

Pathology Report and Specimens for Procedure PROC-39204



ID, Proc, Patient, Barcode	Type	Donor Type	A/S/R	Weight	Prep	Primary	Metastaic	Stage	Grade	Percentages	Procurement Year
WD-105525 PROC-39204 PAT-38701 C42943	MALIGNANT COLON DESCENDING CARCINOMA \ ADENOCARCINOMA		61/M/W	0.27 grams	Frozen, LN2 - vapor phase	COLON	LYMPH NODE	Stage IIIB	G2 Moderately differentiated	0% Necrosis, 30% Lesion, 60% Stroma, 80% Tumor By Area, 30% Cellularity, 10% Acellular Mucin	2014
PET: 1.0 PPET: GPET:	In Surg Path: Organ Removal: Complete Prep:				Cold Ischemia: Warm Ischemia: Trans on Ice: Unknown			Fix Time: PMI Time: Clamp Time:			
Comments:											
Consent Status: Collected from consented donor.											

Pathology report entered by Erik Brooks (CHTN)

61/M/W
C/R=N/N

MSI test result: Results consistent with Microsatellite - Stable (MSS): Microsatellite Instability NOT DETECTED

KRAS (c.34G>T) G12C	Not Detected
KRAS (c.34G>A) G12S	Not Detected
KRAS (c.34G>C) G12R	Not Detected
KRAS (c.35G>T) G12V	Not Detected
KRAS (c.35G>C) G12A	Not Detected
KRAS (c.35G>A) G12D	Not Detected
KRAS (c.37G>T) G13C	Not Detected
KRAS (c.37G>A) G13S	Not Detected
KRAS (c.37G>C) G13R	Not Detected
KRAS (c.38G>A) G13D	DETECTED
KRAS (c.38G>C) G13A	Not Detected
KRAS (c.38G>T) G13V	Not Detected
KRAS (c.181C>A) Q61K	Not Detected
KRAS (c.182A>G) Q61R	Not Detected
KRAS (c.182A>T) Q61L	Not Detected
KRAS (c.183A>T) Q61H	Not Detected
KRAS (c.183A>C) Q61H	Not Detected
KRAS (c.436G>A) A146T	Not Detected
KRAS (c.436G>C) A146P	Not Detected
KRAS (c.437C>T) A146V	Not Detected
KRAS (c.351A>C) K117N	Not Detected
KRAS (c.351A>T) K117N	Not Detected
BRAF (c.1397G>T) G466V	Not Detected
BRAF (c.1406G>A) G469E	Not Detected
BRAF (c.1406G>C) G469A	Not Detected
BRAF (c.1406G>T) G469V	Not Detected
BRAF (c.1781A>G) D594G	Not Detected
BRAF (c.1781A>T) D594V	Not Detected
BRAF (c.1786G>C) G596R	Not Detected
BRAF (c.1799T>A) V600E	Not Detected

Colon panel:

AKT1 (c.49G>A) E17K	Not Detected
PIK3CA (c.3140A>G) H1047R	DETECTED
PIK3CA (c.3140A>T) H1047L	Not Detected
PIK3CA (c.1624G>A) E542K	Not Detected
PIK3CA (c.1633G>A) E545K	Not Detected
PIK3CA (c.1633G>C) E545Q	Not Detected
PIK3CA (c.1634A>C) E545A	Not Detected
PIK3CA (c.1634A>G) E545G	Not Detected
PIK3CA (c.1634A>T) E545V	Not Detected
PIK3CA (c.1636C>A) Q546K	Not Detected
PIK3CA (c.1636C>G) Q546E	Not Detected
PIK3CA (c.1637A>C) Q546P	Not Detected
PIK3CA (c.1637A>G) Q546R	Not Detected

PIK3CA (c.1637A>T) Q546L	Not Detected
PIK3CA (c.1645G>A) D549N	Not Detected
PIK3CA (c.1624G>C) E542Q	Not Detected
SMAD4 (c.989A>C) E330A	Not Detected
SMAD4 (E351N)	Not Detected
SMAD4 (c.1051G>C) D351H	Not Detected
SMAD4 (c.1051G>A) D351N	Not Detected
SMAD4 (c.1065C>A) D355E	Not Detected
SMAD4 (c.1081C>A) R361S	Not Detected
SMAD4 (c.1081C>T) R361C	Not Detected
SMAD4 (c.1082G>A) R361H	Not Detected
PTEN (c.697C>T) R233X	Not Detected
PTEN (c.477G>T) R159S	Not Detected
PTEN (c.800delA) K267RfsX9	Not Detected
PTEN (c.697C>A) R233R	Not Detected
NRAS (c.34G>A) G12S	Not Detected
NRAS (c.34G>C) G12R	Not Detected
NRAS (c.34G>T) G12C	Not Detected
NRAS (c.35G>A) G12D	Not Detected
NRAS (c.35G>T) G12V	Not Detected
NRAS (c.35G>C) G12A	Not Detected
NRAS (c.181C>A) Q61K	Not Detected
NRAS (c.182A>G) Q61R	Not Detected

Diagnosis

1) COLON, LEFT, RESECTION: COLONIC ADENOCARCINOMA, MODERATELY DIFFERENTIATED, 4.6 CM IN GREATEST EXTENT, INVOLVING SUBSEROA; MARGINS NEGATIVE FOR MALIGNANCY. LYMPHOVASCULAR INVASION PRESENT; FOUR OF TWENTY LYMPH NODES INVOLVED BY CARCINOMA (4/20); MULTIPLE MESENTERIC TUMOR DEPOSITS; SEE SYNOPTIC REPORT.

2) ADDITIONAL MESENTERY, EXCISION: FIBROADIPOSE TISSUE WITH NO SIGNIFICANT HISTOPATHOLOGIC CHANGE; NEGATIVE FOR MALIGNANCY.

3) OMENTUM, EXCISION: FIBROADIPOSE TISSUE WITH NO SIGNIFICANT HISTOPATHOLOGIC CHANGE; ONE LYMPH NODE, NEGATIVE FOR MALIGNANCY (0/1); NEGATIVE FOR MALIGNANCY.

Case reviewed by Attending Pathologist

MDL Microsatellite Instability Status: Ordered

Synoptic Diagnosis

1) LEFT COLON:

Specimen: Descending colon
 Procedure: Left hemicolectomy
 Primary Tumor Site: Left (descending) colon
 Additional Sites Involved by Tumor: None identified
 Macroscopic Tumor Perforation: Not identified
 Macroscopic Intactness of Mesorectum: Not applicable
 Histologic Type: Adenocarcinoma
 Histologic Grade: Low-grade
 Tumor Size: Greatest dimension: 4.6 cm
 Microscopic Tumor Extension: Tumor invades through the muscularis propria into the subserosal adipose tissue or the nonperitonealized pericolic or perirectal soft tissues but does not extend to the serosal surface
 Distance of invasive carcinoma from closest margin: 6.5 cm
 Margin: Distal
 Proximal Margin: Uninvolved by invasive carcinoma
 Distal Margin: Cannot be assessed
 Circumferential or Mesenteric Margin: Not applicable
 Lymph-Vascular Invasion: Present
 Perineural Invasion: Not identified
 Tumor Deposits: Present
 Pathologic Staging (pTNM): pT3: Tumor invades through the muscularis propria into pericorectal tissues
 Regional Lymph Nodes (pN): pN2a: Metastasis in 4 to 6 regional lymph nodes
 Number of nodes examined: 20
 Number of nodes involved: 4
 Distant Metastasis (pM): Not applicable
 Ancillary Studies: Microsatellite instability

Clinical Data

Clinical Features: Unspecified

Operator: -----

Operation: Unspecified

Operative Findings: Unspecified

Operative Diagnosis: Unspecified

Tissue Submitted: 1) left colon-stitch marks distal margin, 2) additional mesentery, 3) omentum

Specimen(s) Received

- 1) LEFT COLON
- 2) ADDITIONAL MESENTERY
- 3) OMENTUM

Gross Description

1) LEFT COLON:

Received fresh in a container labeled with the patient's name "-----," medical record number and "left colon" is a 20.2 cm in length x 3.7 cm in diameter portion of unoriented bowel. The serosal surface is tan-brown, glistening with adhesions. Both margins are received stapled. A suture indicates the distal margin and is inked blue.

The mesentery is abundant and covers approximately 60% of the serosal surface. It is red-tan and coarsely lobulated. Areas of the mesentery display congestion. Opening the bowel reveals located approximately 6.5 cm from the distal margin, 12.6 cm from the proximal, and 8.7 cm from the mesenteric margin a circumferential ulceration with raised, rounded borders measuring 4.6 cm circumferentially x 2.1 x 1.4 cm in total depth. The remaining mucosa is grossly unremarkable.

Prior to sectioning the mesenteric margin is inked green and the mesentery underlying the mass blue. Sectioning of the mass reveals tumor extension into the muscularis propria, mesentery and possibly extends to the inked mesenteric surface. The tissue deep to the mass displays a white-tan, hemorrhagic and yellow, lobulated interdispersed appearance. Fat necrosis is identified. Sectioning through parts of the bowel wall reveals a purple submucosa and muscularis propria.

Sectioning through the mesentery yields 12 lymph node candidates ranging from 0.2 x 0.1 x 0.1 to 2.0 x 0.7 x 0.9 cm. Fresh tissue is provided for research. Representative sections are submitted as follows:

Summary of sections:

- 1A, distal margin, shaved, 2/1;
- 1B, proximal margin, shaved, 2/1;
- 1C, mesenteric margin, 1/1;
- 1D, lesion with possible mesenteric surface involvement, 1/1;
- 1E, mass and muscularis propria involvement, 1/1;
- 1F, mass with adjacent normal mucosa, 1/1;
- 1G, ulceration, 1/1;
- 1H, additional mass, 1/1;
- 1I, discolored bowel wall, 2/1;
- 1J, normal mucosa, 1/1;
- 1K, 6 intact lymph node candidates, 6/1;
- 1L, 2 intact lymph node candidates, 2/1;
- 1M, 2 lymph node candidates, bisected (1 inked blue), 4/1;
- 1N and 1O, 1 lymph node candidate, quadrisected, 2/1 each;
- 1Q, 6 intact lymph node candidates, 6/1;
- 1R, 5 lymph node candidates, 5/1;
- 1S, 2 lymph node candidates, 2/1;
- 1T, 2 lymph node candidates, 3/1.

2) ADDITIONAL MESENTERY:

Received fresh in a container labeled with the patient's name "-----," medical record number and "additional mesentery" is a congested, yellow lobulated portion of mesentery measuring 4.9 x 2.3 x 1.4 cm. Sectioning reveals a markedly congested cut surface. The remaining cut surfaces are yellow and coarsely lobulated. Representative sections are submitted in 2A-2B, 2/1 each.

3) OMENTUM:

Received fresh in a container labeled with the patient's name "-----" medical record number and "omentum" is a single portion of finely lobulated omentum, measuring 16.6 x 16.8 x 3.5 cm. Areas of focal congestion are dispersed throughout. Sectioning reveals no discrete lesions or masses. Representative sections are submitted in 3A-3F, 3/1 each.

Chemo history: No

Radiation history: No