

### **Colon & Rectum**

### Effective 2018 dx and forward

### **Treatment & Texting**

Presented by Melissa Riddle, ODS-C ICR Video Training Series | Iowa Cancer Registry March 2025



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# **Treatment Fields**



### Surgery

Primary site Scope of Reg LN Surgery Other Sites Reason no surgery



## **Radiation**

Treatment Modality – Phase I, II, III
Radiation sequence with surgery
Reason no radiation

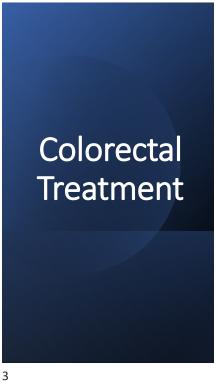


# **Systemic Therapy**

Chemo Immunotherapy



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- Treatment is based largely on the stage (extent) of the cancer and/or genetic mutations
- Typically, the treatment is surgery especially for those with localized cancer
- Radiation is more often used to treat rectal cancer than colon cancer
  - For some, treating with chemotherapy at the same time can make radiation therapy work better
- Systemic therapy is common for colorectal cancers that are higher stage or have specific mutations

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# Colorectal Cancer

### Right-sided colon cancer

- Less common
- More likely to occur in older age
- More likely linked to hereditary cancer syndrome, to be dMMR, MSI-H, BRAF or KRAS mutation

### Left-sided colon cancer

- More common
- More likely to occur in younger age
- More likely diagnosed at an earlier stage due to symptoms
- More likely to have HER2 mutation



# Surgery Data Items

Surgery of Primary Site 2023
Surgical Margins
Scope of Reg LN Surgery
Surgery of Other Sites
Reason No Surgery

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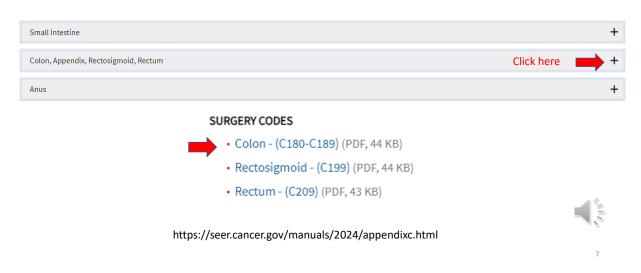
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# Surgery of Primary Site 2023

- Use the entire op report as the primary source document
  - Body of the report will designate the surgeon's planned procedure as well as the description of the procedure that was performed
  - The path report may be used to complement the information in the op report
- Use the site-specific coding scheme corresponding to primary site or histology
  - SEER Appendix C: Site-Specific Surgery Codes
    - · Colon, Appendix, Rectosigmoid, Rectum



# Appendix C: Surgery Codes

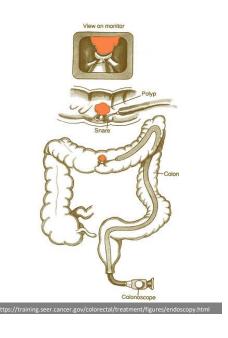


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# Polypectomy vs. Local Excision

- Polypectomy: excision of the polyp cut at the base, usually done by passing a wire loop through the colonoscope to cut the polyp off with an electric current
  - B260 Polypectomy, NOS
  - B280 Polypectomy-endoscopic
  - B281 Polypectomy-endoscopic mucosal resection or dissection
  - B290 Polypectomy-open approach surgical excision or laparoscopic
- Local Excision: tools are used through the colonoscope to remove small cancer on the inner lining of the colon along with a small amount of surrounding tissue; some are performed through laparoscopy or open approach
  - · B200 Local tumor excision, NOS
  - · B270 Excisional biopsy
  - B291 Wide local excision with tumor





# **Polypectomy Codes**

- B260 Polypectomy, NOS
  - Limited information and unknown how the polypectomy is performed
- B280 Polypectomy-endoscopic
  - Performed during colonoscopy either for screening or due to symptoms
  - Unknown if polyp is malignant
- B281 Polypectomy-endoscopic mucosal resection or dissection
  - More complicated polypectomy during colonoscopy
  - · Usually known to be malignant
- **B290** Polypectomy-open approach surgical excision or laparoscopic
  - · Not performed during a colonoscopy
  - Typically known to be malignant and large polyp



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### • B291 WLE with Tumor

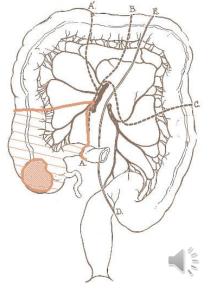
- Procedures focused on just removing the primary tumor and not removing a portion of colon or rectum
  - Adjacent colon, rectum, and LN are NOT removed
- Typically for removal of early tumors that are superficial and not known to be associated with LN involvement
- Alternate names:
  - Wide local excision, wide excision, local tumor resection, transanal resection

# **Partial Colectomy**

### • B300 Partial colectomy

- Removes one or more segments with colon resection but less then half of colon
  - Segments: cecum, ascending colon, hepatic flexure, transverse colon, splenic flexure, sigmoid colon, and/or descending colon
- Transverse colectomy = transverse colon
- Sigmoidectomy = sigmoid colon and descending colon
- Includes: enterocolectomy, ileocolectomy, partial colectomy, segmental resection
- B320 PLUS resection of contiguous organs
- B330 Appendectomy for an appendix primary ONLY
  - · Includes an incidental finding
    - If found incidentally for colon primary, code extent of the surgery for the colon primary and assign B330 for appendix primary site

Code CRM for these surgery codes



https://training.seer.cancer.gov/colorectal/treatment/figures/cecectomy.html

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# Hemicolectomy

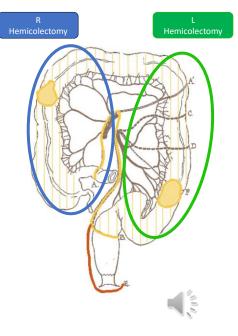
### • **B400** Hemicolectomy

- Total right or left colon and <u>portion</u> of transverse colon
- · Extended left/right hemicolectomy

### • **B401** Subtotal colectomy

- Total right or left colon and ENTIRE transverse colon
- B410 PLUS resection of contiguous organ

Code CRM for these surgery codes

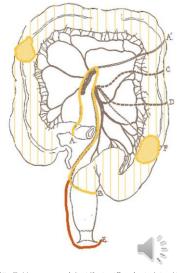


https://training.seer.cancer.gov/colorectal/treatment/figures/hepatic.html

# **Total Colectomy**

- B500 Total Colectomy
  - · Removes the colon from cecum to rectosigmoid junction
  - · May include portion of rectum
  - B510 PLUS resection of contiguous organ
    - Short portion of distal ileum is **NOT** considered contiguous
- B600 Total Proctocolectomy
  - Removes colon from cecum to rectosigmoid junction AND entire rectum
  - · Commonly used for familial polyposis or polyposis coli
  - B610 PLUS resection of contiguous organ
    - Short portion of distal ileum is NOT considered contiguous

Code CRM for these surgery codes



https://training.seer.cancer.gov/colorectal/treatment/figures/proctocolector

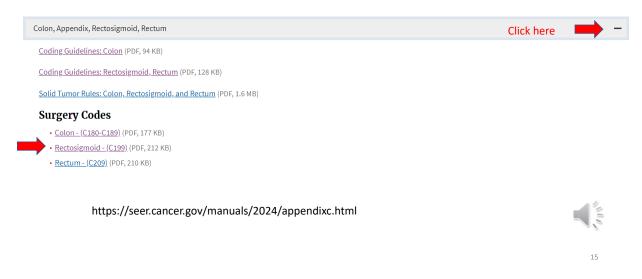
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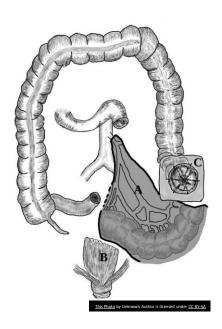
- B700 Colectomy or Proctocolectomy WITH resection of contiguous organs NOS
  - Use this code when there is not enough information to assign codes: B320, B410, B510 or B610
  - Includes ANY colectomy (partial, hemicolectomy, or total) WITH a resection of any other organs in continuity with primary site (en bloc resection)
    - Other organs may be partial or total removal
      - · Oophorectomy, partial proctectomy, rectal mucosectomy, pelvic extenteration
- B800 Surgery NOS
  - Not enough information to assign specific codes

**Code CRM for these** surgery codes

# **Appendix C: Surgery Codes**



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# Rectosigmoid Codes C199

- A300 Segmental resection; partial proctosigmoidectomy NOS
  - Includes: Anterior resection, Hartmann's operation, Low anterior resection (LAR), partial colectomy, rectosigmoidectomy NOS, sigmoidectomy
  - A310 PLUS resection of contiguous organ(s)

Code CRM for these surgery codes



- A400 Pull through WITH sphincter preservation
  - Colo-anal anastomosis
  - Includes: Altemeier's operation, Duhamel's operation, Soave's submucosal resection, Swenson's operation, Turnbull's operation
- A500 Total proctectomy
  - Includes: Abdominoperineal resection (APR), anterior/posterior resection (A/P resection), Miles' operation, Rankin's operation
- A510 Total colectomy
  - Remove colon from cecum to rectosigmoid or portion of rectum
- A550 Total colectomy WITH ileostomy NOS
  - A560 Ileorectal reconstruction
  - A570 Total colectomy **WITH** other pouch (example: Koch pouch)



Code CRM for these surgery codes

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# Rectosigmoid Codes C199

- A600 Total proctocolectomy NOS (Codes A500 + A510)
  - Removes colon from cecum to rectosigmoid or portion of rectum
  - A650 WITH ileostomy NOS
  - · A660 WITH ileostomy and pouch
- A700 Colectomy or proctocolectomy resection in continuity with other organs (en bloc resection); pelvic exenteration
  - Other organ excision can include: oophorectomy, rectal mucosectomy
  - Includes **ANY** colectomy (partial, hemicolectomy, or total) with an en bloc resection of any other organs (partial or total)

Code CRM for these surgery codes and A800 (not listed)



# Appendix C: Surgery Codes



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- A270 Excisional Biopsy
- A300 Segmental resection; partial proctectomy NOS
  - Includes: Anterior resection; Hartmann's operation; Low Anterior Resection (LAR); Transsacral rectosigmoidectomy
- A400 Pull through WITH sphincter preservation
  - Colo-anal anastomosis
  - Includes: Altemeier's operation; Duhamel's operation; Soave's submucosal resection; Swenson's operation; Turnbull's operation
- A500 Proctectomy; Abdominoperineal resection
- A600 Total Proctocolectomy NOS
- A700 Proctectomy of proctocolectomy WITH resection in continuity with other organs; pelvic exenteration

Code CRM for these surgery codes and A800 (not listed)



# **Surgery Data Items**

Surgery of Primary Site 2023
Surgical Margins
Scope of Reg LN Surgery
Surgery of Other Sites
Reason No Surgery

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# Surgical Margins of Primary Site

Code	Description	Notes
0	No residual tumor	Path report has no residual tumor at margins; margins negative
1	Margins involved	Path report states margins involved but not type (micro or macro)
2	Microscopic involvement	CAP protocol margins section states involvement microscopically; Microscopic description on path report
3	Macroscopic involvement	CAP protocol margins section states involvement macroscopically; Gross (naked eye) description on path report
7	Margins not determines	Path report states margins couldn't be determined
9	Unknown/Not applicable	Surgery code 980; Unknown if primary site surgery; no mention of margins on path report or no tissue submitted; DCO; Polypectomy and no mention of margins on path report

- Applies to all cases that have a surgical procedure to the primary site
  - This may not be a "resection" but a procedure that has a sitespecific surgery code (Appendix C)
    - Polypectomy is coded as a surgery



# Scope of Regional LN Surgery

- Use the ENTIRE op report as primary source
  - For colorectal cases SLN biopsy is not typical and not abstracted
- Regional lymph node dissection is used to code this data item
  - Refer to EOD LN to determine regional nodes
- Record ALL surgical procedures that remove, biopsy, or aspirate regional LN whether or not there were any surgical procedures of primary site
  - May be done to diagnose, stage, or part of initial treatment



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# Scope of Regional LN Surgery

- · Code 0 when:
  - · Regional node removal was not performed
  - First course treatment is active surveillance/watchful waiting
  - Op report lists a LND, but no nodes found by the pathologist
- Code 1 Biopsy or Aspiration of regional LN NOS
- Codes 3, 4, and 5 Regional LND performed
  - Code 3: number of regional nodes unknown/not stated
  - Code 4: 1-3 nodes resected
  - Code 5: 4+ nodes resected
- Code 9 unknown or not applicable

SLN biopsy is rare for colorectal sites, codes 2, 6, & 7 will not typically apply



# Scope of Regional LN Surgery

### Counting Regional LN

- Add the number of all LN removed during each surgical procedure (1st course)
  - LN Aspirations:
    - Do NOT double-count when a regional LN is aspirated, and that node is in the resection field; Don't include the aspirated node in the count
    - Count the aspirated node if that node is **NOT** in the resection field
    - Assume the aspirated LN is part of the LN chain surgically removed and do NOT include in the count when the location is unknown
- Code the removal of regional LN for both primaries when the patient has two primaries with common regional nodes

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# Surgery Other Site

- Do not code incidental removal of tissue or organs
  - Reasons not related to cancer or preventing spread of cancer
    - Example: appendix, gallbladder, etc.
- Don't include the removal of organs included in Surgery of Primary Site 2023 codes
  - Example: R hemicolectomy including small bowel resection – code A410; don't code small bowel as surgery to other site



Code	Description	Notes
0	Surgery primary site performed	Surg Prim Site 2023: A100-A900 or B100-B900
1	Not planned	Surgery not standard treatment; no information about surgery AND surgery not typical or no reason to suspect patient would have surgery
2	Contraindicated due to risk factors	Comorbid conditions; advances age; progression of tumor prior to planned surgery
5	Patient died prior to planned/recommend surgery	Surgery was recommended/planned but patient expires prior to surgery
6	Recommended but not performed and reason is unknown	KNOWN surgery recommended <b>AND</b> KNOWN it was not performed <b>AND</b> no reason why not done
7	Recommended but refused by patient, family member or guardian	Refusal noted in medical record
8	Recommended but unknown if performed	Further follow-up necessary
9	Unknown if recommended or planned; DCO; Autopsy only	Surgery recommended but unknown if it is performed

# Radiation

Radiation Treatment Modality
Radiation Planning Technique
Radiation Sequence with Surgery
Reason No Radiation

# Radiation Fields

Item Name	Required SEER	Required CoC
Dose Per Fraction	As available	Yes
Rad External Planning Technique	Collect by CoC facility	Yes
Number of Fractions	As available	Yes
Rad Primary Treatment Volume	As available	Yes
Rad to Draining LN	As available	Yes
Rad Treatment Modality (Phase I, II, III)	Yes	Yes
Total Dose	As available	Yes
Reason No Radiation	Yes	Yes
Rx Summ- Surg/Rad Sequence	Yes	Yes

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# Radiation Therapy

### Typical for rectal cancer

- Where there is less surrounding organs to be affected by radiation
- Neoadjuvant therapy (pre-operative)
  - Used to reduce the bulk of tumor to make an inoperable cancer become possible candidate for surgery
- Adjuvant therapy (post-operative)
  - Used for cases where LNs are involved or positive surgical margins



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# Radiation Treatment Modality

Code	Description
00	No radiation
01	External Beam NOS
02	External Beam, photons
03	External Beam, protons
04	External Beam, electrons
05	External Beam, neutrons
06	External Beam, carbon ions
07	Brachytherapy NOS
08	Brachytherapy, intracavitary LDR
09	Brachytherapy, intracavitary HDR
10	Brachytherapy, interstitial LDR
11	Brachytherapy, interstitial HDR
12	Brachytherapy, electronic
13	Radioisotopes, NOS
14	Radioisotopes, Radium-223
15	Radioisotopes, Strontium-89
16	Radioisotopes, Strontium-90

External beam (external radiation) is common and involves using a machine to aim high-energy rays or particles from outside the body at the tumor, damaging cancer cells in the path.

Inserted into a body cavity

Inserted into tissue

Brachytherapy is radioisotopes administered using seeds or rods (except electronic brachy) that are inserted into a body cavity or tissue

Radioisotopes not delivered as orachytherapy, commonly in liquid form and inserted into blood stream or body cavity



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### **SEER Program Coding and Staging Manual 2023**

### Radiation External Beam Planning Technique--Phase I, II, III



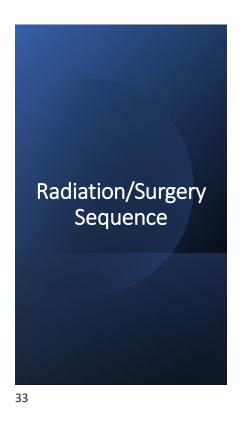
Item Length: 2
NAACCR Item #: 1502, 1512, 1522
NAACCR Name: Phase I Radiation External Beam Planning Tech
Phase II Radiation External Beam Planning Tech
Phase III Radiation External Beam Planning Tech
XML NAACCR ID: phaseIRadiationExternalBeamTech
phase3RadiationExternalBeamTech
phase3RadiationExternalBeamTech

Radiation External Beam Planning Technique--Phase I, II, and III, effective 01/01/2018, identify the external beam radiation planning technique used to administer the first, second, and third phase, respectively, of radiation treatment during the first course of treatment.

SEER Central Registries: Collect when available from CoC reporting facilities.

Code	Label	Description
00	No radiation treatment	Radiation therapy was not administered to the patient. Diagnosed at autopsy.
01	External beam, NOS	The treatment is known to be by external beam, but there is insufficient information to determine the specific planning technique
02	Low energy x- ray/photon therapy	External beam therapy administered using equipment with a maximum energy of less than one (1) million volts (MV). Energies are typically expressed in units of kilovolts (kV). These type of treatments are sometimes referred to as electronic brachytherapy or orthovoltage or superficial therapy. Clinical notes may refer to the brand names of low energy x-ray delivery devices, e.g., Axxent*, INTRABEAM*, or Esteva*.
03	2-D therapy	An external beam planning technique using 2-D imaging, such as plain film x-rays or fluoroscopic images, to define the location and size of the treatment beams. Should be clearly described as 2-D therapy. This planning modality is typically used only for palliative treatments.
04	Conformal or 3-D conformal therapy	An external beam planning technique using multiple, fixed beams shaped to conform to a defined target volume. Should be clearly described as conformal or 3-D therapy in patient record.





- Record the order in which surgery and radiation were administered for those patients who have both surgery and radiation
  - Surgery data items:
    - Surgery of Primary Site 2023
    - · Scope of Reg LN Surgery
    - · Surgery of Other Site
- Code 0 patient didn't have either surgery or radiation; unknown if patient had surgery/radiation
- Code 2 radiation before surgery (neoadjuvant)
- Code 3 radiation after surgery (adjuvant)

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# Radiation/Surgery Sequence

- Code 4- Radiation <u>BOTH</u> before and after surgery
  - At least 2 phases, episodes, or fractions of radiation given before and at least 2 more after surgery
    - Example: Neoadjuvant radiation therapy to shrink large, bulky tumor; Resection performed after neoadjuvant radiation; Adjuvant therapy following resection
- Code 7 Surgery <u>BOTH</u> before and after radiation (cases 2012+)
  - At least 2 surgeries and radiation administered between each of them
    - Example: Sentinel LN Biopsy; Radiation therapy administered; Surgery of primary site

# **Reason No Radiation**

Code	Description	Notes
0	Radiation administered	
1	Not part of 1 <sup>st</sup> course treatment; Diagnosed autopsy	Offered multiple treatment options and patient didn't chose radiation
2	Contraindicated due to risk factors	Comorbid conditions; advanced age; progression of tumor prior to planned radiation
5	Patient expires prior to planned or recommend radiation	
6	Not administered – no reason why	Recommended by physician but radiation not administered and unknown why
7	Refused by patient, family member/guardian	Refusal noted in patient record; Recommended by physician
8	Recommended but unknown if administered	No further documentation to confirm it was given; referral to radiation oncologist – registry should follow-up and code appropriately
9	Unknown if radiation administered or recommended	Unknown if any treatment provided; DCO

# Systemic Therapy

Chemotherapy
Hormone Therapy
Immunotherapy (BRM)
Heme Transplant and Endocrine Procedures



### Commonly used drugs:

- 5-Fluorouracil (5-FU)
- Capecitabine (Xeloda) pill
- Irinotecan (Camptosar)
- Oxaliplatin (Eloxatin)
- Trifluridine and Tipiracil (Lonsurf)
   combination drug in pill
- Used as a single agent or as combination regimen





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# Chemotherapy

### • Chemotherapy recommended:

- Consult recommended chemo or attending physician documented chemo was recommended
- Referral to clinical oncologist is equivalent to recommendation

### Single agent:

- Only one chemo drug was administered during first course treatment
- May or may not be administered with other drugs classified as immunotherapy, hormone, ancillary or other

### • Multiple agent:

- Two or more chemo drugs administered during first course treatment
- May or may not include other systemic therapies



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# Chemotherapy

Code	Description	Notes
00	None	Not planned; not first course; diagnosed at autopsy
01	Chemo NOS	Type and number of agents not documented
02	Single agent	One chemo agent/drug administered
03	Multiple agents	Two or more chemo agent/drugs administered
82	Contraindicated due to risk factors	Comorbid conditions; advanced age; progression of tumor prior to administration of chemo
85	Patient died prior to planned/recommend	Patient expired prior to planned or recommended chemo treatment
86	Recommended – not administered but unknown reason why	Recommended but not administered and no reason documented in the medical record
87	Refused by patient, family member or guardian	Recommended chemo but refused
88	Recommended unknown if administered	Referred to oncologist; Insertion of port-a-cath; Follow-up on these cases
99	Unknown if recommended or administered – not stated	DCO cases; no information in medical record

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- Records immunotherapeutic agents administered as first course therapy
  - Biological therapy
  - Biotherapy
  - Biological response modifier (BRM)
- Use SEER\*Rx to help determine drug agent type
- Types of Immunotherapy used in colorectal cancers:
  - Keytruda
  - Opdivo
  - Jemperli
  - Yervoy

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# **Targeted Therapy**

# Commonly used drugs that target VEGF:

Bevacizumab (Avastin and other names) - **BRM** 

Ramucirumab (Cyramza) – **BRM** 

Ziv-aflibercept (Zaltrap) - **Chemo** 

Fruquintinib (Fruzaqla) - **Chemo** 

# Commonly used drugs that target EGFR:

Cetuximab (Erbitux) - **BRM** Panitumumab (Vectibix) – **BRM** 

- These drugs are not used if the patient has mutations such as KRAS, NRAS, or BRAF
- Exception: If BRAF+ an EGFR inhibitor can be used with Encorafenib (BRAF inhibitor)

# Commonly used drugs that target HER2:

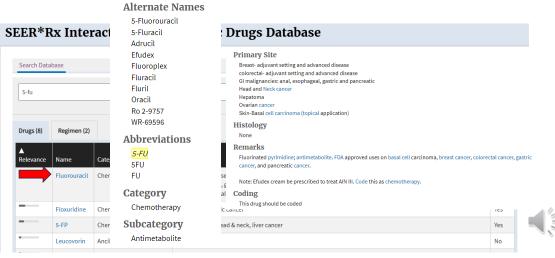
Trastuzumab (Herceptin and other names) - **BRM** Pertuzumab (Perjeta) - **BRM** Tucatinib (Tukysa) - **Chemo** Lapatinib (Tykerb) - **Chemo** 



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# SEER\*Rx



# **Text Documentation**

Helpful and Appropriate Text

Cover Your Abstract (CYA)

Supports your codes



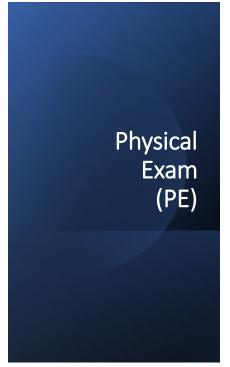
Especially important for Staging codes

Recommended method of abstracting

• Text Documentation FIRST
• Code SECOND



- Physical Exam/History: initial findings, dx
- Laboratory Tests (Cytology & Hematology): SSDI, Markers
- Imaging: X-rays, scans, PET, CT, and other imaging techniques
- Scopes/Bx: manipulative and exploratory procedures
- Surgical Observations: operative report findings
- Pathology: final diagnosis
- Discharge summary/Diagnosis: follow-up, subsequent tests or treatment



### **Physical Exam/History:**

**1st Admission Date** for Cancer (OP or IP): AGE, RACE, SEX, Chief complaint; symptoms, reason for admit, (Impression or Admission Diagnosis).

**Physical Exam**: any ABD masses palpable, enlarged nodes or enlarged liver, blood in stool, anemia, digital rectal exam.

**History**: any relevant hx of other diseases or cancer in the past; family hx of colon cancer.

Dates of subsequent re-admissions related to cancer. Port placed. Treatment plan



### <u>Laboratory Tests</u> (Cytology & Hematology):

 Date: CEA (preTx) Lab value and interpretation or range of normal SSDI

• Date: KRAS, BRAF, NRAS- SSDI

• Date: MSI - SSDI









### X-rays, Scans, and Other Imaging Techniques

• Date: Tests for metastatic disease- CXR, Bone Scan, Liver/Spleen Scans, any workup PTA goes here

### CT of ABD/Pelvis- PET Scan

- Date: Pertinent test results done even if prior to admission (PTA)
- Include both pos and neg results



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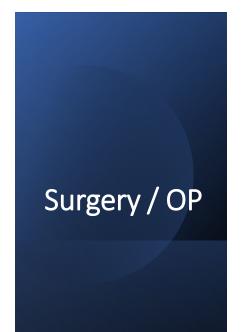


# Manipulative & Exploratory Procedures & (scopes):

- Date: Colonoscopy with/without BX: note location of lesion
- Date: BX of liver or other distant sites.



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### **Surgical Observations:**

 Dates: Name of Procedure (Laser surgery, polypectomy, partial colectomy, hemicolectomy, or total colectomy): note location, size, and extension of tumor; involvement of lymph nodes, <u>liver</u> or other organs involvement. Note if liver normal. Other surgical findings.



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### **FINAL Pathology:**

- Date: Type of specimen (i.e. Bx of colon, or BX of liver or other distant sites): DX- final diagnosis as stated (histology & differentiation), positive or negative tissue involvement with cancer.
- CAP Protocol Summary gives details
- Do not repeat information
- · May need to look in gross section for CRM size





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# Remarks/DS

### **Discharge Summary/Diagnosis:**

 Date of discharge: Final DX and comments on discharge summary report, any other treatment started such as radiation or chemo. Future plans for treatment or follow up, name of oncologist, discharge or transferred to another hospital or nursing home or hospice. Date of last contact and cancer status.



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# Resources for Text Information

### Texting 101 Video series:

https://shri.public-health.uiowa.edu/registrars/training-education/video-training-library/#texting

### NCRA: Information abstracts updated Summer 2022

http://www.cancerregistryeducation.org/

http://www.cancerregistryeducation.org/Files/Org/f3f3d382a7a242549a9999654105a63b/site/Final Informational Abstracts Summer 2022.pdf

### **NAACCR Abbreviation list:**

 $\frac{https://apps.naaccr.org/data-dictionary/data-dictionary/version=24/chapter-view/abbreviations-and-acronyms/recommended-abbreviations-for-abstractors/$ 



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