




# Colorectal Abstracting 101 2025 Training

## Treatment


Presented by Melissa Riddle, ODS-C  
 ICR Video Training Series: Iowa Cancer Registry




## Treatment Fields

 **Surgery**

- Primary Site
- Scope Regional LN
- Surgery Other Site
- Reason no Surgery

 **Radiation**

- Treatment Modality – Phases I, II, III
- Radiation Sequence
- Reason no Radiation

 **Systemic Therapy**

- Chemo
- Immunotherapy

# Colorectal Treatment

- 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 Treatment

### Right-sided colon cancer

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

### Left-sided colon cancer

- More common
- More likely in younger age
- Likely to be diagnosed earlier stage due to symptoms
- More likely to have HER2 mutation

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# Surgery Data Items

Surgery Primary Site 2023  
 Surgical Margins  
 Scope Reg LN Surgery  
 Surgery Other Sites  
 Reason no surgery

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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

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Colon, Appendix, Rectosigmoid, Rectum

[Coding Guidelines: Colon](#) (PDF, 103 KB)

[Coding Guidelines: Rectosigmoid, Rectum](#) (PDF, 137 KB)

[Solid Tumor Rules: Colon, Rectosigmoid, and Rectum](#) (PDF, 7.9 MB)

### Surgery Codes

- [Colon - \(C180-C189\)](#) (PDF, 198 KB)
- [Rectosigmoid - \(C199\)](#) (PDF, 167 KB)
- [Rectum - \(C209\)](#) (PDF, 165 KB)



#### Codes

B000 None; no surgery of primary site; autopsy ONLY

B100 Local tumor destruction, NOS, any form of local tumor destruction, includes electrocautery, and/or fulguration

**Note:** B100 includes electrocautery; fulguration (includes use of hot forceps for tumor destruction).

**No specimen sent to pathology from surgical event B100**

B200 Local tumor excision, NOS

B260 Polypectomy, NOS

B270 Excisional biopsy

B280 Polypectomy-endoscopic

**Note:** Code B280 includes a polypectomy during an initial colonoscopy for screening or symptoms without knowledge of whether the polyp is benign or malignant.

B281 Polypectomy-endoscopic mucosal resection or dissection

**Note:** Code B281 includes a more complicated polypectomy performed during a colonoscopy. Usually, the polyp is known to be a superficial malignancy.

B290 Polypectomy-open approach surgical excision, or laparoscopic

- Link: <https://seer.cancer.gov/manuals/2025/appendixc.html>

## SEER\*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

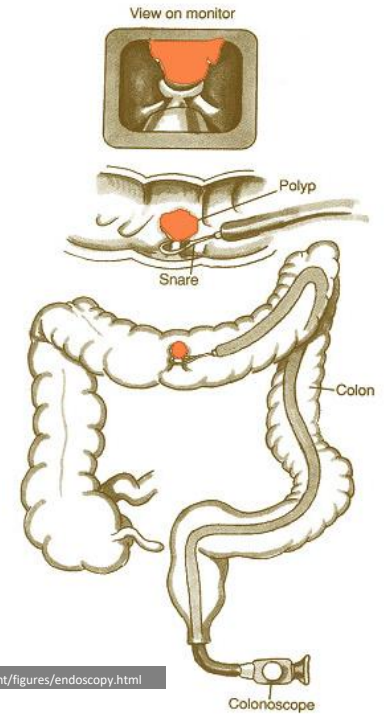
**Local Excision:** tools are used through the colonoscope to remove small cancer on the inner lining of the colon along with a small amount of surrounding tissue; some are performed through laparoscopy or open approach

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# 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



<https://training.seer.cancer.gov/colorectal/treatment/figures/endoscopy.html>

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## Wide Local Excision

- **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

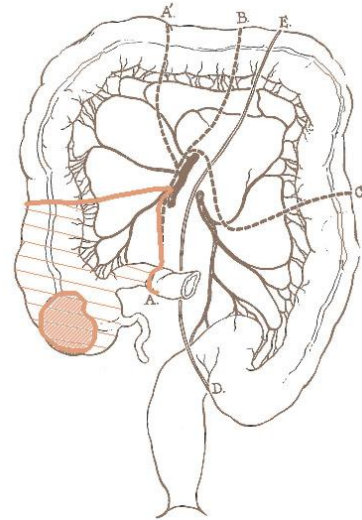
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Code CRM for these surgery codes

# Partial Colectomy

- **B300** Partial colectomy
  - Removes one or more segments with colon resection but less than 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



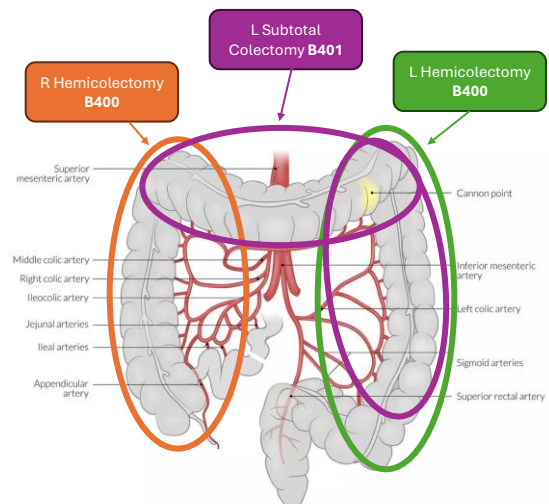
<https://training.seer.cancer.gov/colorectal/treatment/figures/cecectomy.html>

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# Hemicolectomy

- **B400** Hemicolectomy
  - Total right or left colon; portion transverse colon
  - Extended right/left hemicolectomy
- **B401** Subtotal colectomy
  - Total right or left colon and **ENTIRE** transverse colon
  - **B410 – PLUS** resection of continuous organ(s)

Code CRM for these surgery codes



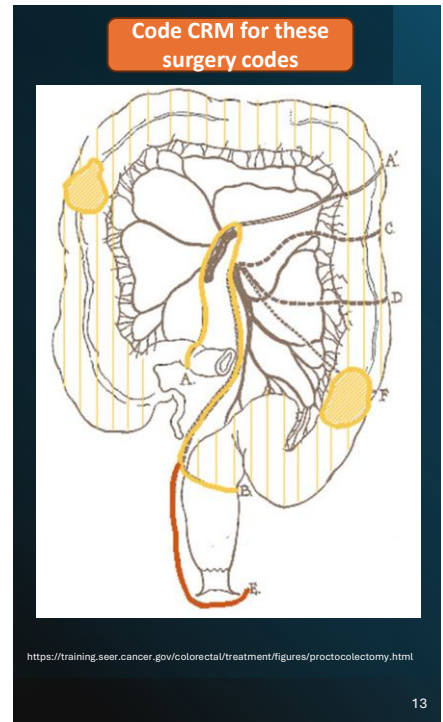
<https://cdn.medizy.com/zQr0eBB2UH5UEm3mEXSUSvgMZfl=1414x1000/img/posts/68fe8c84-ef33-4ff6-be8c-84ef33dff637>

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# Total Colectomy

- **B500 Total Colectomy**
  - Removes the colon from cecum to rectosigmoid junction (C180-C199)
  - May include a portion of the rectum
  - **B510 PLUS** resection of continuous organ(s)
    - Short portion of distal ileum is **NOT** considered part of this code
- **B600 Total Proctocolectomy**
  - Removes the colon from cecum to rectum (C180-C209)
    - Commonly for familial polyposis or polyposis coli
  - **B610 PLUS** resection of continuous organ(s)
    - Short portion of distal ileum is **NOT** considered part of this code



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## Colectomy NOS

Code CRM for these surgery codes

- **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

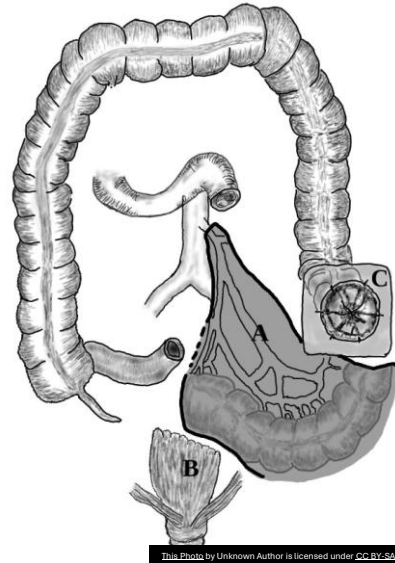
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# Rectosigmoid Surgery Codes (C199)

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

Code CRM for these surgery codes



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## Rectosigmoid Codes (C199)

- **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 includes: oophorectomy, rectal mucosectomy
  - Includes **ANY** colectomy (partial, hemicolectomy, or total) with an en bloc resection of any other organs (partial or total)

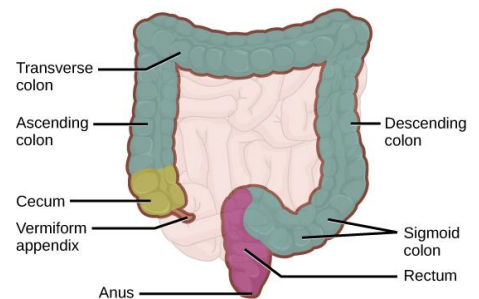
Code CRM for these  
surgery codes and A800  
(not listed)

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## Rectum Surgery Codes (C209)

- **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



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

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| Code | Description                    | Notes   |
|------|--------------------------------|---|
| 0    | No residual tumor              | Path report has no residual tumor at margins; margins negative  |
| 1    | Margins involved               | Path report states <b>margins involved but not type</b> (micro or macro)  |
| 2    | <b>Microscopic</b> involvement | CAP protocol margins section states <b>involvement microscopically</b> ; Microscopic description on path report   |
| 3    | <b>Macroscopic</b> involvement | CAP protocol margins section states <b>involvement macroscopically</b> ; Gross (naked eye) description on path report   |
| 7    | Margins not determined         | 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 |

## Surgical Margins of Primary Site

- 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 site-specific surgery code (Appendix C)
    - Polypectomy is coded as a surgery

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## 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
  - Even if there is no primary site resection
  - Leave dates for surgery blank
- 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

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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

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# Reason No Surgery Primary Site

Surgery Primary Site = A000 or B00  
**Note:** Referral to a surgeon is equivalent to a recommendation for surgery

| 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  |

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# Radiation Treatment

Radiation Treatment Modality

Radiation Sequence

Reason no Radiation

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# Radiation Fields

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

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# Radiation Therapy

- Typical for Rectal Cancer
  - Where there is fewer surrounding organs to be affected by radiation
  - Can be neoadjuvant or adjuvant
    - **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 brachytherapy, commonly in liquid form and inserted into blood stream or body cavity

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## Radiation/Surgery Sequence

- 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 **BOTH** 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 **BOTH** 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

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## 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  |

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# Systemic Therapy

- Chemotherapy
- Hormone Therapy
- Immunotherapy (BRM)

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## SEER\*Rx

**SEER\*Rx Interact**

Search Database

5-fu

Drugs (8)    Regimen (2)

| Relevance | Name         | Cate  |
|-----------|--------------|-------|
| ➔         | Fluorouracil | Cher  |
|           | Floxuridine  | Cher  |
|           | 5-FP         | Cher  |
|           | Leucovorin   | Ancil |

**Alternate Names**

- 5-Fluorouracil
- 5-Fluracil
- Adrucil
- Efudex
- Fluoroplex
- Fluracil
- Fluril
- Oracil
- Ro 2-9757
- WR-69596

**Abbreviations**

- 5-FU
- 5FU
- FU

**Category**

Chemotherapy

**Subcategory**

Antimetabolite

**Drugs Database**

**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: Efudex cream be prescribed to treat AIN III. Code this as chemotherapy.

**Coding**

This drug should be coded

|                           |     |
|---------------------------|-----|
| Head & neck, liver cancer | Yes |
|                           | No  |

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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

- **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

| 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; <b><u>Follow-up on these cases</u></b> |
| 99   | Unknown if recommended or administered – not stated   | DCO cases; no information in medical record  |

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## Immunotherapy

- 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 (Erbix) - **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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# Systemic Treatment Example

3/5/25 80yo male diagnosed with occlusive cancer of descending colon with multiple liver metastasis, Stage 4b; Plan: mFOLFOX6+Pmab

3/7/25 started mFOLFOX6 + Panitumumab (Pmab)

## How do we code the treatment?

- **Chemo: 03** – FOLFOX6
  - 5-FU + Oxaliplatin
  - mFOLFOX6 – administered every 14 days for 12 cycles
- **Immunotherapy: 01** - Panitumumab

The screenshot shows a medical software interface. On the left, under 'Name', 'FOLFOX' is highlighted. Below it, 'Alternate names' are listed: FLO, FLOX, FOLFOX4, OFF, FOLFOX6, and FOLFOX7. On the right, a dropdown menu is open for 'Drugs for FOLFOX', showing options: Fluorouracil, Leucovorin, and Oxaliplatin. Below this, another dropdown menu is open for 'Name', showing 'Fluorouracil' and 'Alternate Names' with '5-Fluorouracil' listed. At the bottom, a table shows 'Drugs (2)' and 'Regimen (0)'. The table has columns for 'Relevance', 'Name', and 'Category'. One entry is visible: 'Panitumumab' under 'Name' and 'Biologic therapy (BRM, immunotherapy)' under 'Category'.

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## Questions? Contact Me.

**Contact Information:**

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Education & Training

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