radiation**

**For the purpose of coding the data item, 'Surgery' is defined as:**

- Surgical Procedure of Primary Site (codes 10-90) or
- Scope of Regional Lymph Node Surgery (codes 2-7) or
- Surgical Procedure of Other Site (codes 1-5)



Code	Description
0	No radiation and/or surgery as defined above; Unknown if surgery and/or radiation given
2	Radiation before surgery
3	Radiation after surgery
4	Radiation both before and after surgery
5	Intraoperative radiation therapy
6	Intraoperative radiation with other radiation given before and/or after surgery
7	Surgery both before and after radiation (for cases diagnosed 01/01/2012 and later)
9	Sequence unknown, but both surgery and radiation were given

### Assign code 0 when:

- The patient did not have either surgery or radiation
- The patient had surgery but not radiation
- The patient had radiation but not surgery
- It is unknown whether or not the patient had surgery and/or radiation
- For death certificate only (DCO) cases



# Reason No Non-Definitive Surgery

KCR #31175

KCR Abstractor's Manual: Pg#305

**This item records the reason no non-definitive surgical procedure was performed as part of the initial diagnostic work up**

- If non-definitive surgery was performed and the pathology specimen was diagnostic of malignancy (code 1)
- If non-definitive surgical specimen is diagnostic of malignancy, **must** create a non-definitive surgical therapy record for the earliest positive non-definitive surgical procedure
- For this field, record only biopsies which obtain tissue (whether positive or negative for malignancy).
  - Fine needle aspirations (which obtain **only** cells, **not** tissue) of the primary tumor or of a metastatic site are **not** recorded, whether positive or negative.
  - FNA's of regional lymph nodes are recorded as surgical therapies, in the item "Scope of Regional Lymph Node Surgery).

Code	Description
0	Non-definitive surgery not performed; not applicable; or not recommended for this case. Autopsy only.
1	Non-definitive surgery performed and results diagnostic of malignancy
2	Non-definitive surgery performed but results negative
3	Non-definitive surgery performed and results turned out to be definitive tx (excisional bx)
8	No non-definitive surgery at this hospital, unknown if done elsewhere
9	Unknown if non-definitive surgery performed



# REASON NO THERAPY

Code reason why treatment was not administered as part of first course of therapy

Includes reasons for:

- No surgery
- No chemotherapy
- No radiation therapy
- No hormone therapy
- No immunotherapy
- No other therapy



# Reason No Surgery of Primary Site

NAACCR #1340

**This data item records the reason that surgery of the primary site was not part of the first course of treatment**

Code	Description
0	Surgery of the primary site was performed
1	Surgery of the primary site was not performed because it was not part of the planned first-course treatment
2	Surgery of the primary site was not recommended/performed because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, progression of tumor prior to planned surgery, etc.)
5	Surgery of the primary site was not performed because the patient died prior to planned or recommended surgery
6	Surgery of the primary site was not performed; it was recommended by the patient's physician, but was not performed as part of the first course of therapy. No reason was noted in the patient's record.
7	Surgery of the primary site was not performed; it was recommended by the patient's physician, but was refused by the patient, the patient's family member, or the patient's guardian. The refusal was noted in the patient record.
8	Surgery of the primary site was recommended, but it is unknown if it was performed. Further follow up is recommended.
9	It is unknown if surgery of the primary site was recommended or performed; DCO and autopsy only cases



### **Assign code 0 when:**

- Surgery of Primary Site was performed
- Surgery of Primary Site coded in the range of 10-90

### **Assign code 1 when:**

- Surgery of Primary Site is coded 98 (not applicable)
- If no surgery is reported and surgery is not standard treatment for a primary site
- The treatment plan offered multiple treatment options and the patient selected treatment that did not include surgery of the primary site
- Surgery was part of the first course of treatment but was cancelled due to complete response to radiation and/or systemic therapy
- Patient elected to pursue no treatment following the discussion of surgery.
- Discussion does not equal a recommendation. Patient's decision not to pursue surgery is not a refusal of surgery in this situation.

### **Assign code 7 when:**

- The patient refuses recommended surgery
- Statement made that patient refused all treatment when surgery is a customary option according to NCCN guidelines and/or the NCI PDQ for the primary site/histology



# Reason No Radiation

NAACCR (#1430)

**Reason for No Radiation captures the reason the patient did not receive radiation treatment as part of first course of therapy**

**Effective 01/01/2018**

Code	Description
0	Radiation therapy was administered
1	Radiation therapy was not administered because it was not part of the planned first-course treatment. Diagnosed at autopsy.
2	Radiation therapy was not administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, progression of tumor prior to planned radiation, etc.)
5	Radiation therapy was not administered because the patient died prior to planned or recommended treatment
6	Radiation therapy was not administered; it was recommended by the patient's physician, but was not administered as part of the first-course therapy. No reason was noted in the patient's record.
7	Radiation therapy was not administered; it was recommended by the patient's physician, but this treatment was refused by the patient, the patient's family member, or the patient's guardian. The refusal was noted in the patient record.
8	Radiation therapy was recommended, but it is unknown if it was administered
9	It is unknown if radiation therapy was recommended or administered. DCO.



**Assign code 0** if the patient received regional radiation as part of first course of therapy

**Assign code 1** if the treatment plan offered multiple alternative treatment options but the patient selected treatment that did not include radiation therapy

**Assign code 7** if the patient refused recommended radiation therapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended

### **Assign code 8**

- If it is known that a physician recommended radiation treatment, but no further documentation is available to confirm it was given
  - If records indicate referral to a radiation oncologist was made and the registry should follow to determine whether radiation was administered
- A referral is equivalent to a recommendation
- If follow-up to the specialist or facility determines the patient was never there and no other documentation can be found, assign Code 1
- Cases coded 8 should be followed and updated to a more definitive code as appropriate



# Chemotherapy

## Rx Summ -- Chemo

NAACCR #1390

**The data item records the chemotherapy given as a part of the first course of treatment or the reason that chemotherapy was not given**

See SEER\*Rx for chemotherapy drug codes and for information on the drug's function

A comprehensive review of chemotherapeutic drugs currently found in the SEER\*Rx – Interactive Drug Database is performed and follows the guidelines set forth by the U.S. Food and Drug Administration (FDA)

Use the date of diagnosis, not the date of treatment, to determine whether to code these drugs as chemotherapy



## Definitions

**Chemotherapy recommended:** A consult recommended chemotherapy, or the attending physician documented that chemotherapy was recommended.

- A referral to a clinical oncologist is equivalent to a recommendation.

**Multiple agent chemotherapy:** Planned first course of therapy included two or more chemotherapeutic agents and those agents were administered. The planned first course of therapy may or may not have included other agents such as hormone therapy, immunotherapy, or other treatment in addition to the chemotherapeutic agents.

**Single agent chemotherapy:** Only one chemotherapeutic agent was administered to destroy cancer tissue during the first course of therapy. The chemotherapeutic agent may or may not have been administered with other drugs classified as immunotherapy, hormone therapy, ancillary, or other treatment.



- Code the chemotherapeutic agents whose actions are chemotherapeutic only; do not code the method of administration
- The physician may change a drug during the first course of therapy because the patient cannot tolerate the original agent
- This is a continuation of the first course of therapy when the chemotherapeutic agent that is substituted belongs to the same group
- Do not code the new agent as first course therapy when the original chemotherapeutic agent is changed to one that is NOT in the same group. Code only the original agent as first course. When the new agent is in a different group, it is second course therapy
- Use SEER\*Rx and compare the subcategory of each chemotherapy agent to determine whether or not they belong to the same group (subcategory)
- Code as treatment for both primaries when the patient receives chemotherapy for invasive carcinoma in one breast and also has an invasive or in situ carcinoma in the other breast. Chemotherapy would likely affect both primaries.



<b>Code</b>	<b>Description</b>
00	None, chemotherapy was not part of the planned first course of therapy; diagnosed at autopsy
01	Chemotherapy administered as first course therapy, but the type and number of agents is not documented in the patient record
02	Single agent chemotherapy administered as first course therapy
03	Multi-agent chemotherapy administered as first course therapy
82	Chemotherapy was not recommended/administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, etc.)
85	Chemotherapy was not administered because the patient died prior to planned or recommended therapy
86	Chemotherapy was not administered. It was recommended by the patient's physician but was not administered as part of the first course of therapy. No reason was stated in patient record.
87	Chemotherapy was not administered. It was recommended by the patient's physician, but the treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record.
88	Chemotherapy was recommended, but it is unknown if it was administered
99	It is unknown whether a chemotherapeutic agent(s) was recommended or administered because it is not stated in the patient record



## Assign code 00 when:

- The medical record documents chemotherapy was not given, was not recommended, or was not indicated
- There is no information in the patient's medical record about chemotherapy, AND It is known that chemotherapy is not usually performed for this type and/or stage of cancer

OR

- There is no reason to suspect that the patient would have had chemotherapy
- The treatment plan offered multiple treatment options and the patient selected treatment that did not include chemotherapy
- Patient elects to pursue no treatment following the discussion of chemotherapy.
  - Discussion does not equal a recommendation. Patient's decision not to pursue chemotherapy is not a refusal of chemotherapy in this situation.
- Active surveillance/watchful waiting is the first course of treatment (e.g., CLL)
- Patient diagnosed at autopsy



## Assign code 88

- When chemotherapy is recommended, but unknown if it was administered
  - The patient was referred to an oncologist
  - Information of the insertion of port-a-cath
- Review cases coded 88 periodically for later confirmation of chemotherapy.



# Hormone

## Rx Summ -- Hormone

NAACCR #1400

**The data item Hormone Therapy records therapy administered as first course treatment that affects cancer tissue by adding, blocking, or removing the action or production of hormones**

- Surgical removal of organs for hormone manipulation is not coded in this data item. Code these procedures in the data item Hematologic Transplant and Endocrine Procedures
- Code the hormonal agent given as part of combination chemotherapy (regimen) whether it affects the cancer cells or not

**Example:** chemotherapy regimen R-CHOP

### SEER\*Rx

- See SEER\*Rx for hormone therapy drug codes
- Check SEER\*Rx to determine if a hormone agent is part of a combination chemotherapy regimen
- Check SEER\*Rx to determine if a hormone agent is an FDA approved hormone treatment for diagnosed cancer
- Use the date of diagnosis, not the date of treatment, to determine whether to code drugs as Hormone therapy



## Hormonal agent even when given for menopausal symptoms:

- **Code the hormonal agent:** When a hormone agent is a known treatment for the diagnosed cancer, and it is given for menopausal symptoms because it will affect the growth or recurrence of the cancer
- **DO NOT CODE:** When hormone treatment is not an FDA approved treatment for the diagnosed cancer
  - When an agent is given but it is not an FDA approved treatment for the diagnosed cancer, code as Other Treatment

## Bridge Therapy

- Code the hormonal agent when given as bridge therapy
  - Bridge Therapy is given to carry a patient until the next step in the treatment plan
    - Example:** Breast cancer patient given Lupron due to a delay in surgery
  - Bridge Therapy is not coded as neoadjuvant treatment. When used as bridge therapy the agent is given for a shorter amount of time than when used as neoadjuvant treatment



## Hormones used as Chemoprevention

**Chemoprevention:** The use of drugs, vitamins, or other agents to try to reduce the risk of, or delay the development or recurrence of, cancer

- **DO NOT CODE:** Hormone treatment when given for a non-reportable condition or as chemoprevention prior to diagnosis of a reportable condition

Code	Description
00	None, hormone therapy was not part of the planned first course of therapy; not usually administered for this type and/or stage of cancer; diagnosed at autopsy only
01	Hormone therapy administered as first course therapy
82	Hormone therapy was not recommended/administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, etc.)
85	Hormone therapy was not administered because the patient died prior to planned or recommended therapy
86	Hormone therapy was not administered. It was recommended by the patient's physician but was not administered as part of the first course of therapy. No reason was stated in the patient record.
87	Hormone therapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record.
88	Hormone therapy was recommended, but it is unknown if it was administered
99	It is unknown whether a hormonal agent(s) was recommended or administered



# Immunotherapy Rx Summ -- BRM

NAACCR #1140

The data item Immunotherapy records immunotherapeutic (biological therapy, biotherapy, or biological response modifier (BRM)) agents administered as first course of therapy

- Immunotherapy uses the body's immune system, either directly or indirectly, to fight cancer or to reduce the side effects that may be caused by some cancer treatments. Record only those treatments that are administered to affect the cancer cells
- **Assign Code 00 when:** Anti-thymocyte globulin treatment is given. Anti-thymocyte globulin is used to treat transplant rejection. Do not code as immunotherapy.

Code	Description
00	None, immunotherapy was not part of the planned first course of therapy
01	Immunotherapy was administered as first course therapy
82	Immunotherapy was not recommended/administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, etc.)
85	Immunotherapy was not administered because the patient died prior to planned or recommended therapy
86	Immunotherapy was not administered; it was recommended by the patient's physician but was not administered as part of the first-course of therapy. No reason was noted in the patient's record.
87	Immunotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record.
88	Immunotherapy was recommended, but it is unknown if it was administered
99	It is unknown if immunotherapy was recommended or administered because it is not stated in patient record.



# Other Therapy Rx Summ -- Other

NAACCR #1420

**Other Therapy identifies treatment given that cannot be classified as surgery, radiation, systemic therapy, or ancillary treatment. This data item includes all complementary and alternative medicine (CAM) used by the patient in conjunction with conventional therapy or in place of conventional therapy**

<b>Code</b>	<b>Description</b>
0	None
1	Other
2	Other-Experimental
3	Other-Double Blind
6	Other-Unproven
7	Refusal
8	Recommended, unknown if administered
9	Unknown



**Assign code 1 for:**

Drugs that have not received FDA approval for its use in certain cancers, can be used "off label". When used "off label" code as "Other Therapy" until such time that it receives FDA approval.

**See SEER\*Rx**



## Complementary and Alternative Medicine (CAM)

**Complementary and Alternative Medicine (CAM) as any medical system, practice, or product that is not thought of as “western medicine” or standard medical care.**

- Alternative medicine is treatment that is used instead of standard medical treatments. Alternative therapy is when the patient receives no other type of standard treatment
- Complementary medicine. Treatments that are used along with standard medical treatments but are not standard treatments; also called conventional medicine. One example is using acupuncture to help lessen some side effects of cancer treatment in conjunction with standard treatment
- Integrative medicine. A total approach to medical care that combines standard medicine with the CAM practices that have shown to be safe and effective. They treat the patient’s mind, body, and spirit
- CAM treatments may include dietary supplements, megadose vitamins, herbal preparations, acupuncture, massage therapy, magnet therapy, spiritual healing, and meditation.



# Palliative Treatment RX Summ--Palliative Proc

NAACCR #3270

- Palliative therapy is part of the first course of therapy only when it destroys or modifies cancer tissue
- Palliative care may include definitive treatment procedures, as well as non-definitive patient care procedures

Code	Description
0	No palliative care provided. Diagnosed at autopsy only.
1	Surgery (which may involve a bypass procedure) to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made.
2	Radiation therapy to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made.
3	Chemotherapy, hormone therapy, or other systemic drugs to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made.
4	Patient received or was referred for pain management therapy with no other palliative care.
5	Any combination of codes 1, 2, and/or 3 without code 4.
6	Any combination of codes 1, 2, and/or 3 with code 4.
7	Palliative care was performed or referred, but no information on the type of procedure is available in patient record. Palliative care was provided that does not fit the descriptions in codes 1-6.
9	It is unknown if palliative care was performed or referred; not stated in patient record.



# SEER\*Rx

<https://seer.cancer.gov/tools/seerrx/>

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## SEER\*Rx – Interactive Antineoplastic Drugs Database

Updated September 30, 2014 (view [Revision History](#))

### Tools & Software

[Glossary for Registrars](#)

[ICD Conversion Programs](#)

[SEER\\*Rx - Interactive Drug Database](#)

[Summary of Changes](#)

[Data Documentation & Variable Recodes](#)

[SEER Abstracting Tool \(SEER\\*Abs\)](#)

[SEER Application Programming Interface \(API\)](#)

[File\\*Pro Software](#)

[Match\\*Pro Software](#)

[SEER Data Management System \(SEER\\*DMS\)](#)

**i** **Important Update:** SEER\*Rx has a new look! SEER\*Rx now has a new and improved search engine that does faster and more intelligent full text searching of all fields, with a sortable results table and a new relevance column so you can tell how relevant each search result is to your entered search string. Additionally, each drug and regimen is now displayed in its own page so that you can bookmark specific entries.

SEER\*Rx was developed as a one-step lookup for coding oncology drug and regimen treatment categories in cancer registries. The information in this database is effective for cancer diagnoses made on January 1, 2005 and after. Review and recoding of drugs from previous years is not required or recommended.

### How to Access SEER\*Rx

The [SEER\\*Rx - Interactive Antineoplastic Drugs Database](#) is provided in a web-based format:

- Updates are automatic: users do not have to install anything to access the latest revisions.
- Allows access from any computer or device with an Internet connection.
- Eliminates problems for users who do not have permission to install software on their work computers.

**i** Please note: The stand-alone version of SEER\*Rx is no longer provided. The web-based tool provides the most up-to-date information.

### Support Resources

- Questions? [Ask a SEER Registrar](#).
- [Join the SEER Registrar News listserv](#) to receive announcements of upcoming changes.



## SEER\*Rx Interactive Antineoplastic Drugs Database

[Search Database](#)[Downloads](#) ▾[Drugs \(1984\)](#)[Regimen \(515\)](#)Show  ▾ Entries

▲ Name	Category	Primary Site	Code?
<a href="#">1,25-Dihydroxyvitamin D3</a>	Differentiation inducing agent		No
<a href="#">1-Methyl-D-tryptophan</a>	Chemotherapy	Melanoma, Other types, NOS	Yes
<a href="#">1018-ISS</a>	Chemotherapy	Lymphoma	Yes
<a href="#">109881</a>	Chemotherapy	Brain cancer	Yes
<a href="#">131I-MIBG</a>	Radiation		See Remarks

### Database Contains:

- 1984 Drugs
- 515 Regimens



## SEER\*Rx Interactive Antineoplastic Drugs Database

[Search Database](#)
[Downloads ▾](#)

5 fu



Search

Note: some or all of the provided search terms were ignored. Single characters are excluded, as are some common English words which don't provide much help in refining the search.

Drugs (148)

Regimen (96)

Show

25



Entries

▲ Relevance	Name	Category	Primary Site	Code?
	Fluorouracil	Chemotherapy	Breast- adjuvant setting and advanced disease, colorectal- adjuvant setting and advanced disease, GI malignancies: anal, esophageal, gastric and pancreatic, Head and Neck cancer, Hepatoma, Ovarian cancer, Skin-Basal cell carcinoma (topical application)	Yes
	Furosemide	Ancillary Agent		No
	Floxuridine	Chemotherapy	Colorectal, Gastric cancer	Yes
	Furazolidone	AIDS drug		No
	BBR 3464 and 5-FU	Chemotherapy	Other cancer	Yes
	...	..	..	..



# Fluorouracil

Search Database

## Name

Fluorouracil

## Alternate Names

5-Fluorouracil  
5-Fluracil  
Adrucil  
Efu<sup>d</sup>ex  
Fluoroplex  
Fluracil  
Fluril  
Oracil  
Ro 2-97<sup>57</sup>  
WR-69<sup>596</sup>

## Abbreviations

5-FU  
5FU  
FU

## Category

Chemotherapy

## Subcategory

Antimetabolite

## NSC Number

019893  
19893

## Primary Site

Breast- adjuvant setting and advanced disease  
colorectal- adjuvant setting and advanced disease  
GI malignancies: anal, esophageal, gastric and pancreatic  
Head and Neck cancer  
Hepatoma  
Ovarian cancer  
Skin-Basal cell carcinoma (topical application)

## Histology

None

## Remarks

Fluorinated pyrimidine; antimetabolite. FDA approved uses on basal cell carcinoma, breast cancer, colorectal cancer, gastric cancer, and pancreatic cancer.

Note: Efu<sup>d</sup>ex cream be prescribed to treat AIN III. Code this as chemotherapy.

## Coding

This drug should be coded



The background features a dense field of 3D question marks in various shades of green, creating a textured, depth-filled effect. The lighting is soft, highlighting the three-dimensional nature of the characters.

**QUESTIONS?**

---

# QUIZ TIME!!

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You have 10 minutes

# Therapy Quiz

1. Patient diagnosed with prostate cancer and chooses to “watch and wait”. Treatment status code?
2. Patient diagnosed with colon cancer and undergoes a colectomy. Treatment status code?
3. Patient undergoes an LAR (lower anterior resection) for a rectosigmoid colon cancer. Reason no surgery code?
4. Patient is recommended by physician to undergo chemotherapy for breast cancer, but patient refuses. Reason no chemotherapy code?
5. Patient is diagnosed with prostate cancer at your facility and is discharged. No additional work-up performed at your facility (stage of disease unknown), no treatment at your facility, and no treatment plan documented, and unknown if treatment administered elsewhere. Reason no therapy code(s)?
6. Patient diagnosed with lymph node positive colon cancer and undergoes hemicolectomy at your facility. There is no information re: therapy in the medical record. Per NCCN treatment guidelines, chemotherapy is recommended. Reason no therapy chemotherapy code?
7. Patient diagnosed with advanced colon cancer undergoes colon bypass surgery with colostomy due to obstruction. Palliative care code?
8. Patient diagnosed with unresectable, obstructive colon cancer with extensive liver metastases and undergoes chemotherapy to hopefully reduce the tumor burden and relieve symptoms. Palliative care code?
9. Prostate patient given Lupron (typical neoadjuvant length 6+ months) for 1 month before total prostatectomy. What is the Neoadjuvant code?
10. Patient starts neoadjuvant chemotherapy but is unable to continue due to adverse reaction. What is the Neoadjuvant code?

# Therapy Quiz

1. Patient diagnosed with prostate cancer and chooses to “watch and wait”. Treatment status code? **2**
2. Patient diagnosed with colon cancer and undergoes a colectomy. Treatment status code? **1**
3. Patient undergoes an LAR (lower anterior resection) for a rectosigmoid colon cancer. Reason no surgery code? **0**
4. Patient is recommended by physician to undergo chemotherapy for breast cancer, but patient refuses. Reason no chemotherapy code? **7**
5. Patient is diagnosed with prostate cancer at your facility and is discharged. No additional work-up performed at your facility (stage of disease unknown), no treatment at your facility, and no treatment plan documented, and unknown if treatment administered elsewhere. Reason no therapy code(s)? **9**
6. Patient diagnosed with lymph node positive colon cancer and undergoes hemicolectomy at your facility. There is no information re: therapy in the medical record. Per NCCN treatment guidelines, chemotherapy is recommended. Reason no therapy chemotherapy code? **8**
7. Patient diagnosed with advanced colon cancer undergoes colon bypass surgery with colostomy due to obstruction. Palliative care code? **2**
8. Patient diagnosed with unresectable, obstructive colon cancer with extensive liver metastases and undergoes chemotherapy to hopefully reduce the tumor burden and relieve symptoms. Palliative care code? **3**
9. Prostate patient given Lupron (typical neoadjuvant length 6+ months) for 1 month before total prostatectomy. What is the Neoadjuvant code? **3**
10. Patient starts neoadjuvant chemotherapy but is unable to continue due to adverse reaction. What is the Neoadjuvant code? **2**