Collecting Cancer Data: Lower Digestive System

NAACCR 2011-2012 Webinar Series
4/5/2012

Q&A

• Please submit all questions concerning webinar content through the Q&A panel.

Reminder:
• If you have participants watching this webinar at your site, please collect their names and emails.
  – We will be distributing a Q&A document in about one week. This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.

Fabulous Prizes
Agenda

• Overview
• Collaborative Stage Data Collection System
• Treatment
• Review of Case Scenarios

OVERVIEW

Statistics

• Estimated new cases and deaths from colon and rectal cancer in the United States in 2012:
  – New cases:
    • 103,170 (colon)
    • 40,870 (rectum)
    • 6,230 (anal)
  – Deaths: 51,690 (colon and rectal combined)
  – Deaths: 780 (anal)

• Estimated new cases and deaths from colon and rectal cancer in Canada in 2011:
  – New Cases
  • 22,000 (colon)
  – Deaths
    • 8,900 (colon)
Collecting Cancer Data: Lower GI

Layers of the Colon/Rectum

- Subserosal Fat
- Muscularis Propria
- Lamina Propria
- Pericolic Fat

Tumor Invasion of the Colon

- Confined to the mucosa
- Invasion into the submucosa
- Invasion of muscularis propria
- Invasion into subserosa
- Invasion through serosa
  - Tumor penetrates the visceral peritoneum
  - Tumor directly invades or is adherent to other organs or structures
Anus

- The anus begins at the apex of the sphincter and ends where the squamous mucosa turns to skin
  - Where the rectum meets the anus is a band of transitional mucosa.
  - Beyond that is a layer of non keratinizing squamous epithelium

Lymph-Vascular Invasion

Histology

- Adenocarcinoma
  - 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
      (2007 MPH Manual pg 29)
Histology

• Mucinous/collloid adenocarcinoma (8480)
  – An adenocarcinoma containing extra-cellular mucin comprising more than 50% of the tumor
  – Note that “mucin-producing” and “mucin-secreting” are not synonymous with mucinous

• Signet ring cell carcinoma (8490)
  – An adenocarcinoma containing intra-cellular mucin comprising more than 50% of the tumor

Histology

• Adenocarcinoma in an adenomatous polyp (8210)
  – Adenocarcinoma in a tubular adenoma
  – Carcinoma in adenomatous polyp
  – Adenocarcinoma in a polyp, NOS
  – Carcinoma in a polyp, NOS

• Adenocarcinoma in villous adenoma (8261)
• Adenocarcinoma in tubulovillous adenoma (8263)

Terminology

• Frank Adenocarcinoma
  – No indication of a polyp

• Sessile Polyp
  – Polyp without a stalk

• Pedunculated Polyp
  – Polyp with a stalk

• Exophytic
  – Nodular or polypoid
  – Pedunculated or sessile

• Endophytic
  – Ulcerative
Tumor Configurations

- Exophytic (nodular or polypoid) (pedunculated or sessile)
- Ulcerative (endophytic)
- Multicentric (multifocal)
- Diffusely infiltrative
- Annular (apple core)

Polyps

- Tubular
- Tubulovillous
- Villous

MP/H Coding

- Rule M4
  - Tumors in sites with ICD-O-3 topography codes that are different at the second (Cxxx), third, (Cxxx) or fourth (C18x) character are multiple primaries
- Rule M5
  - Tumors diagnosed more than one (1) year apart are multiple primaries.
- Rule M6
  - An invasive tumor following an in situ tumor more than 60 days after diagnosis are multiple primaries
- Rule M7
  - A frank malignant or in situ adenocarcinoma and an in situ or malignant tumor in a polyp are a single primary.
Question

• Patient was diagnosed with T4 colon cancer of the ascending colon in February of 2010. She had a hemicolectomy followed by chemotherapy.
• In April of 2011 she was found to have what the physician described as and adenocarcinoma “recurrent at the anastomotic junction”
  – Is this a second primary?

Answer

• Yes, this is a second primary per rule M4.
  – ... When a colon resection has taken place, the original primary site is no longer present. A colon resection usually includes a portion of uninvolved colon on either side of the tumor. A tumor diagnosed at the anastomotic junction cannot be located in the same site as the previous tumor.
  • SEER SING 20091116
• Rule M4
  – Tumors in sites with ICD-O-3 topography codes that are different at the second (Cxxx), third, (Cxxx) or fourth (C18x) character are multiple primaries.

Grade

<table>
<thead>
<tr>
<th>Two Grade system</th>
<th>Four Grade System</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 2 Low-grade</td>
<td>• 1 Well Differentiated</td>
</tr>
<tr>
<td>– Well-differentiated and moderately differentiated</td>
<td>• 2 Mod Differentiated</td>
</tr>
<tr>
<td>• 4 High-grade</td>
<td>• 3 Poorly differentiated</td>
</tr>
<tr>
<td>– Poorly differentiated and undifferentiated</td>
<td>• 4 Undifferentiated</td>
</tr>
</tbody>
</table>
Pop Quiz

• Modestly to well differentiated adenocarcinoma of the sigmoid colon
  – What is Grade?
  – What is Grade Path Value and Grade Path System?

• Grade 1 of 2 adenocarcinoma of the sigmoid colon
  – What is Grade?
  – What is Grade Path Value and Grade Path System?

Descending Aorta
Superior Mesenteric Artery
Inferior Mesenteric Artery
Right and Left Common Iliac
Rectal (Hemorrhoidal) Artery
Middle Hemorrhoidal Artery
Inferior Hemorrhoidal Artery
Left Colic Artery
Sigmoid Arteries
Lymph Nodes of the colon

- Superior mesenteric artery branches
  - 1 Ileocolic
  - 2 Right colic
  - 3 Middle colic

- Inferior mesenteric artery branches
  - 4 Ascending left colic
  - 5 Left colic
  - 6 Sigmoid branches
  - 7 Superior rectal artery
  - 8 Middle rectal artery
  - 9 Inferior rectal artery
  - 10 Inferior mesenteric vein

Lymph Nodes of Colon

Image source: http://training.seer.gov
Common Metastatic Sites

- Liver
- Lung
- Abdominal seeding

Distant Lymph Nodes

- Primary of the cecum
  - Superior mesenteric lymph node
    - Code under CS Lymph Nodes
  - Inferior mesenteric lymph node
    - Code under CS Mets at DX
  - Mesenteric lymph node
    - Code under CS Lymph Nodes

Pop Quiz

- Primary of the cecum
- Are the following regional or distant lymph nodes?
  - Ileocecal lymph node
  - Common iliac lymph node
  - External iliac lymph node
Questions?

QUIZ 1

COLLABORATIVE STAGE DATA COLLECTION SYSTEM (CS)

CS COLON & RECTUM
CS Extension: Colon & Rectum

- Codes 000 – 050
  - Noninvasive tumor
- Codes 100 – 120
  - Tumor confined to mucosa of colorectal wall
- Codes 130 – 170
  - Tumor invades submucosa of colorectal wall
- Codes 200 – 250
  - Tumor invades muscularis propria of colorectal wall

CS Extension: Colon & Rectum

- Codes 400 – 470
  - Tumor invades through muscularis propria into pericolorectal tissues
- Codes 500 – 560
  - Tumor penetrates serosa (visceral peritoneum)
- Codes 565 – 850
  - Tumor invades or adheres to other organs or structures

CS Extension: Colon & Rectum
Pop Quiz: CS Extension

- Final diagnosis: Intramucosal carcinoma of cecum. Physician staged as Tis.
- What is the code for CS Extension?
  - 000 – In situ
  - 100 – Confined to mucosa including intramucosal

CS Lymph Nodes: Colon & Rectum

- Code 050
  - Tumor deposits in subserosa or non-peritonealized pericolic or perirectal tissues without regional nodal metastasis
- Code 300
  - Mesenteric NOS
  - Regional lymph nodes NOS
- Code 800
  - Lymph nodes NOS

Pop Quiz: CS Lymph Nodes

- Lesion 1: 11 cm adenocarcinoma of cecum with extension into superficial pericolonic adipose tissue; pT3pN1
- Lesion 2: 1 cm adenocarcinoma of ascending colon arising in adenomatous polyp with invasion into submucosa; pT1pN0
- Metastatic adenocarcinoma involving 2/24 pericolonic lymph nodes
Pop Quiz: CS Lymph Nodes

• What is the code for CS Lymph Nodes for the cecum primary?
  – 000 – No regional lymph nodes involved
  – 110 – Paracolic/pericolic

• What is the code for CS Lymph Nodes for the descending colon primary?
  – 000 – No regional lymph nodes involved
  – 110 – Paracolic/pericolic

CS Mets at DX: Colon & Rectum

• Single distant lymph node chain
  – Code 08, 16, or 18
• Multiple distant lymph node chains
  – Code 29, 31, or 33
  • Code 29 obsolete in v02.04.40 for colon
• Metastasis to single distant organ except peritoneum
  – Code 26
• Metastases to more than 1 distant organs except distant lymph nodes
  – Code 36

Pop Quiz: CS Mets at DX

• Rectosigmoidoscopy and biopsy: 6 cm rectal tumor, adenocarcinoma, extends into pelvic wall
• CT scan: Rectal tumor extending into pelvic wall with metastatic deposits in pelvic wall
• What is the code for CS Mets at DX?
  – 00: No distant metastasis
  – 26: Metastasis to a single distant organ
  – 36: Metastasis to more than 1 distant organ
  – 99: Unknown
### SSF1: Carcinoembryonic Antigen (CEA)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>010</td>
<td>Positive/elevated</td>
</tr>
<tr>
<td>020</td>
<td>Negative/normal; within normal limits</td>
</tr>
<tr>
<td>030</td>
<td>Borderline; undetermined if positive or negative</td>
</tr>
<tr>
<td>988</td>
<td>Not applicable: Info not collected for case</td>
</tr>
<tr>
<td>997</td>
<td>Test ordered, results not in chart</td>
</tr>
<tr>
<td>998</td>
<td>Test not done</td>
</tr>
<tr>
<td>999</td>
<td>Unknown or no information</td>
</tr>
</tbody>
</table>

### SSF2: Clinical Assessment Regional Nodes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Nodes not clinically evident; imaging of regional nodes performed and nodes not mentioned</td>
</tr>
<tr>
<td>010</td>
<td>Metastasis in 1 regional node clinically Stated as clinical N1a</td>
</tr>
<tr>
<td>020</td>
<td>Metastases in 2-3 regional nodes clinically Stated as clinical N1b</td>
</tr>
<tr>
<td>030</td>
<td>OBSOLETE v02.04.40 Tumor deposits without regional nodal metastasis</td>
</tr>
<tr>
<td>100</td>
<td>Metastases in 1-3 regional nodes clinically Stated as clinical N1 [NOS]</td>
</tr>
<tr>
<td>110</td>
<td>Metastases in 4-6 regional nodes clinically Stated as clinical N2a</td>
</tr>
<tr>
<td>120</td>
<td>Metastases in 7 or more regional nodes clinically Stated as clinical 2b</td>
</tr>
<tr>
<td>200</td>
<td>Metastases in 4 or more regional nodes clinically Stated as clinical N2 [NOS]</td>
</tr>
</tbody>
</table>
SSF2: Clinical Assessment Regional Nodes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>Clinically positive regional nodes, NOS</td>
</tr>
<tr>
<td>988</td>
<td>Not applicable: Info not collected for case</td>
</tr>
<tr>
<td>999</td>
<td>Regional lymph node(s) involved pathologically, clinical assessment not stated Unknown if nodes are clinically evident Not documented in patient record</td>
</tr>
</tbody>
</table>

Pop Quiz: SSF2

- CT of abdomen pelvis: Cecal mass with circumferential mural thickening extending across the ileocecal valve to the ascending colon. Pericolic soft tissue stranding is present at this site along with a small node measuring 7 mm. This is most likely cecal carcinoma with local lymphadenopathy.

Pop Quiz: SSF2

- What is the code for SSF2?
  - 000 – Nodes not clinically evident
  - 010 – Metastasis in 1 regional node, determined clinically
  - 400 – Clinically positive regional nodes, NOS
  - 999 – Unknown if regional nodes clinically evident
SSF3: CEA Lab Value

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>0 ng/ml exactly</td>
</tr>
<tr>
<td>001</td>
<td>0.1 or less ng/ml</td>
</tr>
<tr>
<td>002-979</td>
<td>0.2 - 97.9 ng/ml</td>
</tr>
<tr>
<td></td>
<td>Exact value to nearest tenth in ng/ml</td>
</tr>
<tr>
<td>980</td>
<td>98.0 or greater ng/ml</td>
</tr>
<tr>
<td>988</td>
<td>Not applicable: Info not collected for case</td>
</tr>
<tr>
<td>997</td>
<td>Test ordered, results not in chart</td>
</tr>
<tr>
<td>998</td>
<td>Test not done</td>
</tr>
<tr>
<td>999</td>
<td>Unknown or no information</td>
</tr>
</tbody>
</table>

Pop Quiz: SSF1 and SSF3

- 12/5/11 CEA lab value 4.2 ng/ml; lab’s normal range < 2.5 ng/ml
- 12/12/11 Hemicolecotomy: adenocarcinoma of splenic flexure extending through colon wall; 0/22 metastatic nodes

Pop Quiz: SSF1 and SSF3

- What is the code for SSF1?
  - 010 – Positive/elevated
  - 020 – Negative/normal
  - 999 – Unknown
- What is the code for SSF3?
  - 042
  - 420
  - 999 - Unknown
SSF4: Tumor Deposits

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>None</td>
</tr>
<tr>
<td>001-080</td>
<td>1-80 tumor deposits (TD)</td>
</tr>
<tr>
<td>081</td>
<td>81 or more TD</td>
</tr>
<tr>
<td>998</td>
<td>Not applicable: Info not collected for case</td>
</tr>
<tr>
<td>990</td>
<td>TD identified, number unknown</td>
</tr>
<tr>
<td>998</td>
<td>No surgical resection of primary site</td>
</tr>
<tr>
<td>999</td>
<td>Unknown or no information</td>
</tr>
</tbody>
</table>

Pop Quiz: SSF4

- Sigmoid polypectomy: Non-invasive adenocarcinoma confined to polyp. No other procedure was performed.
- What is the code for SSF4?
  - 000 – None
  - 998 – No surgical resection of primary site
  - 999 - Unknown

SSF5: Tumor Regression Grade

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Tumor Regression Grade 0</td>
</tr>
<tr>
<td></td>
<td>Complete response: No viable cancer cells</td>
</tr>
<tr>
<td></td>
<td>No residual tumor</td>
</tr>
<tr>
<td>010</td>
<td>Tumor Regression Grade 1</td>
</tr>
<tr>
<td></td>
<td>Moderate response: Single or small groups of</td>
</tr>
<tr>
<td></td>
<td>cancer cells</td>
</tr>
<tr>
<td>020</td>
<td>Tumor Regression Grade 2</td>
</tr>
<tr>
<td></td>
<td>Minimal response: Residual cancer outgrown by</td>
</tr>
<tr>
<td></td>
<td>fibrosis</td>
</tr>
</tbody>
</table>
SSF5: Tumor Regression Grade

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>030</td>
<td>Tumor Regression Grade 3&lt;br&gt;Poor response: Minimal or no tumor kill; extensive residual cancer</td>
</tr>
<tr>
<td>988</td>
<td>Not applicable: Info not collected for case</td>
</tr>
<tr>
<td>990</td>
<td>Response present, but degree of response not further described</td>
</tr>
<tr>
<td>998</td>
<td>No preoperative treatment or no resection of primary site after preoperative treatment</td>
</tr>
<tr>
<td>999</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Pop Quiz: SSF5

- Large rectal tumor identified by endoscopic ultrasound; biopsy proven adenocarcinoma of rectum. Patient received neoadjuvant chemotherapy.
- Low anterior resection: Microscopic foci of rectal adenocarcinoma; 0/10 regional nodes metastatic; moderate treatment effect

Pop Quiz: SSF5

- What is the code for SSF5?
  - 010 - Tumor Regression Grade 1; Moderate response: Single cells or small groups of cancer cells
  - 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
### SSF6: Circumferential Resection Margin (CRM)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Margin IS involved with tumor</td>
</tr>
<tr>
<td></td>
<td>CRM positive</td>
</tr>
<tr>
<td></td>
<td>Described as “less than 1 millimeter (mm)”</td>
</tr>
<tr>
<td>001-980</td>
<td>0.1 – 98.0 mm (Exact size to nearest tenth of mm)</td>
</tr>
<tr>
<td>981</td>
<td>98.1 mm or greater</td>
</tr>
<tr>
<td>988</td>
<td>Not applicable: Info not collected for case</td>
</tr>
<tr>
<td>990</td>
<td>No residual tumor identified on specimen</td>
</tr>
<tr>
<td>991</td>
<td>Margins clear, distance from tumor not stated CRM negative NOS</td>
</tr>
</tbody>
</table>

### SSF6: Circumferential Resection Margin (CRM)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>992</td>
<td>Described as “less than 2 mm” or “greater than 1 mm” or “between 1 mm and 2 mm”</td>
</tr>
<tr>
<td>993</td>
<td>Described as “less than 3 mm” or “greater than 2 mm” or “between 2 mm and 3 mm”</td>
</tr>
<tr>
<td>994</td>
<td>Described as “less than 4 mm” or “greater than 3 mm” or “between 3 mm and 4 mm”</td>
</tr>
<tr>
<td>995</td>
<td>Described as “less than 5 mm” or “greater than 4 mm” or “between 4 mm and 5 mm”</td>
</tr>
<tr>
<td>996</td>
<td>Described as “greater than 5 mm”</td>
</tr>
</tbody>
</table>

### SSF6: Circumferential Resection Margin (CRM)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>998</td>
<td>No resection of primary site</td>
</tr>
<tr>
<td>999</td>
<td>Unknown or no information</td>
</tr>
<tr>
<td></td>
<td>CRM not mentioned</td>
</tr>
<tr>
<td></td>
<td>Not documented in patient record</td>
</tr>
</tbody>
</table>
Pop Quiz: SSF6

- Tumor site: Rectum
- Tumor size: 2 cm
- Tumor extension: Into muscularis propria
- Margins
  - Proximal: Uninvolved
  - Distal: Uninvolved
  - Circumferential: Uninvolved
  - Distance of invasive carcinoma from closest margin: 3.5 mm

Pop Quiz: SSF6

- What is the code for SSF6?
  - 035
  - 991: Margins clear, distance from tumor not stated; CRM negative NOS
  - 994: Described as "less than 4 mm," or "greater than 3 mm," or "between 3 mm and 4 mm"
  - 999: Unknown

SSF7: Microsatellite Instability

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>020</td>
<td>Microsatellite instability (MSI) stable; no MSI; negative NOS</td>
</tr>
<tr>
<td>040</td>
<td>MSI unstable low; positive, low</td>
</tr>
<tr>
<td>050</td>
<td>MSI unstable high; positive, high</td>
</tr>
<tr>
<td>060</td>
<td>MSI unstable, NOS; positive, NOS</td>
</tr>
<tr>
<td>988</td>
<td>Not applicable: Info not collected for case</td>
</tr>
<tr>
<td>997</td>
<td>Test ordered, results not in chart</td>
</tr>
<tr>
<td>998</td>
<td>Test not done</td>
</tr>
<tr>
<td>999</td>
<td>Unknown or no information</td>
</tr>
</tbody>
</table>
Pop Quiz: SSF7

- Colonoscopy with polypectomy and biopsy:
  Adenocarcinoma confined to head of sigmoid colon polyp. Biopsy of hepatic flexure positive for adenocarcinoma.
- Hemicolecction: No residual carcinoma in sigmoid colon. Adenocarcinoma of hepatic flexure, 3 cm, extending into pericolic fat. 00/14 nodes negative for tumor.
- Molecular studies
  - MSI result stable

Pop Quiz: SSF7

- What is the code for SSF7 for the sigmoid colon primary?
  - 020 – MSI stable
  - 999 - Unknown
- What is the code for SSF7 for the hepatic flexure primary?
  - 020 – MSI stable
  - 999 - Unknown

SSF8: Perineural Invasion

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>None; no perineural invasion present</td>
</tr>
<tr>
<td>010</td>
<td>Perineural invasion present</td>
</tr>
<tr>
<td>988</td>
<td>Not applicable: Info not collected for case</td>
</tr>
<tr>
<td>998</td>
<td>No histologic examination of primary site</td>
</tr>
<tr>
<td>999</td>
<td>Unknown Not documented in patient record</td>
</tr>
</tbody>
</table>
Pop Quiz: SSF8

- The patient had polypectomy at an outside facility. Physician at our facility stated that the pathology report showed "well differentiated adenocarcinoma in a tubulovillous adenoma". Pathology report is not available for review. Colectomy was performed at our facility and showed no residual carcinoma.

---

Pop Quiz: SSF8

- What is the code for SSF8?
  - 000 – None; no perineural invasion present
  - 010 – Perineural invasion present
  - 998 – No histologic examination of primary site
  - 999 - Unknown

---

SSF9: KRAS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>010</td>
<td>Abnormal (mutated) Positive for mutations</td>
</tr>
<tr>
<td>020</td>
<td>Normal (wild type) Negative for mutations</td>
</tr>
<tr>
<td>988</td>
<td>Not applicable: Info not collected for case</td>
</tr>
<tr>
<td>997</td>
<td>Test ordered, results not in chart</td>
</tr>
<tr>
<td>998</td>
<td>Test not done</td>
</tr>
<tr>
<td>999</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

---
Pop Quiz: SSF9

- 6/15/11 Segmental resection of sigmoid colon: Adenocarcinoma in tubulovillous adenoma; KRAS test not done
- 12/15/11 Hemicolecetomy: Recurrent adenocarcinoma of sigmoid colon; KRAS mutated

- What is the code for SSF9?
  - 010 – Abnormal (mutated); positive for mutations
  - 998 – Test not done
  - 999 – Unknown

SSF10: 18q Loss of Heterozygosity

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>010</td>
<td>Test positive for loss of heterozygosity (LOH)</td>
</tr>
<tr>
<td>020</td>
<td>Test negative for LOH; normal heterozygous state</td>
</tr>
<tr>
<td>030</td>
<td>Undetermined if LOH positive or negative</td>
</tr>
<tr>
<td>988</td>
<td>Not applicable: Info not collected for case</td>
</tr>
<tr>
<td>997</td>
<td>Test ordered, results not in chart</td>
</tr>
<tr>
<td>998</td>
<td>Test not done</td>
</tr>
<tr>
<td>999</td>
<td>Unknown or no information</td>
</tr>
</tbody>
</table>

Pop Quiz: SSF10

- Hemicolecetomy: Adenocarcinoma of descending colon infiltrating pericolic fat
- Addendum: Test for 18q gene delection normal

- What is the code for SSF10?
  - 010 – Test positive for LOH
  - 020 – Test negative for LOH; normal heterozygous state
  - 998 – Test not done
  - 999 – Unknown
Standard Setters SSF Requirements

- Colon
  - CoC, SEER
    - SSF: 1-4, 6, 8, 9
  - NPCR
    - SSF2
  - Canadian Council of Cancer Registries
    - SSF: 1, 2, 3*, 4-10**
      - * Collect if readily available in clinical chart
      - ** Collect if in path report

Standard Setters SSF Requirements

- Rectum
  - CoC, SEER
    - SSF: 1-4, 6, 8, 9
  - NPCR
    - SSF2
  - Canadian Council of Cancer Registries
    - SSF: 1, 2, 3*, 4-5**, 6, 7-10**
      - * Collect if readily available in clinical chart
      - ** Collect if in path report

CS ANUS AND ANAL CANAL
CS Tumor Size: Anus

- Assignment of T1, T2, and T3 categories is based on tumor size
- Use physician’s statement of T category to code CS tumor size if it is the only information about tumor size
  - Code 992: Stated as T1 with no other information on tumor size
  - Code 995: Stated as T2 with no other information on tumor size
  - Stated as T2 moved from 993 to 995 in v02.04.40
  - Code 996: Stated as T3 with no other information on tumor size

CS Extension: Anus

- Code 000
  - In situ, intraepithelial, noninvasive
  - AIN III (anal intraepithelial neoplasia grade III)
    - Reportable to standard setters except Commission on Cancer
- Codes 100-400
  - T category based on value of CS Tumor Size
- Codes 600-850
  - Tumor invades adjacent organs

Pop Quiz: CS Tumor Size & CS Extension

- CT scan: 1.5 cm tumor of anal canal; no lymphadenopathy; no organomegaly
- Anal biopsy: Squamous cell carcinoma, well differentiated
- Per physician clinical T1 N0 M0
- Treatment: Chemotherapy, fluorouracil and mitomycin
Pop Quiz: CS Tumor Size & CS Extension

- What is the code for CS Tumor Size?
  - 015
  - 992 - Described as "less than 2 cm," or "greater than 1 cm," or "between 1 cm and 2 cm"; Stated as T1 with no other information on tumor size

- What is the code for CS Extension?
  - 300 – Localized NOS
  - 310 – Stated as T1 with no other information on extension
  - 999 - Unknown

CS Lymph Nodes: Anus

- Use codes for anal canal unless tumor is stated to occur at anus
- Perirectal lymph nodes
  - Codes 110 – 140
- Unilateral internal iliac AND/OR inguinal lymph nodes
  - Codes 200 – 405
    - Codes 400 & 405 – Combination of unilateral iliac and inguinal nodes

CS Lymph Nodes: Anus

- Perirectal and inguinal nodes AND/OR bilateral internal iliac and/or inguinal nodes
  - Codes 415 – 550
    - Codes 415, 425 & 440 – Combination of perirectal and inguinal nodes
    - Code 530 – Combination of bilateral iliac & inguinal nodes
- Regional nodes NOS
  - Code 600
CS Mets at DX: Anus

- Standard table is used
- Common metastatic sites
  - Liver
  - Lungs
  - Abdominal cavity

SSF1: Human Papilloma Virus (HPV) Status

- Record results of HPV test on pathology specimen
  - Primary tumor or metastatic site may be tested
- Use code 000 or 060 if HPV test only reports negative or positive results
  - Code 000 – HPV negative
  - Code 060 – HPV positive for high-risk types NOS
- Codes 010 – 050 are hierarchical

Standard Setters SSF Requirements

- Anus
  - CoC, SEER, NPCR
    - None required
  - Canadian Council of Cancer Registries
    - SSF1: Collect if available in clinical chart
Questions?

QUIZ 2

TREATMENT

Colonoscopy

- Colonoscopy with biopsy
  - Diagnostic/Staging Procedure
- Colonoscopy with polypectomy
  - Surgical procedure
- The area that is biopsied is often tattooed for future reference
Clinical Staging

- Endoscopic ultrasound
  - Can be used to determine the depth of invasion
  - Can be used to assess the status of regional lymph nodes
- MRI
  - Can be used to assess depth of invasion
  - Can be used to assess status of regional lymph nodes.

Treatment for Polyps

- Polypectomy may be only treatment necessary if...
  - Tis or T1
  - Grade 1 or 2
  - No lymph-vascular invasion
  - Negative surgical margins
- Sessile polyps may require additional surgery even with favorable histologic features

Treatment-Colon or Rectum

- Tis, T1 or T2 with no further mets (Stage 1)
  - Surgery
    - Open
    - Laparoscopic
  - Surveillance
Treatment-Colon

- Low-risk stage II
  - Surgery
  - Possibly chemotherapy
  - Surveillance
- High risk stage II
  - Surgery (if resectable)
  - Chemotherapy
  - Surveillance

Stage II Poor Prognostic Features

- T4A or T4B
- Histologic grade 3 or 4
- Lymphvascular invasion (LVI)
- Perineural invasion
- Bowel obstruction
- Lesions with perforation
- Close or positive surgical margins
- Inadequate lymph node sampling (fewer than 12 lymph nodes)

Treatment Colon

- Stage III (lymph nodes positive, but no distant mets)
  - Surgery
  - Chemotherapy
    - 5-fluorouracil/leucovorin/oxaliplatin
- Stage IV
  - Surgery of the colon primary with resection of liver or lung mets.
  - Neoadjuvant chemotherapy followed by surgery to the colon and to the liver or lung
  - If unresectable, chemotherapy
    - Reassessment for surgical candidacy after 2 months.
Surgical Procedures-Colon

- Polypectomy
  - Endoscopic
  - Surgical Excision
- Partial/Segmental Resection
- Hemicolectomy
- Colectomy

Treatment-Rectum

- cT3 or cN1-2
  - Neoadjuvant radiation and/or neoadjuvant chemo
  - Resection
  - Adjuvant chemo
- cT4 or distant mets
  - Neoadjuvant radiation and/or neoadjuvant chemo
  - Resection (if resectable)
  - Adjuvant chemo

Neoadjuvant Treatment-Rectum

Chemotherapy/Radiation
- 5-fluorouracil and radiation therapy for about 5 ½ weeks
  - Radiation to the tumor, pre-sacral nodes and internal iliac nodes.

Surgery
- May be 5-10 weeks after completion of chemo/radiation.

Adjuvant Chemotherapy
- 5-fluorouracil and leucovorin
- FOLFOX
Surgical Resection-Rectum

- Transanal Endoscopic Microsurgery (TEM)
- Low Anterior Resection (LAR)
  - Performed for lesions in the rectum and rectosigmoid 4-5cm from the anal verge
  - Total Mesorectal Excision (TME)
  - Coloanal anastomosis
- Abdominoperineal Resection (APR)

Illustration courtesy of the American Society of Clinical Oncology.

Treatment-Anal Squamous Cell Carcinoma

- T1 tumors (2cm or less) may be treated with local excision
- Tumors greater than 2cm’s are primarily treated with concurrent chemotherapy/radiation
  - Mitomycin and 5-Fu
  - Radiation doses based on stage of disease

Illustration courtesy of the American Society of Clinical Oncology.

QUIZ 3
Coming up!

• 5/3/12
  – Collecting Cancer Data: Hematopoietic
• 6/14/12
  – Using and Interpreting Data Quality Indicators

And the winners of the fabulous prizes are....

Thank You!