Colon, Rectum, and Appendix

2011 Reporting Requirements and CSv02.03.02 NCCN/ASCO Treatment Guidelines by Stage

FCDS 2011 Educational Webcast Series

September 15, 2011 Steven Peace, CTR

Presentation Outline

- Overview Tumor Characteristics
- Anatomy of Colon/Rectum Layers
- Multiple Primary and Histology Coding Rules Refresher
- Collaborative Stage Data Collection System (CSv02.03.02)
- 2011 FCDS Required C.S. Site Specific Factors
- NCCN/ASCO Treatment Guidelines by Stage
- Documentation

Overview - Tumor Characteristics

Colon/Rectal Cancer – 3rd most common

- 2011 estimates in the United States
 - 101,340 new colon cancer cases
 - 39,870 new rectal cancer cases
 - 49,380 deaths
- 2011 estimates in Florida
 - 10,180 new cases
 - 3,370 deaths

Source: American Cancer Society Cancer Facts and Figures 2011

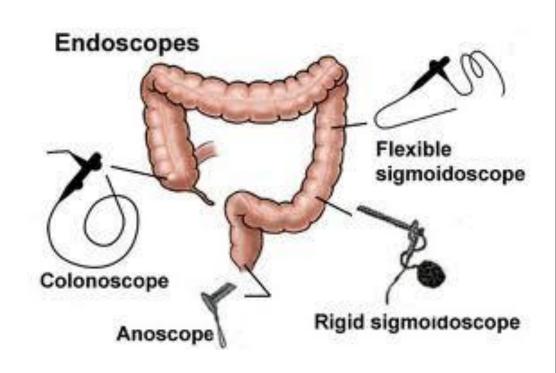
Colorectal Cancer Histology

- Many originate in polyps
- 95% 98% adenocarcinoma
- Most produce mucin (glandular)
- 10% or more are mucinous (>50% mucin production)
- <1% are signet ring cell (>50% signet rings) more aggressive
- 2% 5% other cancers (GIST, NET, etc.)

Screening Advancements

- Rigid Sigmoidoscopy
- Flexible Sigmoidoscopy
- Full Colonoscopy
- Virtual Colonoscopy





Large Intestine Anatomy

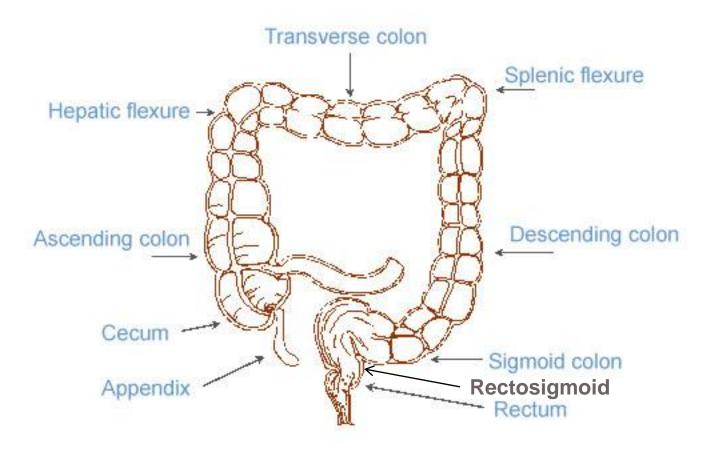
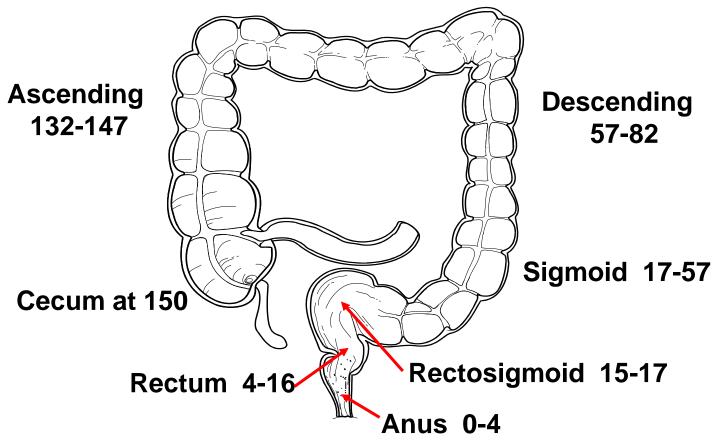


Image source: SEER Training Modules Colorectal Cancer

Colonoscopy Measurements

Transverse 82-132



Distance from anal verge - approximations only.

Source: AJCC Cancer Staging Manual, fifth edition, page 85, 1997.

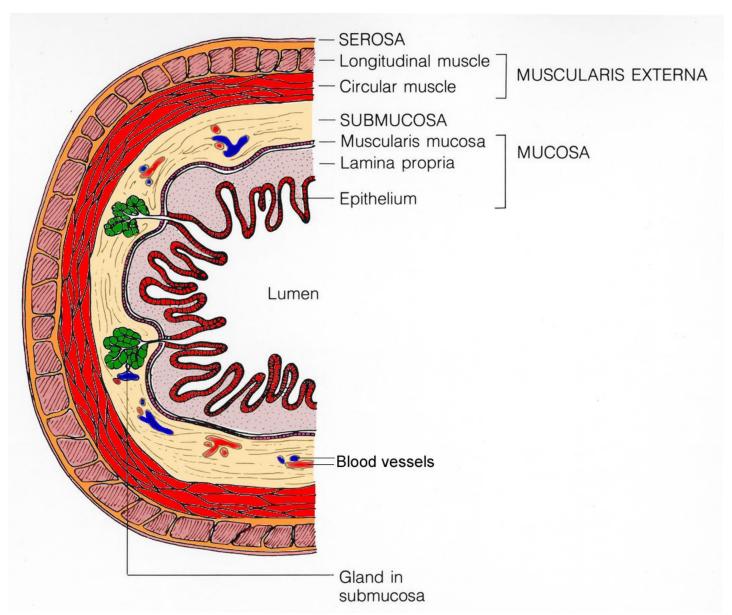
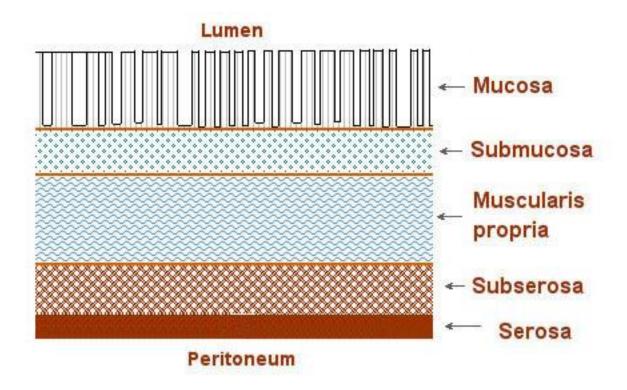
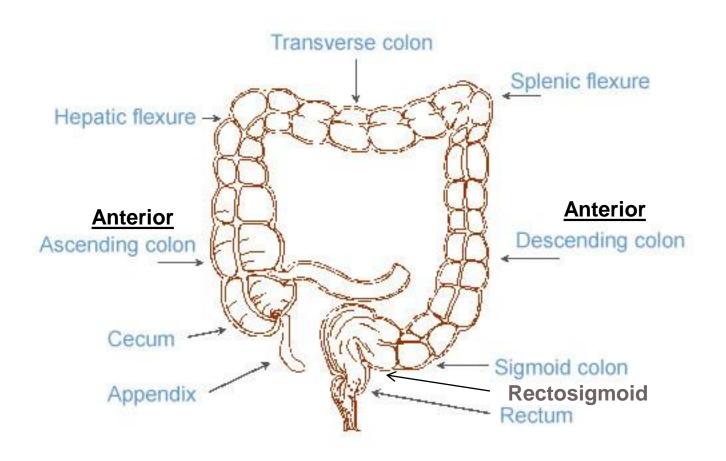


Image source: Emory Cancer Institute

Colorectal Wall Anatomy

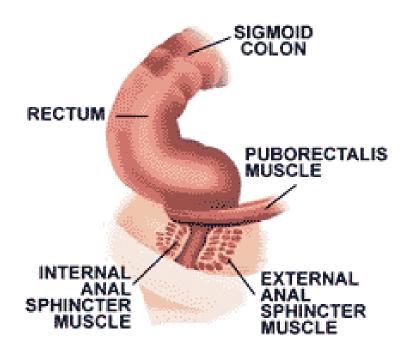


Intraperitoneal Colorectal Subsites



Rectosigmoid/Rectum Anatomy

Anatomy of the Rectum and Anal Canal



Regional Lymph Nodes

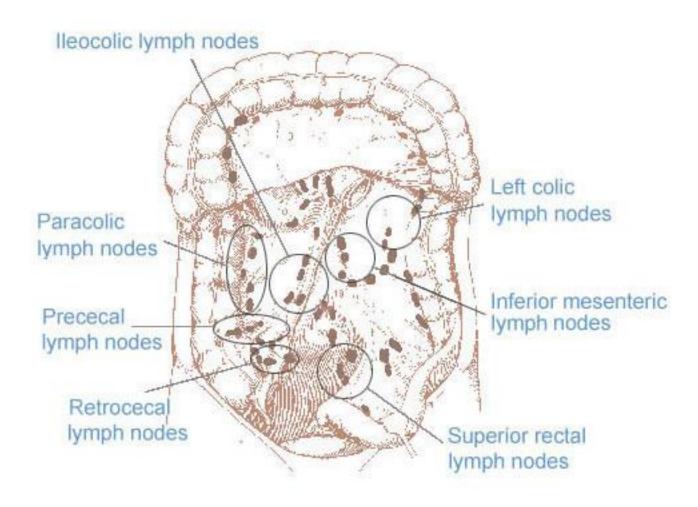


Image source: SEER Training Modules Colorectal Cancer

Metastatic Sites

- Large intestine
 - Liver
 - Lung
 - Seeding of other segments of colon, small intestine, or peritoneum
- Mucinous carcinoma of appendix
 - Peritoneal surfaces

Multiple Primary Rules Histology Coding Rules



Multiple Primary and Histology Coding Rules

January 01, 2007

National Cancer Institute Surveillance Epidemiology and End Results Program Bethesda, MD

Colon Equivalent Terms, Definitions and Illustrations C180-C189

(Excludes lymphoma and leukemia M9590-9989 and Kaposi sarcoma M9140)

Introduction

Note 1: Rectum and rectosigmoid are covered by The Other Sites rules.

Note 2: For the purpose of these rules, the words "exophytic" and "polypoid" are not synonymous with a polyp.

Use these rules only for cases with primary colon cancer.

Ninety-eight percent of colon cancers are adenocarcinoma. Ten to fifteen percent of these cases produce enough mucin to be categorized as mucinous/colloid.* Mixed histologies and specific types other than mucinous/colloid or signet ring cell are rare.

*ACS Clinical Oncology

Equivalent or Equal Terms

Note: For the purpose of these rules, the words "ex ophytic" and "polypoid" are not synonymous with a polyp

- Familial polyposis, familial adenomatous polyposis, (FAP)
- Intramucosal, lateral extension
- · Invasion through colon wall, extension through colon wall, transmural
- Low grade neuroendocrine carcinoma, carcinoid
- Most invasive, most extensive
- Mucin producing, mucin secreting
- Mucinous, colloid
- Polyp, adenoma
- Serosa, visceral peritoneum
- · Tumor, mass, lesion, neoplasm
- Type, subtype, predominantly, with features of, major, or with _____differentiation.

Definitions

Adenocarcinoid (8245/3): A specific histology commonly found in the appendix.

Adenocarcinoma with mixed subtypes (8255): Rarely used for colon primaries (see introduction).

Adenocarcinoma, intestinal type (8144) is a form of stomach cancer. Do not use this code when the tumor arises in the colon

Adenoma: A benign lesion composed of tubular or villous structures showing intraep ithelial neoplasia (See definition of intraep ithelial neoplasia).

Colon Multiple Primary Rules - Flow chart

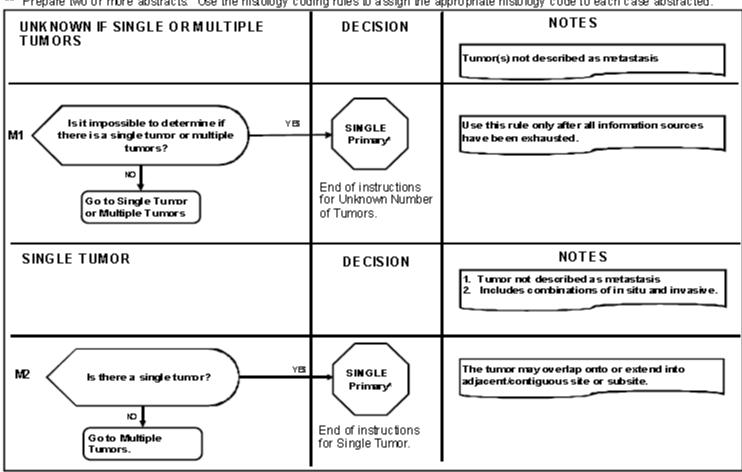
(C180-C189)

(Excludes lymphoma and leukemia M9590-9989 and Kaposis arcoma M9140)

- Prepare one abstract. Use the histology coding rules to assign the appropriate histology code.
- ** Prepare two or more abstracts. Use the histology coding rules to assign the appropriate histology code to each case abstracted.

low chart Key

Fla-Dhecker



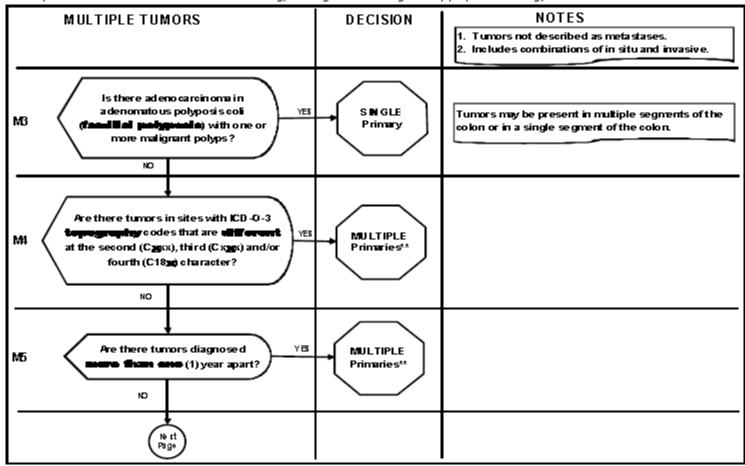
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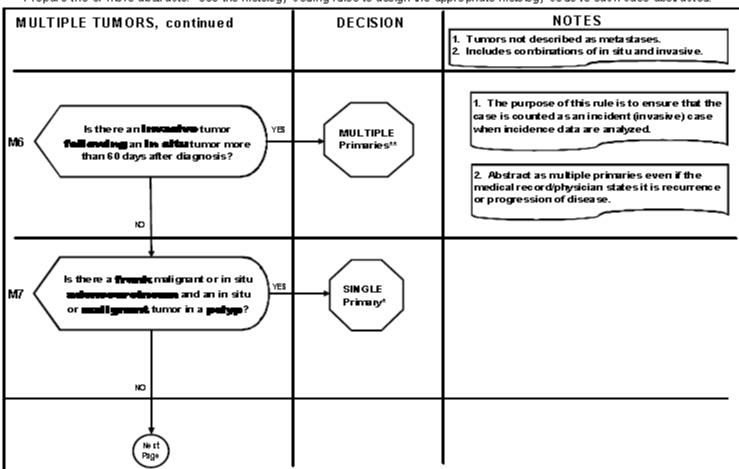
Colon Multiple Primary Rules -Flowchart

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Flowchart Rev



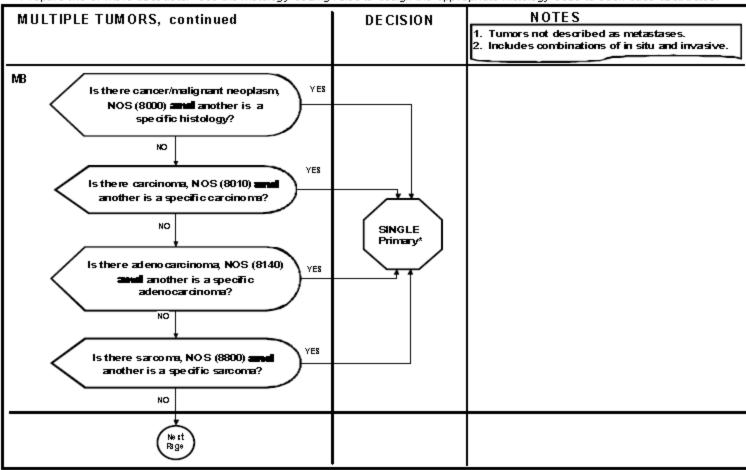
Colon Multiple Primary Rules - Flow chart (C 180-C 189)

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Flowchart Key

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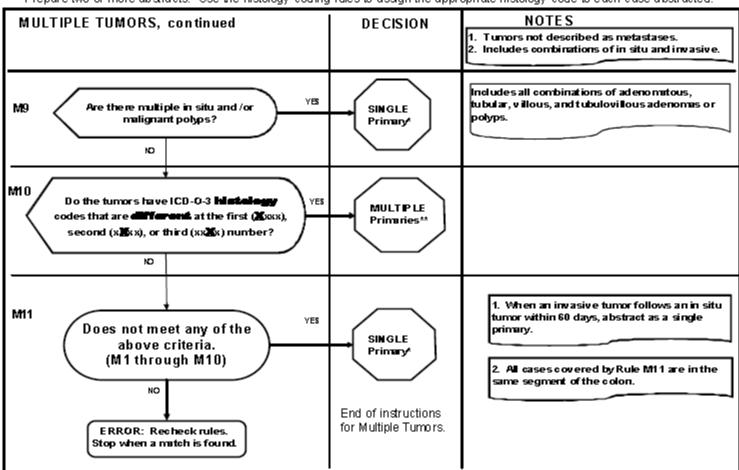


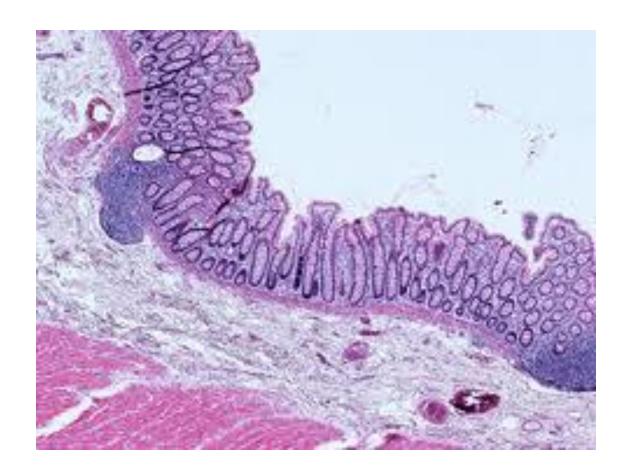
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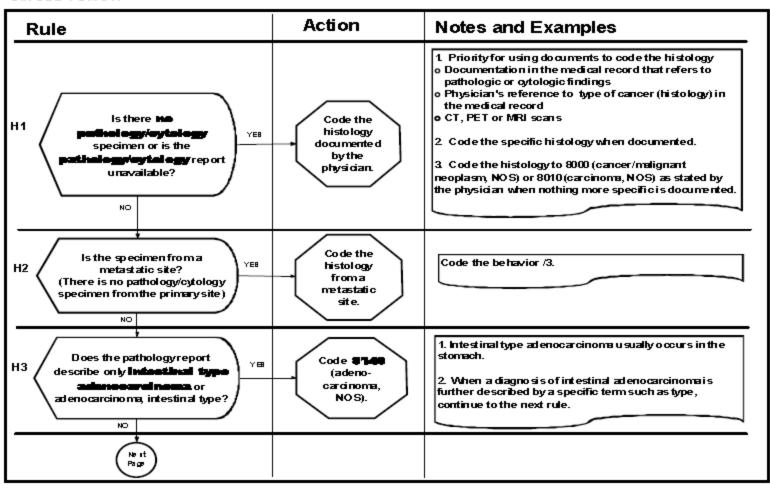




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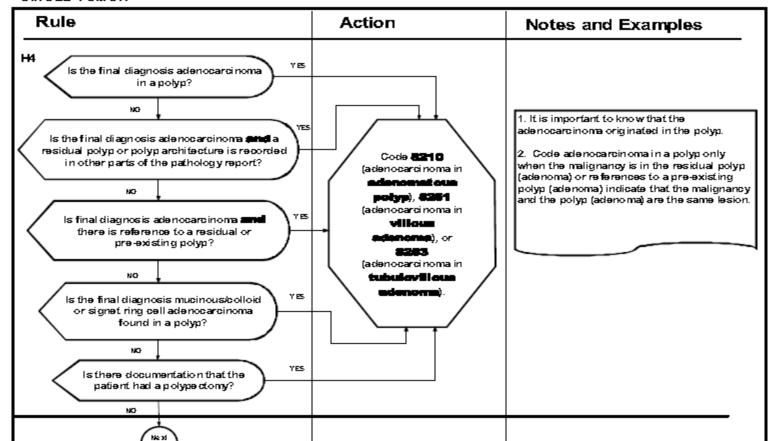




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(C180-C189)

(Excludes lymphoma and leukemia M9590-9989 and Kaposi sarcoma M9140).

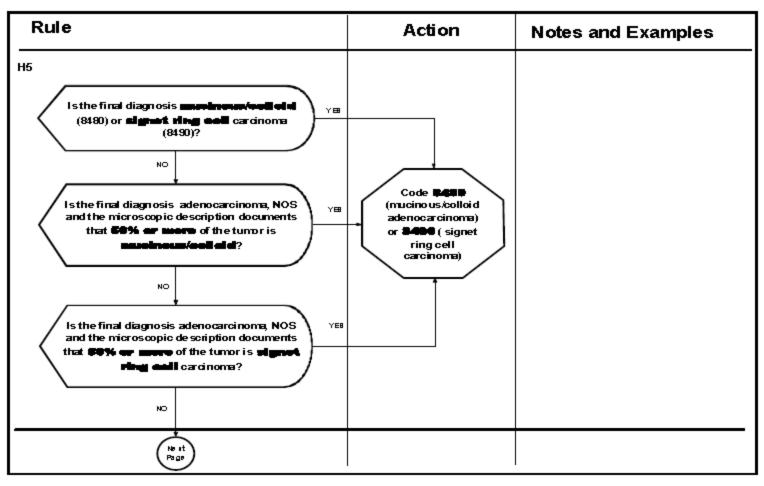




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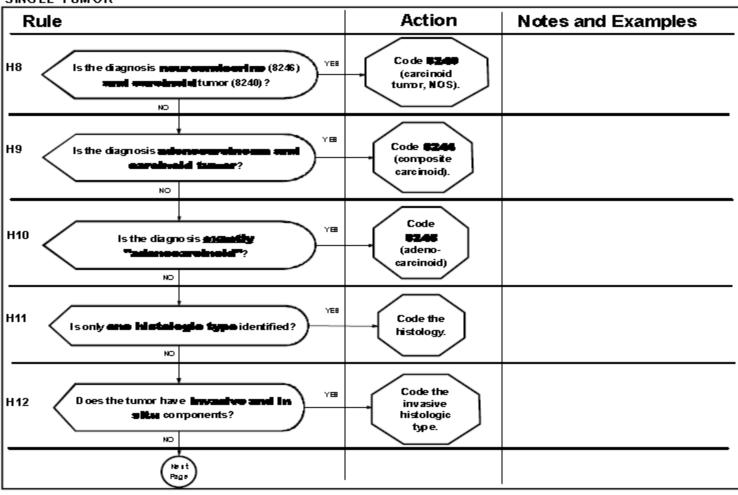




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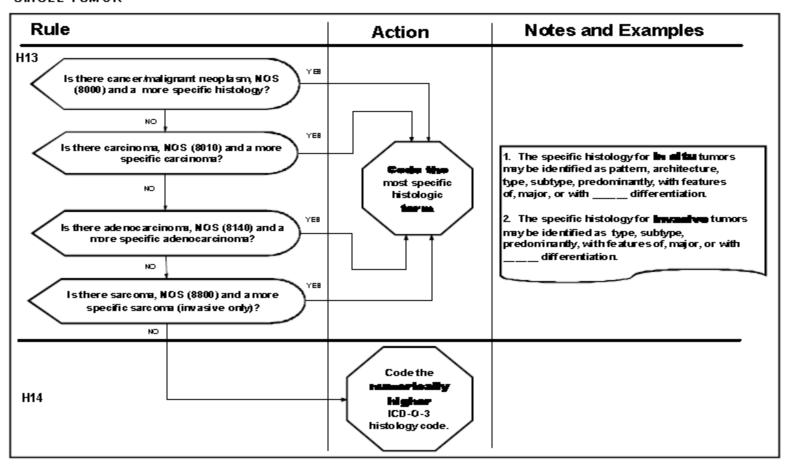




(C180-C189)

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CSv2 Coding Instructions, CSv02.03.02

Colon

C18.0-C18.9 (excluding appendix)

Schema Selection

• http://www.cancerstaging.org/cstage/index.html

• Colon (excludes Appendix, GIST, NET) of Colon

• Click on Site Specific Schema tab on the left

• Select the **Colon** Schema

All Florida Cases are coded in CSv02.03.02

CSv02.03.02, Select Correct Schema



MelanomaOropharynx

MelanomaEpiglottisAnterior

Melanom<u>aNasopharynx</u>

MelanomaHypopharynx

EpiglottisAnterior

Pharyngeaffonsil Pharyngeaffonsil

Nasopharvnx

Hypopharynx

PharynxOther

PancreasBodyTail

MelanomaNasalCavity

PancreasOther |

DigestiveOther

SinusMaxillary

NasalCavity

MiddleEar



MelanomaPharynxOther SinusEthmoid AdnexaUterineOther MelanomaSinusEthmoid GenitalFemaleOther SinusOther 1 4 1 Placenta EsophagusGEJunction <u>MelanomaSinusOther</u> Penis LarynxGlottic <u>MerkelCellPenis</u> MelanomaLarynxGlottic Prostate LarynxSupraglottic MelanomaLarynxSupraglot ic GenitalMaleOther LarynxSubglottic Scrotum MelanomaLarvnxSubglottic MerkelCellScrotum LarynxOther KidneyParenchyma MelanomaLarynxOther KidneyRenalPelvis Trachea Bladder

> HeartMediastinum UrinaryOther Conjunctiva RespiratoryOther MelanomaConjunctiva **Bone** EyeOther Skin Melanomalris SkinEyelid MelanomaCiliaryBody MerkelCellSkin MelanomaChoroid MelanomaSkin MelanomaEyeOther MycosisFungoides LacrimalGland SoftTissue LacrimalSac Peritoneum Orbit Retinoblastoma Retroperitoneum LymphomaOcularAdnexa

> > KaposiSarcoma

IIIDefinedOther

MyelomaPlasmaCellDisorder

Lymphoma HemeRetic

GISTPeritoneum PeritoneumFemaleGen **Breast** CNSOther IntracranialGland Vulva MerkelCellVulva Thyroid Vaqina AdrenalGland Cervix **EndocrineOther**

CorpusCarcinoma CorpusAdenosarcoma CorpusSarcoma MelanomaSinusMaxillary FallopianTube

Version

Check Schema

Check

Colon (excluding Appendix, Gastrointestnal Stromal Tumor, and Neuroendocrine Tumor)

C18.0, C18.2--C18.9

- C18.0 Cecum
- C18.2 Ascending colon
- C18.3 Hepatic flexure of colon
- C18.4 Transverse colon
- C18.5 Splenic flexure of colon
- C18.6 Descending colon
- C18.7 Sigmoid colon
- C18.8 Overlapping lesion of colon
- C18.9 Colon, NOS

CS Tumor Size	CS Site-Specific Factor 7			
CS Extension	Microsatellite Instability (MSI)			
CS Tumor Size/Ext Eval	CS Site-Specific Factor 8			
CS Lymph Nodes	Perineural Invasion			
CS Lymph Nodes Eval	CS Site-Specific Factor 9			
Regional Nodes Positive	KRAS			
Regional Nodes Examined	CS Site-Specific Factor 10			
CS Mets at DX	18q Loss of Heterozygosity (LOH)			
CS Mets Eval	CS Site-Specific Factor 11 = 988			
CS Site-Specific Factor 1	CS Site-Specific Factor 12 = 988			
Carcinoembryonic Antigen (CEA)	CS Site-Specific Factor 13 = 988			
CS Site-Specific Factor 2	CS Site-Specific Factor 14 = 988			
Clinical Assessment of Regional Lymph Nodes	CS Site-Specific Factor 15 = 988			
CS Site-Specific Factor 3	CS Site-Specific Factor 16 = 988			
Carcinoembryonic Antigen (CEA) Lab Value	CS Site-Specific Factor 17 = 988			
CS Site-Specific Factor 4	CS Site-Specific Factor 18 = 988			
Tumor Deposits	CS Site-Specific Factor 19 = 988			
CS Site-Specific Factor 5	CS Site-Specific Factor 20 = 988			
Tumor Regression Grade	CS Site-Specific Factor 21 = 988			
CS Site-Specific Factor 6	CS Site-Specific Factor 22 = 988			
Circumferential Resection Margin (CRM)	CS Site-Specific Factor 23 = 988			
	CS Site-Specific Factor 24 = 988			
	CS Site-Specific Factor 25 = 988			

Histology Inclusion Table AJCC 7th ed.

Code
8000-8152
8154-8231
8243-8245
8247
8248
8250-8576
8940-8950
8980-8981

CS Tumor Size

Code	Description				
000	No mass/tumor found				
001-988	001 - 988 millimeters (mm) (Exact size in mm)				
989	989 mm or larger				
990	Microscopic focus or foci only, no size of focus given				
991	Described as "less than 1 cm"				
992	Described as "less than 2 cm," or "greater than 1 cm," or "between 1 cm and 2 cm"				
993	Described as "less than 3 cm," or "greater than 2 cm," or "between 2 cm and 3 cm"				
994	Described as "less than 4 cm," or "greater than 3 cm," or "between 3 cm and 4 cm"				
995	Described as "less than 5 cm," or "greater than 4 cm," or "between 4 cm and 5 cm"				
998	Familial/multiple polyposis (M-8220/8221)				
999	Unknown; size not stated Size of tumor cannot be assessed Not documented in patient record				

Colon - CS Tumor Size

- − 998 = Familial/multiple polyposis
- -(M-8220/8221)

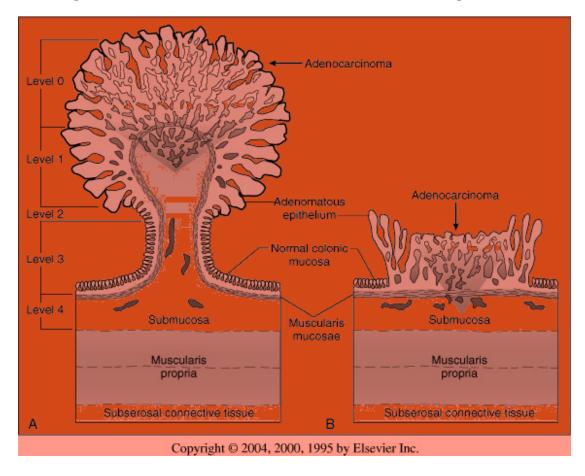


CS Extension

- Note 1: Ignore intraluminal extension to adjacent segment(s) of colon/rectum or to the ileum from the cecum; code depth of invasion or extracolonic spread as indicated.
- Note 2: Codes 600-800 are used for contiguous extension from the site of origin. Discontinuous involvement is coded in CS Mets at DX.
- Note 3: Tumor that is adherent to other organs or structures, macroscopically, is classified of 4b. If tumor is present in adhesion(s) upon microscopic examination, the tumor is classified as pT4b. Use code 565 for macroscopic pathologically confirmed tumor in adhesions. However, if no tumor is present in adhesion is pased upon extent of tumor invasion into or through the wall; use codes 000-160, 200, 40 the microscopically confirmed depth of tumor invasion for these cases. Use codes 600, the adherent tumor.
- Note 4: High grade dysplasia and severe dysplasia are generally not reportable in cancellegistries, but registry does collect these, code 000 should be used.

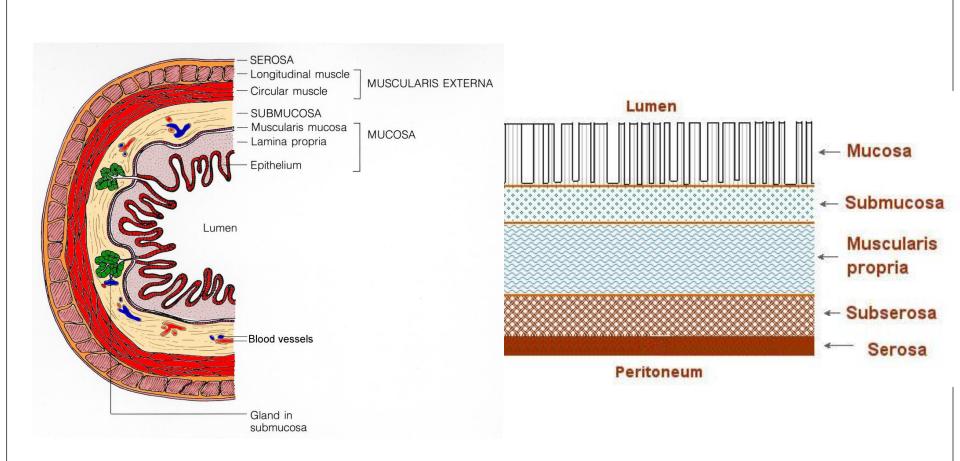
Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
000	In situ, intraepithelial, noninvasive	Tis	Tis	IS	IS
050	(Adeno)carcinoma, noninvasive, in a polyp or adenoma	Tis	Tis	IS	IS
100	Invasive tumor confined to mucosa, NOS, including intramucosal, NOS	Tis	Tis	L	L
110	Invades lamina propria, including lamina propria in the stark or a polyp	Tis	Tis	L	L
120	Confined to and not through the muscularis mucosae, including muscularis mucosae in the stalk of a polyp.	Tis	Tis	L	L
130	Confined to head of polyp, NOS	T1	T1	L	L
140	Confined to stalk of polyp, NOS	T1	T1	L	L
150	Invasive tumor in polyp, NOS	T1	T1	L	L
160	Invades submucosa (superficial invasion), including submucosa in the head or stalk of a polyp	T1	T1	L	L
170	Stated as T1 with no other information on extension	T1	T1	L	L

Types of Colon Polyps



Source: Abeloff et al: Clinical Oncology, third edition, Elsevier Churchill Livingstone, 2004

Colorectal Wall Anatomy



			1	1	
200	Muscularis propria invaded Stated as T2 with no other information on extension	T2	T2	L	L
300	Localized, NOS Confined to colon, NOS	T1	T1	L	L
400	Extension through wall, NOS Invasion through muscularis propria or muscularis, NOS Non-peritonealized pericolic tissues invaded Perimuscular tissue invaded Subserosal tissue/(sub)serosal fat invaded Transmural, NOS Wall, NOS	Т3	Т3	L	L
410	OBSOLETE DATA CONVERTED V0203 See code 470 Stated as T3 with no other information on extension	ERROR	ERROR	ERROR	ERROR
420	OBSOLETE DATA CONVERTED V0203 See code 458 Fat, NOS	ERROR	ERROR	ERROR	ERROR
450	Extension to: All colon sites: Adjacent tissue(s), NOS Connective tissue Mesenteric fat Mesentery Mesocolon Pericolic fat Ascending and descending colon Retroperitoneal fat Transverse colon and flexures Gastrocolic ligament Greater omentum	ТЗ	Т3	RE	RE
458	Fat, NOS	T3	T3	RE	RE
460	OBSOLETE DATA RETAINED AND REVIEWED V0203 See Note 3, codes 565 and 570 Adherent to other organs or structures, but no microscopic tumor	Т3	Т3	RE	RE

470	Stated as T3 with no other information on extension	Т3	Т3	RE	RE
500	Invasion of/through serosa (mesothelium) (visceral peritoneum) Tumor penetrates to surface of visceral peritoneum	T4a	T4	RE	RE
550	500 + (450 + 458)	T4a	T4	RE	RE
560	Stated as T4a with no other information on extension	T4a	T4	RE	RE
565	Adherent to other organs or structures clinically with no microscopic examination Tumor found in adhesion(s) if microscopic examination performed	T4b	T4	RE	RE
570	Adherent to other organs or structures, NOS	T4b	T4	RE	RE
600	All colon sites: Small intestine Cecum: Greater omentum Ascending colon: Greater omentum Liver, right lobe Transverse colon and flexures: Gallbladder/bile ducts Kidney Liver Pancreas Spleen Stomach Descending colon: Greater omentum Pelvic wall Spleen Sigmoid colon: Greater omentum Pelvic wall	T4b	T4	RE	RE
650	OBSOLETE DATA RETAINED AND REVIEWED V0203 See codes 655 and 675 All colon sites: Abdominal wall Retroperitoneum (excluding fat)	T4b	T4	RE	RE

675	Sigmoid colon: Retroperitoneum (excluding fat)	T4b	T4	D	RE
700	Cecum, ascending, descending and sigmoid colon: Fallopian tube Ovary Uterus	T4b	T4	D	D
750	All colon sites unless otherwise stated above: Adrenal (suprarenal) gland Bladder Diaphragm Fistula to skin Gallbladder Other segment(s) of colon via serosa	T4b	T4	D	D
800	Further contiguous extension: Cecum: Kidney Liver Ureter Transverse colon and flexures: Ovary Fallopian tube Uterus Ureter Sigmoid colon: Cul de sac (rectouterine pouch) Ureter	T4b	T4	D	D
850	Stated as T4b with no other information on extension	T4b	T4	RE	RE
900	Stated as T4 [NOS] with no other information on extension	T4NOS	T4	RE	RE
950	No evidence of primary tumor	ТО	ТО	U	U
999	Unknown; extension not stated Primary tumor cannot be assessed Not documented in patient record	ТХ	ТХ	U	U

Colon - CS Extension

 Codes 600-800 are used for contiguous extension from the site of origin. Discontinuous involvement is coded in CS Mets at DX.

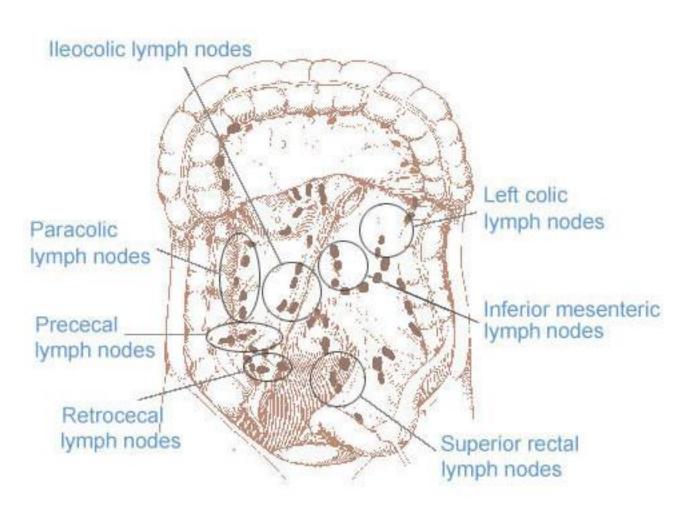
Colon

CS Lymph Nodes

- Note 1: Code only regional nodes and nodes, NOS in this field. Note 2 specifies when to code certain tumor deposits (TD) here. Distant nodes are coded in CS Mets at DX.
- Note 2: One or more malignant satellite peritumoral nodules in the pericolorectal adipose tissue of a primary carcinoma without histologic evidence of residual lymph node in the nodule(s) may represent discontinuous spread, venous invasion with extravascular spread, or a totally replaced lymph node. If the primary tumor is localized and maps to T1 or T2 and this is the only information on lymph nodes, use code 050. The total number of TD must also be coded in CS Site-Specific Factor 4. If there are TD and node involvement, code only the information on node involvement in this field; use a higher code number than 050.
- Note 3: Inferior mesenteric nodes are coded in CS Mets at DX for cecum, ascending colon, transverse colon, and hepatic flexure. Superior mesenteric nodes are coded in CS Mets at DX for all colon sites.
- Note 4: The number of positive regional nodes is required to calculate the correct N category for this schema. Use codes 400-470 when the
 pathology report assigns an N1 or N2 category but does not specify the number of nodes involved, or the record identifies an N1 or N2 category
 but the specific information about number of nodes involved is not available. Use codes 110--300 rather than codes 400-470 when
 information about the number of positive nodes is available, or when nodes are clinically positive but not removed for examination.
- Note 5: Sigmoid nodes for descending colon have been moved from code 200 in CS Version 1 to code 210.

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
000	No regional lymph node involvement and no tumor deposits (TD)	N0	N0	NONE	NONE
050	TD in the subserosa, mesentery, or nonperitonealized pericolic or perirectal tissues WITHOUT regional nodal metastasis Stated as N1c with no other information on regional lymph nodes	N1c	N1	RN	RN
100	OBSOLETE DATA RETAINED AND REVIEWED V0203 Code 100 was defined as "Regional lymph nodes for all colon sites: Colic (NOS), Epicolic (adjacent to bowel wall), Mesocolic (NOS), Paracolic/pericolic, Nodule(s) or foci in pericolic fat/adjacent mesentery/mesocolic fat" in CSv1. Code 100 was defined as "Regional lymph nodes for all colon sites: Colic (NOS), Epicolic (adjacent to bowel wall), Mesocolic (NOS), Paracolic/pericolic" in CSv2:V0201, V0202. All cases should be reviewed and recoded to appropriate codes; see codes 050 and 110. Regional lymph nodes for all colon sites: Colic (NOS) Epicolic (adjacent to bowel wall)	٨	*	RN	RN

Regional Lymph Nodes



210	Regional lymph nodes, for specific colon sites: Cecum: Cecal: Anterior (prececal), Posterior (retrocecal); NOS Ileocolic Right colic Ascending colon: Ileocolic Middle colic Right colic Transverse colon and flexures: Inferior mesenteric for splenic flexure only Left colic for splenic flexure only Middle colic Right colic for hepatic flexure only Descending colon: Inferior mesenteric Left colic Sigmoid colon: Inferior mesenteric Sigmoid colon: Inferior mesenteric Sigmoidal (sigmoid mesenteric) Superior hemorrhoidal Superior rectal	٨	*	RN	RN
220	Regional lymph nodes for descending colon: Sigmoid	٨	*	D	RN
300	Regional lymph nodes for all colon sites: Mesenteric, NOS Regional lymph node(s), NOS	٨	*	RN	RN
400	OBSOLETE DATA CONVERTED V0203 See code 430 Stated as N1 pathologic	ERROR	ERROR	ERROR	ERROR
410	Stated as pathologic N1a with no other pathologic information on regional lymph nodes	N1a	N1	RN	RN
420	Stated as pathologic N1b with no other pathologic information on regional lymph nodes	N1b	N1	RN	RN
430	Stated as pathologic N1 [NOS] with no other pathologic information on regional lymph nodes	N1NOS	N1	RN	RN

450	OBSOLETE DATA CONVERTED V0203 See code 480 Stated as N2 pathologic	ERROR	ERROR	ERROR	ERROR
460	Stated as pathologic N2a with no other pathologic information on regional lymph nodes	N2a	N2	RN	RN
470	Stated as pathologic N2b with no other pathologic information on regional lymph nodes	N2b	N2	RN	RN
480	Stated as Pathologic N2 [NOS] with no other pathologic information on regional lymph nodes	N2NOS	N2	RN	RN
800	Lymph nodes, NOS	N1NOS	N1	RN	RN
999	Unknown; regional nodes not stated Regional lymph node(s) cannot be assessed Not documented in patient record	NX	NX	U	U

^{*} For codes 100-300 and 800 ONLY: when CS Lymph Nodes Eval is 0, 1, 5, or 9, the N category is assigned from the Lymph Nodes Clinical Evaluation 6th Table, using Regional Nodes Positive and CS Site-Specific Factor 2; when CS Regional Nodes Eval is 2, 3, 6, 8, or not coded, the N category is determined from the Lymph Nodes Pathologic Evaluation 6th Table Also Used When CS Reg Nodes Eval is Not Coded using Regional Nodes Positive.

[^] For codes 100-300 and 800 ONLY: when CS Lymph Nodes Eval is 0, 1, 5, or 9, the N category is assigned from the Lymph Nodes Clinical Evaluation 7th Table, using Regional Nodes Positive and CS Site-Specific Factor 2; when CS Regional Nodes Eval is 2, 3, 6, 8, or not coded, the N category is determined from the Lymph Nodes Pathologic Evaluation 7th Table Also Used When CS Reg Nodes Eval is Not Coded using Regional Nodes Positive.

Colon

CS Mets at DX

• Note: For metastasis limited to a single distant lymph node chain, use code 08 or 16. For metastases involving multiple distant lymph node chains, use codes 29 or 31.

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
00	No distant metastasis	MO	MO	NONE	NONE
08	Metastasis limited to a single distant lymph node chain: For cecum, ascending, hepatic flexure and transverse colon: Superior mesentric lymph nodes only	M1a	M1	RN	D
10	OBSOLETE DATA RETAINED V0200 See codes 15 and 25 Distant lymph node(s) other than code 08 For all colon sites: Common iliac Distant lymph node(s), NOS External iliac Para-aortic Retroperitoneal For cecum, appendix, ascending colon, transverse colon, and hepatic flexure; Inferior mesenteric For splenic flexure, descending colon, and sigmoid colon: Superior mesenteric	ERROR	M1	D	D
	See code 16 Metastasis to a single distant lymph node chain other than code 08 For all colon sites:				

16	Common iliac Distant lymph node(s), NOS External iliac Para-aortic Retroperitoneal For cecum, ascending colon, transverse colon, and hepatic flexure: Inferior mesenteric For splenic flexure, descending colon, and sigmoid colon: Superior mesenteric	M1a	M1	D	D
18	Metastasis limited to a single distant lymph node chain, NOS	M1a	M1	RN	D
20	OBSOLETE DATA CONVERTED V0203 See code 26 Metastasis to a single distant organ	ERROR	ERROR	ERROR	ERROR
22	OBSOLETE DATA CONVERTED V0203 See code 27 Stated as M1a with no other information on distant metastases	ERROR	ERROR	ERROR	ERROR
25	OBSOLETE DATA CONVERTED V0203 See code 31 Metastasis to more than one distant lymph node chain other than code 08 For all colon sites: Common iliac Distant lymph node(s), NOS External iliac Para-aortic Retroperitoneal For cecum, ascending colon, transverse colon, and hepatic flexure: Inferior mesenteric Superior mesenteric For splenic flexure, descending colon, and sigmoid colon: Superior mesenteric	ERROR	ERROR	ERROR	ERROR
26	Metastasis limited to a single distant organ except peritoneum	M1a	M1	D	D
27	Stated as M1a with no other information on distant metastasis	M1a	M1	D	D
29	Metastases to multiple distant lymph node chains included in code 08 only	M1b	M1	D	D

CSv2 Coding Instructions, CSv02.03.02

Rectosigmoid & Rectum C19.9-C20.9

Schema Selection

- http://www.cancerstaging.org/cstage/index.html
- Rectum (escludes GIST and NET of rectum)
- Rectosigmoid and Rectum are combined
- Click on Site Specific Schema tab on the left
- Select the **Rectum** Schema
- All Florida Cases are coded in CSv02.03.02



MelanomaSinusEthmoid

MelanomaSinusOther

LarynxSupraglottic

LarynxSubglottic

MelanomaLarynxGlottic

SinusOther

LarynxGlottic

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Site Specific Schema

TNM 7 Schema List (v.02.03)

Natural Order · Alphabetical Order ·

LipUpper MelanomaPharynxOther SinusEthmoid MelanomaLipUpper LipLower MelanomaLipLower LipOther MelanomaLipOther TonqueBase MelanomaTongueBase TongueAnterior MelanomaTongueAnterior GumUpper MelanomaGumUpper GumLower MelanomaGumLower GumOther MelanomaGumOther FloorMouth MelanomaFloorMouth PalateHard MelanomaPalateHard PalateSoft MelanomaPalateSoft MouthOther MelanomaMouthOther BuccalMucosa MelanomaBuccalMucosa ParotidGland SubmandibularGland SalivaryGlandOther Oropharynx MelanomaOropharynx **EpiglottisAnterior** MelanomaEpiglottisAnterior DigestiveOther Nasopharynx

MelanomaNasopharynx

MelanomaHypopharynx PharvnxOther

PharyngealTonsil

Hypopharynx

Esophagus GISTEsophagus EsophagusGEJunction Stomach GISTStomach NETStomach SmallIntestine GISTSmallIntestine NETSmallIntestine Appendix CarcinoidAppendix GISTAppendix Colon GISTColon NETColon Rectum **GISTRectum NETRectum** Anus Liver BileDuctsIntraHepat Gallbladder BileDuctsPerihilar CysticDuct BileDuctsDistal AmpullaVater **NETAmpulla** BiliaryOther PancreasHead PancreasBodyTail PancreasOther NasalCavity MelanomaNasalCavity

MiddleEar

SinusMaxillary

MelanomaLarynxSubglottic LarvnxOther MelanomaLarvnxOther Trachea Lung **HeartMediastinum** Pleura Bone Skin SkinEyelid MerkelCellSkin MelanomaSkin MycosisFungoides SoftTissue Peritoneum Retroperitoneum GISTPeritoneum PeritoneumFemaleGen Breast Vulva MerkelCellVulva Vagina Cervix CorpusCarcinoma CorpusAdenosarcoma CorpusSarcoma Ovary MelanomaSinusMaxillary FallopianTube

AdnexaUterineOther GenitalFemaleOther Placenta <u>Penis</u> MerkelCellPenis Prostate Testis MelanomaLarynxSupraglottic GenitalMaleOther Scrotum <u>MerkelCellScrotum</u> KidneyParenchyma KidneyRenalPelvis Bladder Urethra <u>UrinaryOther</u> Conjunctiva EyeOther

Melanomalris MelanomaCiliaryBody MelanomaChoroid MelanomaEyeOther LacrimalGland LacrimalSac Orbit Retinoblastoma LymphomaOcularAdnexa Brain CNSOther IntracranialGland Thyroid AdrenalGland EndocrineOther KaposiSarcoma Lymphoma HemeRetic MyelomaPlasmaCellDisorder IIIDefinedOther

Check Version

Check Schema

Rectosigmoid, Rectum (excluding Gastrointestinal Stromal Tumor and Neuroendocrine Tumor)

C19.9, C20.9

- M-8000-8152,8154-8231,8243-8245,8247-8248,8250-8576,8940-8950,8980-8981
- C19.9 Rectosigmoid junction
- C20.9 Rectum, NOS

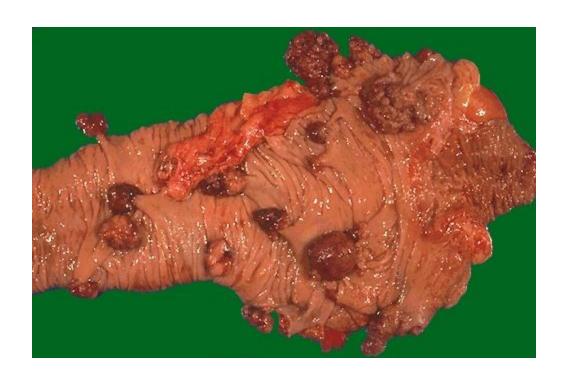
CS Tumor Size	CS Site-Specific Factor 7
CS Extension	Microsatellite Instability (MSI)
CS Tumor Size/Ext Eval	CS Site-Specific Factor 8
CS Lymph Nodes	Perineural Invasion
CS Lymph Nodes Eval	CS Site-Specific Factor 9
Regional Nodes Positive	KRAS
Regional Nodes Examined	CS Site-Specific Factor 10
CS Mets at DX	18q Loss of Heterozygosity (LOH)
CS Mets Eval	CS Site-Specific Factor 11 = 988
CS Site-Specific Factor 1	CS Site-Specific Factor 12 = 988
Carcinoembryonic Antigen (CEA)	CS Site-Specific Factor 13 = 988
CS Site-Specific Factor 2	CS Site-Specific Factor 14 = 988
Clinical Assessment of Regional Lymph Nodes	CS Site-Specific Factor 15 = 988
CS Site-Specific Factor 3	CS Site-Specific Factor 16 = 988
Carcinoembryonic Antigen (CEA) Lab Value	CS Site-Specific Factor 17 = 988
CS Site-Specific Factor 4	CS Site-Specific Factor 18 = 988
Tumor Deposits	CS Site-Specific Factor 19 = 988
CS Site-Specific Factor 5	CS Site-Specific Factor 20 = 988
Tumor Regression Grade	CS Site-Specific Factor 21 = 988
CS Site-Specific Factor 6	CS Site-Specific Factor 22 = 988
Circumferential Resection Margin (CRM)	CS Site-Specific Factor 23 = 988
	CS Site-Specific Factor 24 = 988
	CS Site-Specific Factor 25 = 988

CS Tumor Size

Code	Description
000	No mass/tumor found
001-988	001 - 988 millimeters (mm) (Exact size in mm)
989	989 mm or larger
990	Microscopic focus or foci only; no size given
991	Described as "less than 1 cm"
992	Described as "less than 2 cm," or "greater than 1 cm," or "between 1 cm and 2 cm"
993	Described as "less than 3 cm," or "greater than 2 cm," or "between 2 cm and 3 cm"
994	Described as "less than 4 cm," or "greater than 3 cm," or "between 3 cm and 4 cm"
995	Described as "less than 5 cm," or "greater than 4 cm," or "between 4 cm and 5 cm"
998	Familial/multiple polyposis (M-8220/8221)
999	Unknown; size not stated Not documented in patient record

Rectum - CS Tumor Size

- -998 = Familial/multiple polyposis
- -(M-8220/8221)



CS Extension

- Note 1: For rectosigmoid, ignore intraluminal extension to adjacent segment(s) of colon and rectum; code depth of invasion or extrarectosigmoidal spread as indicated.
- Note 2: Codes 600 750 are used for contiguous extension from the site of origin. Discontinuous involvement is coded in CS Mets at DX.
- Note 3: Tumor that is adherent to other organs or structures, macroscopically, is classified 4b; If tumor is esent in adhesion(s) upon thologic confirmation, and for microscopic examination, the tumor is classified as pT4b. Use code 565 for macroscopid hesions if no pathologically confirmed tumor in adhesions. However, if no tumor is present in adhesion(oon microsc c examination, the classification is based upon extent of tumor invasion into or through the wall: use codes 000 - 163, 200, 21 00, 415, 45 58, 500, and 555 as appropriate to describe the microscopically confirmed depth of tumor invasion for these cases. Use co de invasion of underlying 610-800 to structures from the adherent tumor.
- Note 4: High grade dysplasia and severe dysplasia are generally not reportable in cancer distries but, if egistry does collect these, code 000 should be used.

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
000	In situ, intraepithelial, noninvasive	Tis	Tis	IS	IS
050	(Adeno)carcinoma, noninvasive, in a polyp or adenoma	Tis	Tis	IS	IS
100	Invasive tumor confined to mucosa, NOS including intram	Tis	Tis	L	L
110	Invades lamina propria, including lamina propria in the stames a ponje	Tis	Tis	L	L
120	Confined to and not through the muscularis mucosae, including muscularis mucosae in the stalk of a polyp.	Tis	Tis	L	L
130	Confined to head of polyp, NOS	T1	T1	L	L
140	Confined to stalk of polyp, NOS	T1	T1	L	L
150	Invasive tumor in polyp, NOS	T1	T1	L	L
160	Submucosa (superficial invasion), including submucosa in the head or stalk of a polyp	T1	T1	L	L
165	For rectum: Tumor invading submucosa with intraluminal extension to colon	T1	T1	L	L

140	Confined to stalk of polyp, NOS	T1	T1	L	L
150	Invasive tumor in polyp, NOS	T1	T1	L	L
160	Submucosa (superficial invasion), including submucosa in the head or stalk of a polyp	T1	T1	L	L
165	For rectum: Tumor invading submucosa with intraluminal extension to colon and/or anal canal/anus	T1	T1	L	L
170	Stated as T1 with no other information on extension	T1	T1	L	L
200	Muscularis propria invaded	T2	T2	L	L
210	For rectum: Tumor invading muscularis propria with intraluminal extension to colon and/or anal canal/anus	T2	T2	RE	L
250	Stated as T2 with no other information on extension	T2	T2	L	L
300	Confined to rectosigmoid junction, NOS Confined to rectum, NOS Localized, NOS	T1	T1	L	L
400	Extension through wall, NOS Invasion through muscularis propria or muscularis, NOS Non-peritonealized perirectal tissues invaded Perimuscular tissue invaded Subserosal tissue/(sub)serosal fat invaded Transmural, NOS	Т3	Т3	L	L
410	OBSOLETE DATA CONVERTED V0203 See code 470 Stated as T3 with no other information on extension	ERROR	ERROR	ERROR	ERROR
415	For rectum: Tumor invading through muscularis propria with intraluminal extension to colon and/or anal canal/anus	Т3	Т3	RE	L
420	OBSOLETE DATA CONVERTED V0203 See code 458	ERROR	ERROR	ERROR	ERROR

450	See codes 165, 210, 415, 455, and 610 Adjacent (connective) tissue: For all sites: Perirectal fat For rectosigmoid: Mesentery (including mesenteric fat, mesocolon) Pericolic fat For rectum: Extension to anus Rectovaginal septum	ТЗ	ТЗ	RE	RE
455	Adjacent (connective) tissue: For all sites: Perirectal fat For rectosigmoid: Mesentery (including mesenteric fat, mesocolon) Pericolic fat For rectum: Rectovaginal septum	ТЗ	ТЗ	RE	RE
458	Fat, NOS	Т3	T3	RE	RE
460	OBSOLETE DATA RETAINED AND REVIEWED V0203 See Note 3, codes 565, 570 Adherent to other organs or structures but no tumor found in adhesion(s)	Т3	Т3	RE	RE
470	Stated as T3 with no other information on extension	Т3	Т3	RE	RE
490	OBSOLETE DATA CONVERTED V0203 See code 900 Stated as T4[NOS] with no other information on extension	ERROR	ERROR	ERROR	ERROR
500	Invasion of/through serosa (mesothelium) (visceral peritoneum) Tumor penetrates visceral peritoneum	T4a	T4	RE	RE
550	OBSOLETE DATA RETAINED AND REVIEWED V0203 See codes 555, 610 (500) with [(420) or (450)]	T4a	T4	RE	RE

555	500 + (165, 210, 415, or 458)	T4a	T4	RE	RE
560	Stated as T4a with no other information on extension	T4a	T4	RE	RE
565	Adherent to other organs or structures clinically with no microscopic examination Tumor found in adhesion(s) if microscopic examination performed	T4b	T4	RE	RE
570	Adherent to other organs or structures, NOS	T4b	T4	RE	RE
600	OBSOLETE DATA CONVERTED V0203 See code 610 Rectosigmoid: Cul de sac (rectouterine pouch) Pelvic wall Small intestine Rectum: Bladder for males only Cul de sac (rectouterine pouch) Ductus deferens Pelvic wall Prostate Rectovesical fascia for male only Seminal vesicle(s) Skeletal muscle of pelvic floor Vagina	ERROR	ERROR	ERROR	ERROR
610	For rectosigmoid: Cul de sac (rectouterine pouch) Pelvic wall/pelvic plexuses Small intestine For rectum: Anal canal/anus extraluminally Bladder for males only Cul de sac (rectouterine pouch) Ductus deferens Pelvic wall Prostate Rectovesical fascia for males only Seminal vesicle(s) Skeletal muscle of pelvic floor Vagina	T4b	T4	RE	RE
	For all sites:				

Rectum - CS Extension

 Codes 600-800 are used for contiguous extension from the site of origin. Discontinuous involvement is coded in CS Mets at DX.

CS Lymph Nodes

- Note 1: Code only regional nodes and nodes, NOS, in this field. Note 2 specifies when to code tumor deposits (TD) here. Distant nodes are coded in CS Mets at DX.
- Note 2: One or more malignant satellite peritumoral nodules in the pericolorectal adipose tissue of a primary carcinoma without histologic
 evidence of residual lymph node in the nodule(s) may represent discontinuous spread, venous invasion with extravascular spread, or a totally
 replaced lymph node. If the primary tumor is localized and maps to T1 or T2 and this is the only information on lymph nodes, use code 050. The
 total number of TD must always be coded in CS Site-Specific Factor 4. If there are TD and node involvement, code only the information on
 node involvement in this field; use a higher code number than 050.
- Note 3: Rectal nodes, NOS are coded 100. Middle or superior rectal nodes are coded 200 for both rectosigmoidal and rectal primaries.
 Inferior rectal nodes are coded 200 for rectal primaries.
- Note 4: . Middle or superior hemorrhoidal nodes are coded 200 for both rectosigmoidal and rectal primaries. Inferior hemorrhoidal nodes are coded 200 for rectal primaries. Inferior hemorrhoidal nodes are coded in CS Mets at DX for rectosigmoidal primaries.
- Note 5: Mesenteric nodes, NOS are coded 300. Inferior mesenteric or sigmoid mesenteric nodes are coded 200. Superior mesenteric nodes are coded in CS Mets at DX.
- Note 6: CS does not collect information on otherwise negative lymph nodes containing isolated tumor cells (ITCs) for this schema. CS does
 not derive ITC status for this schema. Count otherwise negative regional nodes containing ITCs as negative nodes.
- Note 7: The number of positive regional nodes is required to calculate the correct N category for this schema. Use codes 400-470 when the
 pathology report assigns an N1 or N2 category but does not specify the number of nodes involved, or the record identifies an N1 or N2 category
 but the specific information about number of nodes involved is not available. Use codes 100-300 rather than codes 400-470 when information
 about the number of positive nodes is available, or when nodes are clinically positive but not removed for examination.

Code	Description	TNM 7 Mapping	TNM 6 Mapping	SS77 Map	SS2000 Map
000	No regional lymph node involvement and no tumor deposits (TD)	N0	N0	NONE	NONE
050	TD in the subserosa, mesentery, or nonperitonealized pericolic or perirectal tissues WITHOUT regional nodal metastasis Stated as N1c with information that regional lymph nodes are not involved	N1c	N1	RE	RE
100	OBSOLETE DATA RETAINED AND REVIEWED V0203 See codes 050, 110 Regional lymph nodes: Rectosigmoid: Paracolic/pericolic Perirectal Rectal	٨	*	RN	RN

100	Regional lymph nodes: Rectosigmoid: Paracolic/pericolic Perirectal Rectal Nodule(s) or foci in pericolic fat/adjacent mesentery/mesocolic fat Rectum: Perirectal Rectal, NOS Nodule(s) or foci in perirectal fat	۸	*	RN	RN
110	Regional lymph nodes: All sites: Perirectal Rectal, NOS Rectosigmoid: Paracolic/pericolic	٨	*	RN	RN
200	Regional lymph nodes for rectosigmoid and rectum: Hemorrhoidal, middle Hemorrhoidal, superior Inferior mesenteric Rectal, middle Rectal, superior Sigmoidal (sigmoid mesenteric) Regional lymph nodes for rectosigmoid: Colic, NOS Left colic Regional lymph nodes for rectum: Hemorrhoidal, inferior Internal iliac (hypogastric), NOS Obturator Rectal, inferior Sacral, NOS Lateral (laterosacral) Middle (promontorial) (Gerota's node) Presacral Sacral promontory	٨	*	RN	RN
300	Mesenteric, NOS Regional lymph node(s), NOS	٨	*	RN	RN
400	OBSOLETE DATA CONVERTED V0203 See code 430	ERROR	ERROR	ERROR	ERROR

CS Mets at DX

• Note: For metastasis limited to a single distant lymph node chain, use code 08 or 16. For metastases involving multiple distant lymph node chains, use codes 29 or 31.

Code	Description	TNM 7 Map	TNM 6 Map	SS77 Map	SS2000 Map
00	No distant metastasis	MO	MO	NONE	NONE
05	OBSOLETE DATA CONVERTED V0203 See code 18 Metastasis to a single distant lymph node chain, NOS	ERROR	ERROR	ERROR	ERROR
08	Metastasis limited to a single distant lymph node chain: For rectosigmoid: Internal iliac (hypogastric), NOS Obturator	M1a	M1	RN	D
10	OBSOLETE DATA RETAINED V0200 See codes 15 and 20 Distant lymph node(s), NOS	ERROR	M1	D	D
11	OBSOLETE DATA RETAINED V0200 See codes 15 and 20 Rectosigmoid: Internal iliac (hypogastric) Obturator	ERROR	M1	RN	D
12	OBSOLETE DATA RETAINED V0200 See codes 15 and 20 Other distant lymph node(s), including external iliac or common iliac	ERROR	M1	D	D
	OBSOLETE DATA CONVERTED V0203				

20	OBSOLETE DATA CONVERTED V0203 See code 16 Metastasis to other single distant lymph node chains, including external iliac or common iliac	ERROR	ERROR	ERROR	ERROR
25	OBSOLETE DATA CONVERTED V0203 See code 26 Metastasis to a single distant organ	ERROR	ERROR	ERROR	ERROR
26	Metastasis limited to a single distant organ except peritoneum	M1a	M1	D	D
27	Stated as M1a with no other information on distant metastasis	M1a	M1	RN	D
29	Mestatases to multiple distant lymph node chains included in code 08 only	M1b	M1	RN	D
30	OBSOLETE DATA CONVERTED V0203 See code 31 Metastasis to more than one distant lymph node chain	ERROR	ERROR	ERROR	ERROR
31	Metastasis to multiple distant lymph node chains listed in code 16, with or without distant lymph node chains listed in code 08	M1b	M1	D	D
33	Metastases to multiple distant lymph node chains, NOS	M1b	M1	D	RN
35	OBSOLETE DATA REVIEWED V0203 See codes 36, 48 Distant metastases to more than one distant organ Metastases to the peritoneum Carcinomatosis Stated as M1b, NOS	M1b	M1	D	D
36	Metastasis to more than one distant organ except distant lymph node(s) Metastasis to peritoneum Carcinomatosis	M1b	M1	D	D

Colon and Rectum Site-Specific Factors

FCDS-Required ONLY SSFs for this Presentation

Schema Number	Schema Name	FCDS Required	CoC Additional Required
50	Appendix	2, 7, 10, 11	1, 3
53	Colon	2, 7, 9, 10	1, 3, 4, 6, 8
56	Rectum	2, 5, 7, 9, 10	1, 3, 4, 6, 8

CS Site-Specific Factor 2 Clinical Assessment of Regional Lymph Nodes

 Note: In the rare instance that the number of clinically positive nodes is stated but a clinical N category is not stated, code 1-3 nodes as 100 (N1), and 4 or more nodes as 200 (N2).

Code	Description
000	Nodes not clinically evident
100	Clinically N1
200	Clinically N2
400	Clinically positive regional nodes, NOS
888	OBSOLETE DATA CONVERTED V0200 See code 988: Not applicable for this site
988	Not applicable: Information not collected for this case (May include cases converted from code 888 used in CSv1 for "Not applicable" or when the item was not collected. If this item is required to derive T, N, M, or any stage, use of code 988 may result in an error.)
999	Unknown if nodes are clinically evident

FCDS Required = YES CoC Required = Yes

CS Site-Specific Factor 5 Tumor Regression Grade

- Note 1: Record the pathologic response to preoperative adjuvant treatment as documented in the pathology report. The response may be
 called "treatment effect" and will often be stated in terms of a Tumor Regression Grade of 0 to 3. The response may also be characterized in
 descriptive terms. Consult the pathologist if a different grading system is used.
- Note 2: Tumor regression grade or treatment effect should only be assessed on the primary tumor.
- Note 3: If a response is stated to be present or found but is not described further, use code 990.

Code	Description
000	Tumor Regression Grade 0 Complete response: No viable cancer cells No residual tumor
010	Tumor Regression Grade 1 Moderate response: Single cells or small groups of cancer cells
020	Tumor Regression Grade 2 Minimal response: Residual cancer outgrown by fibrosis
030	Tumor Regression Grade 3 Poor response: Minimal or no tumor kill; extensive residual cancer
888	OBSOLETE DATA CONVERTED V0200 See code 988 Not applicable for this site.
988	Not applicable: Information not collected for this case (May include cases converted from code 888 used in CSv1 for "Not applicable" or when the item was not collected. If this item is required to derive T, N, M, or any stage, use of code 988 may result in an error.)
990	Response present, but degree of response not further described
998	No preoperative treatment or no resection of primary site after preoperative treatment
999	Unknown or no information Not documented in patient record

FCDS Required = YES - RECTUM ONLY CoC Required = No

CS Site-Specific Factor 7 Microsatellite Instability

Note: The Microsatellite Instability (MSI) test is a genetic test performed ontumor tissue to look for differences in length of
certain non-functioning sections of DNA. The differences are caused by problems with the genes that normally repair DNA.
MSI testing is less expensive and faster than testing for the defects in the functional genes. A high-positive MSI result may
indicate that the gene repair problem is related to the development of the cancer, and that the patient may have HNPCC
(Hereditary NonPolyposis Colorectal Cancer, also known as Lynch syndrome.) A low-positive or stable MSI result (stable
meaning that there are no differences in the lengths) means it is unlikely that the cancer is genetic.

Code	Description
020	MSI Stable; No microsatellite instability
040	MSI unstable low; Positive, low
050	MSI unstable high; Positive, high
060	MSI unstable, NOS; Positive, NOS
988	Not applicable: Information not collected for this case
997	Test ordered, results not in chart
998	Test not done (test was not ordered and was not performed)
999	Unknown or no information Not documented in patient record

FCDS Required = YES - NEW CoC Required = NO

CS Site-Specific Factor 9 KRAS

Note: KRAS is a gene which belongs to a class of genes known as oncogenes. When mutated, oncogenes have the
potential to cause normal cells to become cancerous. Studies suggest that KRAS gene mutations are often present in
colorectal cancer.

Code	Description
010	Abnormal (mutated) Positive for mutations
020	Normal (wild type) Negative for mutations
988	Not applicable: Information not collected for this case
997	Test ordered, results not in chart
998	Test not done (test was not ordered and was not performed)
999	Unknown Not documented in patient record

FCDS Required = YES - NEW COC Required = YES

CS Site-Specific Factor 10 18q Loss of Heterozygosity (LOH)

- Note 1: This is a special molecular diagnostic test performed on tumor tissue to identify loss of genetic material normally
 found on the long arm of one of the patient's two copies of chromosome 18. A normal cell will contain two complete copies
 of each chromosome, one from each parent, and this normal state is termed heterozygous. Loss of heterozygosity (LOH) is
 an abnormal state reflecting damage to the chromosome.
- · Note 2: Other terms for loss of heterozygosity include gene deletion and allelic loss.

Code	Description
010	Test positive for loss of heterozygosity
020	Test negative for loss of heterozygosity
988	Not applicable: Information not collected for this case
997	Test ordered, results not in chart
998	Test not done (test was not ordered and was not performed)
999	Unknown or no information Not documented in patient record

FCDS Required = YES - NEW COC Required = NO

SSF10 18q Loss of Heterozygosity

Code	Description
010	Test positive for loss of heterozygosity
020	Test negative for loss of heterozygosity
988	Not applicable
997	Test ordered, results not in chart
998	Test not done (test not ordered & not performed)
999	Unknown or no information Not documented in patient record

Treatment



Treatment	Non-Invasive Polyp Pedunc		KRAS Wild Type	T1, N0	T2, N0	T3, N0	T4, N0	N1-2-any T	Unresectable	M1-any T,N	Advanced Disease
NeoAdjv Chemo							х		х		
NeoAdjv XRT							х		х		
NeoAdjv Other											
Polypectomy	Х	Х									
Resection w/nodes				X	х	Х	х	х			
Resection liver/lung mets									х	х	Х
KRAS Test						х	х	х	х	х	X
MSI Test						х	х	х	х	х	Х
LOH Test						х	х	х	x	х	Х
FOLFOX6 Chemo						х	х	х	х	Х	Х
FOLFOX6 Variant											
FLOX Chemo								х	х	Х	Х
FLOX Variant											
CapeOX Chemo								х	X	Х	Х
CapeOX Variant											
Irinotecan (not 1st course)											
Capecitabine (KRAS Wild)			х			consider	consider	consider	consider	consider	consider
Panitumumab (KRAS Wild)			x			consider	consider	consider	consider	consider	consider
Bevacizumab						Consider	consider	consider	consider	consider	consider
5FU+Leucovorin						х	х	х			
BRM 1											
BRM 2											
XRT Beam 1							consider		consider	consider	consider
XRT Beam 2											
XRT Other							consider		consider	consider	consider
Other											
CLINICAL TRIAL REGIMEN							consider		consider	consider	consider

Non-Invasive Tumors

- Polypectomy No lymph node assessment
- Depending upon type of polyp may require further resection
- May not even recommend further resection if pedunculated
- No KRASTest
- No MSITest
- No LOH Test
- No Chemo

T1 or T2 (minimally invasive)

- Resection with nodes (negative nodes presumed here)
- Full TNM Staging assess penetration through wall
- No KRASTest
- No MSI Test
- No LOH Test
- No Chemo

T3 or T4

- Penetration partially or fully through colon wall
 - T4 lesion may recommend neoadjuvant chemo/XRT
- High likelihood of positive nodes
- Adjuvant chemo recommended
 - FOLFOX
 - 5FU Leucovorin
- KRAS Test possible
- MSI Test possible
- LOH Test possible

Folfox and 5FU/Leucovorin

	Regimen	Agent Name	NSC #	Std Dose	Std Unit	Delivery	Schedule
						Method	
1	olfox	Oxaliplatin	266046	85	mg/m²	IV	Day 1
		Leucovorin	003590	400	mg/m²	IV	Day 1
		5-FU	019893	400	mg/m²	Bolus	Day 1
				1200	mg/m²/day	IV	Day 2, 3 (continuous infusion)

Roswell-Park	Leucovorin	003590	500	mg/m ²	IV	over 2 hours, days 1,8, 15, 22, 29, and 36
(Bolus or infusional 5- FU/leucovorin)				mg/m²	Bolus	1 hour after start of leucovorin days 1, 8, 15, 22, 29
O/icucovoriii,	5-FU	019893	500			and 36
	Leucovorin	003590	400	mg/m²	IV	over 2 hours on day 1 followed by 5-FU
5-FU/LV (LV5FU2)	5-FU	019893	400	mg/m²	Bolus	
				mg/m²/	Bolus	400mg/m ² and then 1200 mg/m ² /day x 2 days (total
			1200	day		2400mg/m ² over 46-48 hours) continuous infusion
	Leucovorin	003590	20	mg/m²	IV	over 2 hours on day 1 followed by 5-FU
					IV	
	5-FU	0198930	500	mg/m²		bolus injection 1h after the start of leucovorin
Weekly						
					IV	
	5-FU	0198930	2600	mg/m²		24 hour infusion plus leucovorin
	Leucovorin	003590	500	mg/m²	IV	

KRAS Wild Regimens and Other Chemo

- Irinotecan (not FDA approved for 1st line therapy)
- Capecitabine (KRAS wild) —T3 and higher
- Panitumumab (KRAS wild) –T3 and higher
- Bevacizumab T3 and higher
- LOH + NO 5FU regimens will be resistant

KRAS Wild Regimens and Other Chemo

Cetuximab (KRAS wild-type gene only) E irinotecan	·				IV	
	Cetuximab	714692	400	mg/m²		1st infusion, then 250mg/m ²
			OR			
					IV	
	Cetuximab	714692	500	mg/m²	IV	Every 2 weeks
	Irinotecan	616348	300-350	mg/m²	IV	Every 3 weeks
			OR			
	Irinotecan	616348	180	mg/m²	IV	Every 2 weeks
	Imotecan	010340	100	1116/111	LVCI y 2 WCCKS	
	<u> </u>		OR			
	Irinotecan	616348	125	mg/m²		Days 1, 8 and repeat 3 weeks
	Irinotecan	616348	125	mg/m²	IV	Days 1, 8 and repeat 3 weeks
Cetuximab (KRAS wild-type gene only)	Irinotecan Cetuximab	616348 714692	125 400	mg/m²	IV	Days 1, 8 and repeat 3 weeks 1st infusion, then 250mg/m2 IV weekly
Cetuximab (KRAS wild-type gene only) Panitumumab (KRAS wild-type gene					IV IV	

N1-N2 and higher

- KRASTest possible
- MSI Test possible
- LOH Test possible
- Chemo depends on above outcomes
 - FOLFOX
 - FLOX
 - CapeOX

Advanced Disease

- KRASTest − yes (new agents)
- MSITest yes (familial/hereditary)
- LOH Test − yes (response to 5FU)
- Chemo based on results of above

• Clinical Trial recommendations

Irinotecan – not FDA first line drug

- Okay for Advanced Disease
- Okay after patient failed some other regimen
- Regimens with Irinotecan
 - Irinotecan alone
 - Irinotecan + Cetuximab (KRAS wild type)
 - IROX
 - FOLFOXIRI
 - FOLFIRI

What about neo-adjuvant treatment?

- T4 Colon
- T3, T4 Rectum or any rectum
- Chemo alone
- Radiation alone
- Radiation plus chemo
- Intent of neo-adjuvant treatment
- Measuring response to treatment
- Surgery must take place
- What happens after surgery?

Inquiry & Response System

- Submit questions to Inquiry & Response System
 - Allows tracking for educational purposes
 - Provides information for all



• http://web.facs.org/coc/default.htm

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Collaborative Stage Data Collection System Web Site www.cancerstaging.org/cstage