SHRI Video Training Series
2018 dx and forward
Recorded 1/2020

Colorectal Primary Site & Histology

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2020

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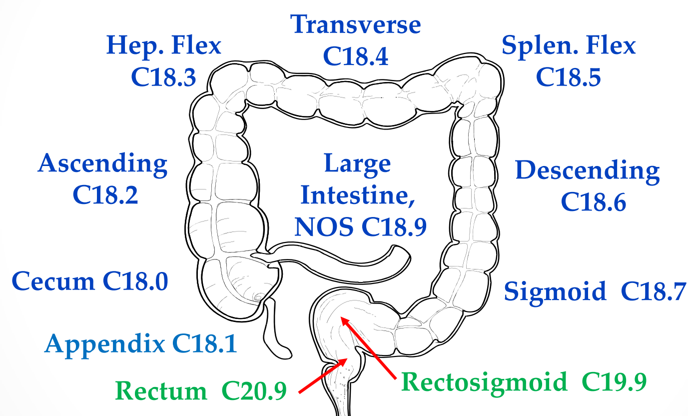
Colorectal Anatomy

Primary Site ICD-O Codes for Colon and Rectum



Determining Primary Site

Coding Guidelines

- **Priority Order for Coding Primary Site**

Resected cases

- Operative report with surgeon's description
- Pathology report
- Imaging

Polypectomy or excision without resection

- Endoscopy report
- Pathology report

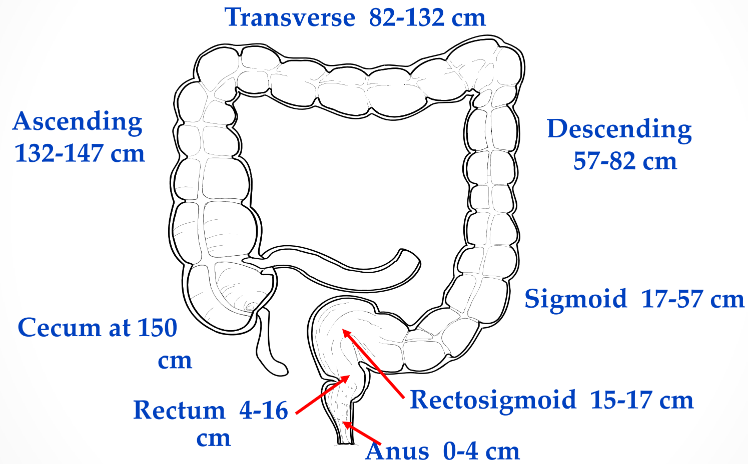
Determining Primary Site

Subsites:

- Code the subsite with the most tumor when the tumor overlaps two subsites.
- Code C188 when both subsites are equally involved

- **Colonoscopy measurement as indication of tumor location**

Colonoscopy Measurements*



* from anal verge Approximations only.
Source: AJCC Cancer Staging Manual, fifth edition, page 85, 1997.

USE

Solid Tumor Rule Manual

Review Manual

Introduction

Changes from 2007 MPH Rules

Equivalent or Equal Terms

Table 1

Table 2 (Not reportable)

Illustrations

Introduction

- 98% colon cancers are adenocarcinoma and adenoca subtypes
- Mixed histologies rare
- Terms: NET, NEC, GIST
  - NET (Neuroendocrine tumor) replacing the term carcinoid; some path still uses carcinoid
  - NEC (Neuroendocrine carcinoma) includes small cell, large cell and PD neuroendocrine carcinoma
  - GIST (gastrointestinal stromal tumor) 60% stomach; 30% small intestine
    - About 25% are malig; often difficult to determine behavior

Changes from 2007 MPH Rules

Effective 1/1/2018 dx and later:

Code **most specific histology** from biopsy or resection.

- If discrepancy, code from most representative specimen (greater amt of tumor)

NET (formerly carcinoid) arising in appendix are reportable 1/1/2015 and forward.

Pseudomyxoma peritonei

- High grade is malig /3
- Low grade is NOT malig /1

Terminology

- Equivalent Terms: pg 57-58
- Not Equivalent or Equal: pg 58-59

Changes

Dysplasia /2 not reportable in U.S.

- Pathologists often use severe dysplasia or high gr dysplasia in place of CIS. Code CIS ONLY if pathologist states CIS.

Disregard polyps

- o Adenocarcinoma in a polyp now coded to 8140.

Table 1

Specific Histologies, NOS and Subtypes/Variants

- Rare histologies may not be listed in table
- If code specific to /2 or /3, means only one possible behavior
- If not specified can be /2 or /3
- Columns & Rows

Colon, Rectosigmoid, and Rectum Equivalent Terms and Definitions
C180-C189, C199, C209
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

Table 2: Histologies Not Reportable for Colon, Rectosigmoid and Rectum

Column 1 lists the **non-reportable** histology term and code for NOS or specific
Column 2 lists the **synonym**(s) for the term
Column 3 lists the **subtype/variant** of the NOS term with the histology code
Column 4 lists the **reason** these histologies are **not reportable**

Specific or NOS Term and Code	Synonyms	Subtype/Variant of NOS with Histology Code	Reason not reportable
Adenoma 8140/0 *Note*: No malignancy in polyps	Adenoma NOS	Tubular adenoma **8211/0** Tubulovillous adenoma **8263/0** Villous adenoma **8261/0**	Non-malignant
Cowden-associated polyp No code *Note*: No malignancy in polyps	Cowden disease Cowden syndrome Multiple hamartoma syndrome		Non-malignant /no code
Dysplasia, high grade 8148/2 *Note:* Colorectal primaries only (C180-C189, C199 and C209)	High-grade dysplasia Intraepithelial neoplasia, high grade		**CURRENTLY NOT REPORTABLE**
Dysplasia, low grade 8148/0* *Note:* Colorectal primaries only (C180-C189, C199 and C209)	Intraepithelial neoplasia, low grade		Non-malignant

Headers

Unknown if single or multiple M1

Single Tumor M2

Multiple Tumors M3-M15

STR Examples

Multiple Primary Sites?

Example 1: Malignant mass found in **transverse colon C18.4**, and another malignant mass found in **descending colon C18.6.**

- **Biopsy showed adenocarcinoma (8140) of both lesions.**

- How many primaries?

Multiple Tumors

M3 polyposis

M4 Abstract mult pri when there are separate non-contiguous tumors in sites with ICDO site codes that differ at the CXxx and or CxXx character

C18.4 and C18.6. Do not stop. YET.

Multiple Tumors

- **M5** histology subtypes in Table 1
- **M6** different rows Table 1
- **M7** anastomotic site (new)
- **M8** anastomotic site
- **M9** Mult pri separate non-continuous tumors in ICDO site that differ at 4th character C18X.

C18.4 and C18.6

Multiple cancers

Example 2:

- Patient with Colon cancer in 2000 and on your database with Site: C18.2 **Ascending** colon PD invasive adenocarcinoma. 8140/3 on hemicolectomy.
- In 2018 found **to have recurrence at the anastomotic site dx exactly as mucinous adenocarcinoma (8480).**

Rule M7 Abstract **multiple primaries**[ii] when a subsequent tumor arises at the **anastomotic** site **AND:**

- One tumor is a **NOS** and the other is a **subtype/variant** of that NOS **OR**
- The subsequent tumor occurs **greater than 24 months** after original tumor resection **OR**
- The **subsequent** tumor arises in the **mucosa**

Note: Bullet three does not apply to GIST. GISTs only start in the wall; never in the mucosa.

Example: (For bullet 1: NOS and subtype/variant) The original tumor was adenocarcinoma NOS **8140**. The patient had a hemicolectomy. There was a recurrence at the **anastomotic** site diagnosed exactly as **mucinous** adenocarcinoma **8480.** Mucinous adenocarcinoma is a subtype/variant of the NOS adenocarcinoma, but they are two different histologies. **Code two primaries,** one for the original adenocarcinoma NOS and another for the subsequent anastomotic site mucinous adenocarcinoma.

Note 1: There may or may not be **physician documentation** of anastomotic recurrence. Follow the rules.

Note 2: When the original tumor was diagnosed prior to 1/1/2018 and was coded to adenocarcinoma in a polyp, and the anastomotic site tumor is adenocarcinoma per 2018 rules, the tumors are the same histology. ICD-O codes differ because of changes in histology coding rules. Continue through the rules.

Note 3: The tumor may or may not invade into the colon wall or adjacent tissue.

Note 4: These rules are hierarchical. Only use this rule when previous rules do not apply.

Histology

for Colorectal Cancer

Solid Tumor Rules

Includes Colon, Rectum and Rectosigmoid

Priority Order for using Documentation to Identify Histology

1. **Code histology prior to neoadjuv treatment.**
2. **Code histology assigned by physician. Don't change to stage.**

Code most specific pathology/tissue from resection or biopsy

- Term 'Most specific' = subtype/variant
- Code invasive if both in situ and invasive
- If discrepancy between biopsy and resection, code from most representative spec (greater amt of tumor).
- Use tissue from path, addendum, final, CAP.
- Tissue from metastatic site
- Scan
- Clinical
- Cytology

Multiple Histologies

Code Histology when:

A. Exact term is documented

B. Histology described as
- Subtype
- Type
- Variant

Coding Histology

- Code most specific (do not use breast rules for this site)
- Use Histology Rules, not just this section

1. Code most specific histology, subtype/variant, regardless if stated as majority or predominant; minority; component
2. Code histology described as differentiation, features/features of only when there is specific code for “features” or “differentiation”

3. Code specific histology described by ambiguous terms ONLY when A or B is true:

A. Only dx available described by ambig term

>Case accessioned based on ambig terms (no other histology available)

B. NOS histology and a more specific described by ambig terms

> Code specific hist confirmed by MD or pt rec'v treatment based on specific hist described by ambig term.

4. Do not code hist described as: architecture, foci, focus, focal, pattern.

Colon, Rectosigmoid, and Rectum Histology Rules
C180-C189, C199, C209
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

4. **Do not code** histology when described as:
   - Architecture
   - Foci; focus; focal
   - Pattern

Single Tumor

Rule H1 Code adenocarcinoma with neuroendocrine differentiation **8574** when the final diagnosis is **exactly** "adenocarcinoma with neuroendocrine differentiation".
Note: **Do not** use this code when:
- The diagnosis is any subtype/variant of adenocarcinoma with neuroendocrine differentiation
- Any modifier other than differentiation is used, i.e., adenocarcinoma with neuroendocrine features

Rule H2 Code the **histology** and **ignore the polyp** when a carcinoma **originates** in a **polyp.**
Note 1: This is a **change** from the **2007** MPH rules which instructed registrars to use the codes for malignancies in a polyp, such as adenocarcinoma in a polyp **8210.**
Note 2: Sufficient data has been collected to:
- Determine the frequency with which carcinomas arise within polyps
- Establish patient care guidelines for individuals with colon polyps

Example: Colonoscopy with polypectomy finds mucinous adenocarcinoma in the polyp. Code mucinous adenocarcinoma **8480.**

Rule H3 Code combined small cell carcinoma **8045** when the final diagnosis is **small cell** carcinoma **AND any other carcinoma.**
Examples:
- Small cell carcinoma **8041** and adenocarcinoma **8140**
- Small cell carcinoma **8041** and neuroendocrine carcinoma **8246**

Colon, Rectosigmoid, and Rectum Histology Rules
C180-C189, C199, C209
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

Rule H4 Code **mixed mucinous and signet ring cell** as follows:
- Adenocarcinoma with mucinous and signet ring features – code adenocarcinoma **8140**
- Mucinous carcinoma and signet ring cell carcinoma:
  - Mucinous carcinoma documented as **greater than 50%** – code mucinous carcinoma **8480**
  - Signet ring cell carcinoma documented as **greater than 50%** – code signet ring cell carcinoma **8490**
  - Percentage of mucinous carcinoma and signet ring cell carcinoma **unknown/not designated**- code adenocarcinoma mixed subtypes **8255**

Note: This rule is for mucinous carcinoma and signet ring cell carcinoma in a single tumor. For mucinous adenocarcinoma mixed with another histology OR signet ring cell carcinoma mixed with another histology, proceed through the rules.

Rule H5 Code invasive **mucinous** adenocarcinoma **8480** when the diagnosis is any of the following:
- **Exactly "mucinous** adenocarcinoma" (no modifiers)
- **High-grade** pseudomyxoma peritonei
- **Invasive** pseudomyxoma peritonei
- **Malignant** pseudomyxoma peritonei
- Two histologies and mucinous is documented to be **greater than 50%** of the tumor

Note 1: Be very **careful** when **determining primary** site; almost all pseudomyxoma peritonei originate in the appendix C181. However, it **can be metastatic** disease from sites such as bowel, ovary, or bladder. Code the primary site as designated by a physician. When the primary site is not designated, code unknown primary **C809** and the histology as mucinous carcinoma **8480.**

Note 2: Report the appendiceal mucinous neoplasm as malignant /3 using the ICD-O matrix principle and the SEER and COC Manuals when the **pathology** from the appendix is **low-grade mucinous** neoplasm (not reportable) **AND**
- The pseudomyxoma peritonei are **high-grade**/invasive/malignant **OR**
- Patient is **treated** for malignant pseudomyxoma peritonei

Note 3: The following are **non-reportable:**
- Appendiceal neoplasm with **low-grade** pseudomyxoma peritonei **AND no treatment**
- **No designation** of high- or low-grade for the appendiceal neoplasm **AND no treatment** for the pseudomyxoma peritonei

Rule H6 Code adenocarcinoma NOS **8140** when the final diagnosis is:
- Two histologies:
  - Adenocarcinoma and mucinous carcinoma
    - Percentage of mucinous **unknown/not documented**
    - Mucinous documented as less than 50% of tumor
  - Adenocarcinoma and signet ring cell carcinoma
    - Percentage of signet ring **unknown/not documented**
    - Signet ring cell documented as less than 50% of tumor
- **Exactly** adenocarcinoma **OR**
- **Intestinal** type adenocarcinoma **OR** adenocarcinoma intestinal type (no modifiers or additional histologic terms).

Note 1: Code **8140 adenocarcinoma NOS** even if pathology says intestinal type adenocarcinoma.

Note 2: Do **not** use code **8144** adenocarcinoma intestinal type for **colorectal** primaries. Intestinal type adenocarcinoma 8144 is used for tumors which occur in the stomach, head and neck, and specific GYN sites. It is called intestinal because it resembles carcinoma which occurs in the colon, rectosigmoid or rectum.

Note 3: When a diagnosis of intestinal type adenocarcinoma is **further described** by a **specific term** (such as mucinous intestinal type adenocarcinoma or signet ring cell intestinal type adenocarcinoma), it would be treated as an adenocarcinoma with a **subtype/variant**.

Rule H7 Code the histology when only **one histology** is present.

Note 1: Use **Table 1** to code histology. New codes, terms, and synonyms are included in Table 1 and coding errors may occur if the table is not used.

Note 2: Use the ICD-O and all updates when the histology is not listed in Table 1.

Note 3: Submit a question to Ask a SEER Registrar when the histology code is not found in Table 1, ICD-O or all updates.

Rule H8 Code the **invasive** histology **when in situ** and **invasive** histologies are present in the **same tumor**.

Colon, Rectosigmoid, and Rectum Histology Rules
C180-C189, C199, C209
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

Rule H9 Code the **subtype/variant** when there is a **NOS** and a **single** **subtype/variant** of that NOS such as the following:

- Adenocarcinoma **8140** and a subtype/variant of adenocarcinoma
- Mixed adenoneuroendocrine carcinoma **8244** and a subtype/variant of mixed adenoneuroendocrine carcinoma
- Neuroendocrine carcinoma **8246** and a subtype/variant of neuroendocrine carcinoma
- Neuroendocrine tumor Grade 1 (G1) **8240** and a subtype/variant of neuroendocrine tumor Grade 1 (G1)
- Sarcoma **8800** and a subtype/variant of sarcoma

Note 1: See Table 1 in the Equivalent Terms and Definitions to find NOS and subtypes/variants.
Note 2: Only code subtypes/variant when pathology gives an **exact diagnosis**. **Do not** code the subtype/variant when **modified** by terms such as **differentiation, features of, etc., unless** there is a specific code for the histology term with the modifier.

This is the end of instructions for Single Tumor.

Code the histology using the rule that fits the case.

Multiple Tumors Abstracted as a Single Primary

Note: Multiple tumors **must be a single primary** to use this module. **See** the **Multiple Primary Rules** to determine whether these tumors are a single primary.

Rule H10 Code adenocarcinoma in familial adenomatous polyposis coli (**FAP**) **8220** when **clinical** history says the patient has **familial polyposis AND**

- The final diagnosis on the **pathology report** from resection is **adenocarcinoma in FAP OR**
- There are **greater than 100 polyps** identified in the resected specimen

Note 1: Use this rule **only** when there are **multiple polyps**. **Do not** use for a single polyp (adenoma) or for a de novo (frank) malignancy and a malignancy in a single polyp.
Note 2: Use this rule **ONLY** for adenocarcinoma in **FAP.**
Note 3: The disease process, treatment, and prognosis for FAP is not as favorable as a single polyp with adenocarcinoma.

Rule H11 Code adenocarcinoma in multiple adenomatous polyps **8221** when FAP is not mentioned **AND**

- There are at least 2 polyps with adenocarcinoma /2 or /3 **AND**
  - Less than or equal to 100 polyps are identified **OR**
  - The exact number of polyps is unknown/not documented

Note 1: **Do not use** this code for a malignancy in **a single polyp** (adenoma) or for a de novo (frank) malignancy.
Note 2: Use this rule **ONLY** for **adenocarcinoma NOS** in multiple polyps**.**

Rule H12 Code the histology of the **invasive** tumor when there are **in situ** /2 and **invasive** /3 tumors.

- One tumor is in situ and the other is invasive
- All tumors are a **mixture** of **in situ** and **invasive** histology

Rule H13 Code the histology when only **one** histology is present in **all** tumors.

Note 1: Use **Table 1** to code histology. New codes, terms, and synonyms are included in **Table 1** and coding errors may occur if the table is not used.
Note 2: When the histology is **not listed** in **Table 1,** use the **ICD-O** and all **updates**.
Note 3: Submit a question to Ask a SEER Registrar when the histology code is not found in Table 1, ICD-O or all updates.

Rule H14 Code the **subtype/variant** when the diagnosis is a **NOS** and a **single subtype/variant** of that NOS such as the following:

- Adenocarcinoma **8140** and a subtype/variant of adenocarcinoma
- Mixed adenoneuroendocrine carcinoma **8244** and a subtype/variant of mixed adenoneuroendocrine carcinoma
- Neuroendocrine carcinoma **8246** and a subtype/variant of neuroendocrine carcinoma
- Neuroendocrine tumor Grade 1 (G1) **8240** and a subtype/variant of neuroendocrine tumor Grade 1 (G1)
- Sarcoma **8800** and a subtype/variant of sarcoma

Note 1: All tumors may be **mixed** histologies (NOS and a subtype/variant of that NOS) **OR** one tumor may be a **NOS** histology and the other tumor a **subtype/variant** of that NOS.
Note 2: See **Table 1** in the Equivalent Terms and Definitions to find NOS and subtypes/variants.
Note 3: Check the **Multiple Primary Rules** to confirm that the tumors are a single primary.
Note 4: Only code subtypes/variant when pathology gives an **exact diagnosis**. **Do not** code the subtype/variant when **modified** by terms such as **differentiation, features of, etc., unless** there is a specific code for the histology term with the modifier.

This is the end of instructions for Multiple Tumors Abstracted as a Single Primary.

Code the histology using the rule that fits the case.

NET (Carcinoid) cancer

- Look for schemas starting with NET
- All NET tumors are considered malig, /3.
- Effective 2015, carcinoid tumor, NOS of appendix (C18.1) is reportable, 8240/3.
- Keep it simple: Code all to /3 unless designated benign.

FAP (8220)

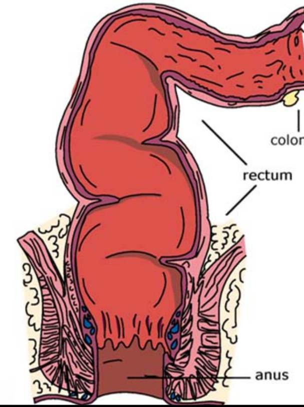
- Familial adenomatous polyposis (FAP)
  - also known as familial polyposis coli
    - subtype: Gardner syndrome (with other neoplasms)
  - genetic defect
  - patients have >100 colon polyps (usually thousands); most are tubular adenomas
  - 100% progress to colon carcinoma
  - prophylactic colectomy by age 20-25

Reportable only when cancer in a polyp
Rule M3 single primary
Rule H10 8220

Anus Histology

- **Squamous cell carcinoma** (8070/3)
  - Arises in the anus
- **Cloacogenic** transitional cell carcinoma (8124/3)
  - Arises at anorectal junction

Primary Site :
C21.0 Anus NOS
C21.1 Anal Canal
C21.2 Cloacogenic zone
C21.8 Overlap rectum & anus



Histology Example

Example #1

Pathology: 3-1-19 Left colon resection:
Final DX = Splenic flexure MD adenocarcinoma, mucinous (>75%). Tumor invades through bowel wall. 1 out of 13 mesenteric LNs pos. Stage T3N1M0.

Primary Site C: _____
Histology/behavior: _______

Primary Site and Morphology Exercises

Case #1

Final Pathology: 3-1-19 Sigmoid resection: Infiltrating PD adenocarcinoma with mucinous features. Tumor invades through bowel wall. 1 out of 13 mesenteric LNs pos.	
Primary Site	
Histology/Behavior	

Case #2

FINAL Pathology: 3-1-19 L colon resection: Infiltrating well diff adenocarcinoma and signet ring cell carcinoma (>75%). Tumor invades through bowel wall. 1 out of 13 mesenteric LNs pos.	
Primary Site	
Histology/Behavior	

Case #3

Scope: Colonoscopy shows tumor 10cm from dentate line. **FINAL Pathology:** 3-1-19 Rectosigmoid resection: **Gross**= A 1.5 cm rectal mass showing dysplasia, high grade, intraepithelial neoplasia.	
Primary Site	
Histology/Behavior	

Table 2: Histologies Not Reportable for Colon, Rectosigmoid and Rectum

Column 1 lists the **non-reportable** histology term and code for NOS or specific
Column 2 lists the **synonym**(s) for the term
Column 3 lists the **subtype/variant** of the NOS term with the histology code
Column 4 lists the **reason** these histologies are **not reportable**

Specific or NOS Term and Code	Synonyms	Subtype/Variant of NOS with Histology Code	Reason not reportable
Adenoma 8140/0 *Note:* No malignancy in polyps	Adenoma NOS	Tubular adenoma **8211/0** Tubulovillous adenoma **8263/0** Villous adenoma **8261/0**	Non-malignant
Cowden-associated polyp No code *Note:* No malignancy in polyps	Cowden disease Cowden syndrome Multiple hamartoma syndrome		Non-malignant /no code
Dysplasia, high grade 8148/2 *Note:* Colorectal primaries only (C180-C189, C199 and C209)	High-grade dysplasia Intraepithelial neoplasia, high grade		**CURRENTLY NOT REPORTABLE**
Dysplasia, low grade 8148/0* *Note:* Colorectal primaries only (C180-C189, C199 and C209)	Intraepithelial neoplasia, low grade		Non-malignant

Case #4

Surgery: 10-10-19 R Hemicolectomy: Adenoma in Hepatic flexure **FINAL Pathology:** 10-10-19 Tubulovillous adenoma with infiltrating mucinous adenocarcinoma, invasion into submucosa. All 10 pericolic LNs negative. Margins free.	
Primary Site	
Histology/Behavior	

Case #5

Surgery: 10-30-19 Right hemicolectomy: liver palpated WNL. FINAL Pathology: 10-30-19 Right colon, terminal ileum and appendix. DX= Two separate lesions are all mod diff adenoCA; Largest tumor in ascending colon is 3.7cm, infiltrates the muscularis propria and pericolonic fat. Margins negative. 5/14 LNs positive. Second tumor in hepatic flexure is 0.9 cm polyp which invades submucosa. **How many abstracts? _____**	
Primary Site	
Histology/Behavior	

Homework

SEER Solid Tumor Rules on SEER*Edu

- https://educate.fredhutch.org/LandingPage.aspx
- Practical application section
  - Select DX 2018 Solid Tumor Rules
    - Colon and rectum 01-05

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Questions

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