

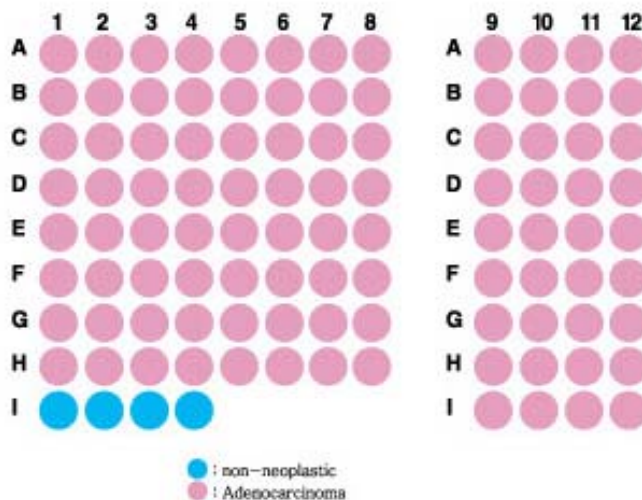
Specifications:

- No. of cases: 50
- Tissue type: Colon cancer tissues
- No. of spots: 2 spots from each cancer case (100 spots)
4 non-neoplastic spots (4 spots)
- Total spots: 104
- Corresponding normal tissues with cancers: No
- Diameter: 1.0 mm

Documents:

- Product specification: layout, summary of tissue spots
- H&E stained images
- Detailed pathological information

Layout:



Summary of tissue spots

No.	Coordinate	Sex	Age	Key Word	Surgery	Grade	TNM Stage
1	1, 2	m	86	Rectum: adenocarcinoma	resection	G1	B1
2	3, 4	m	56	Rectum: adenocarcinoma Rectum: tubular adenoma Rectum: hyperplastic polyp	Miles' operation	G1	B2
3	5, 6	f	70	Rectosigmoid: adenocarcinoma	anterior resection	G1	C2
4	7, 8	f	47	Rectum: adenocarcinoma	anterior resection	G1	C2
5	1, 2	f	53	Rectum: adenocarcinoma	anterior resection	G1	C2
6	3, 4	f	72	Rectum: adenocarcinoma	anterior resection	G1	B2
7	5, 6	f	70	Colon: adenocarcinoma	colectomy	G1	C2
8	7, 8	f	46	Colon: adenocarcinoma	total proctocolectomy	G1	C2
9	1, 2	m	39	Rectum: adenocarcinoma	anterior resection	G1	C2
10	3, 4	f	66	Rectum: adenocarcinoma	anterior resection	G1	B2
11	5, 6	m	45	Rectum: adenocarcinoma	Hartmann's operation	G1	C2
12	7, 8	f	45	Anus: adenocarcinoma Lymph node: metastatic carcinoma	Mile's operation	G1	C2
13	1, 2	f	86	Colon: adenocarcinoma	colectomy	G1	B2
14	3, 4	f	66	Rectum: adenocarcinoma	segmental resection	G1	B2
15	5, 6	m	74	Rectum: adenocarcinoma	anterior resection	G1	B2
16	7, 8	f	53	Colon: adenocarcinoma	hemicolectomy	G1	C2
17	1, 2	f	81	Rectum: adenocarcinoma Rectum: adenoma	Miles' operation	G2	B2
18	3, 4	f	72	Rectum: adenocarcinoma	anterior resection	G2	B2
19	5, 6	f	69	Rectum: adenocarcinoma Liver: metastatic carcinoma	anterior resection	G2	D
20	7, 8	m	62	Rectum: adenocarcinoma	anterior resection	G2	B2
21	1, 2	f	49	Colon: adenocarcinoma	hemicolectomy	G2	C2
22	3, 4	m	70	Rectum: adenocarcinoma	Miles' operation	G2	C2
23	5, 6	m	40	Rectum: adenocarcinoma Lymph node: metastatic adenocarcinoma Appendix: lymphoid hyperplasia	Miles' operation	G2	C1
24	7, 8	f	68	Sigmoid colon: adenocarcinoma	colectomy	G2	B2
25	1, 2	m	65		colectomy	G2	C2
26	3, 4	m	53	Rectum : adenocarcinoma	Hartmann's operation	G2	B2
27	5, 6	f	63	Rectum : adenocarcinoma	Miles' operation	G2	C2
28	7, 8	m	63	Rectum : adenocarcinoma	Miles' operation	G2	B1

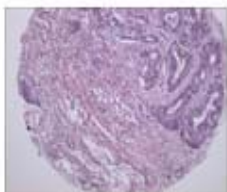
Summary of tissue spots

No.	Coordinate	Sex	Age	Key Word	Surgery	Grade	TNM Stage
29	H	1, 2	m	50	Colon : adenocarcinoma	Miles' operation	G2 C2
30		3, 4	f	62	Colon: adenocarcinoma Lymph node : tumor metastasis	hemicolectomy	G2 C2
31	H	5, 6	m	61	Rectum: adenocarcinoma	anterior resection	G2 C2
32	H	7, 8	f	69	Rectum: adenocarcinoma	anterior resection	G2 B2
33	A	9, 10	m	59	Colon: adenocarcinoma	Hemicolectom	G3 C2
34	A	11, 12	m	46	Colon: adenocarcinoma	Hemicolectom	G3 B2
35	B	9, 10	f	62	Rectum: adenocarcinoma Rectum: adenoma	anterior resection	G3 B1
36	B	11, 12	f	28	Rectum: adenocarcinoma	Hartmann's operation	G3 C2
37	C	9, 10	m	46	Rectum: adenocarcinoma Lymph node: metastatic carcinoma Skin: seborrheic keratosis	anterior resection	G3 C2
38	C	11, 12	m	70	Sigmoid Colon: adenocarcinoma Sigmoid Colon: tubular adenoma	colectomy	G3 C2
39	D	9, 10	m	69	Ileum: adenocarcinoma Appendix: obliteration Lymph node: free of tumor	hemicolectomy	G3 B2
40	D	11, 12	m	75	Anus: adenocarcinoma Lymph node: metastatic carcinoma	En-bloc resecti	G1+G2 C2
41	E	9, 10	m	65	Colon: adenocarcinoma	hemicolectomy	G2+G1 B2
42	E	11, 12	f	73	Rectum: adenocarcinoma	Miles' operation	G2+G1 B2
43	F	9, 10	m	72	Colon: adenocarcinoma Colon: tubular adenoma	Colectom	G2+G1 B2
44	F	11, 12	m	38	Rectum: adenocarcinoma	Miles' operation	G2+G1 C2
45	G	9, 10	m	66	Colon: adenocarcinoma Colon: abscess Colon: tubular adenoma	hemicolectomy	G2+G1 B2
46	G	11, 12	m	53	Rectum: adenocarcinoma Lymph node: metastatic carcinoma	Miles' operation	G2+G3 C2
47	H	9, 10	f	55	Colon: adenocarcinoma	hemicolectomy	G2+G1 C2
48	H	11,12	m	44	Rectum: adenocarcinoma Lymph node: metastatic adenocarcinoma	anterior resection	G2+G3 C2

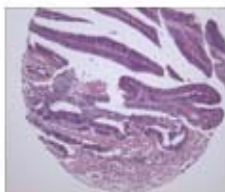
Summary of tissue spots

No.	Coordinate	Sex	Age	Key Word	Surgery	Grade	TNM Stage
49	I 9, 10	m	54	Rectum: adenocarcinoma	anterior resection	G2+G3	C2
50	I 11, 12	m	70	Sigmoid colon: adenocarcinoma	segmental resection	G1+G2	B2
51	I 1Non-neoplastic	m	76	Sigmoid colon: adenocarcinoma	sigmoid colon with pericolic gatty tissue, anterior resection	G2	C2
52	I 2Non-neoplastic	m	75	Colon: adenocarcinoma	colorectum with perirectal gatty tissue, resection	G2+G3	C2
53	I 3Non-neoplastic	m	71	Colon: adenocarcinoma	right hemicolectomy	G2	B2
54	I 4Non-neoplastic	m	74	Colon: adenocarcinoma	left hemicolectomy	G2	B1
				Tumor stage	Grade		
				B1 : Extending into the muscularis propria but of penetrating the	G1 : Well differentiated		
				B2 : Penetrating through the muscularis propria: un	G2 : Moderately differentiated		
				C1 : Extending into the muscularis propria but of penetrating	G3 : Poorly differentiated		
				C2 : Penetrating through the muscularis propria: involved nodes			
				D : Distant metastatic spread			

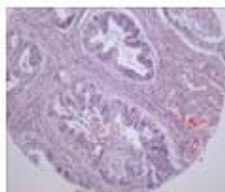
QC sheet_LOT#122120307051-1 Haematoxylin and Eosin staining



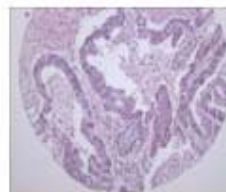
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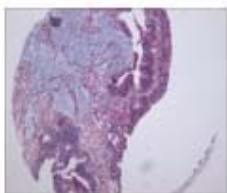
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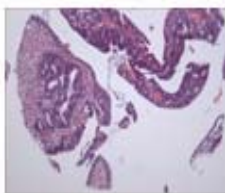
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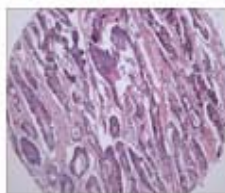
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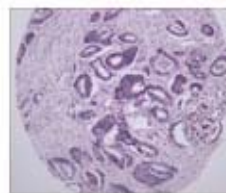
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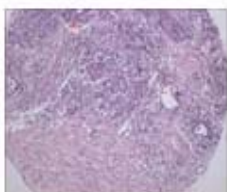
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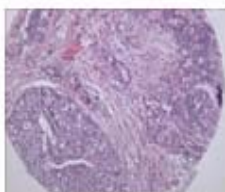
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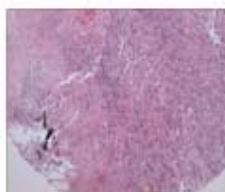
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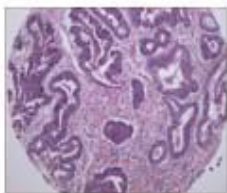
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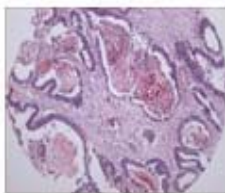
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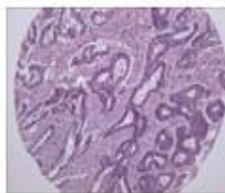
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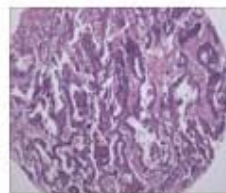
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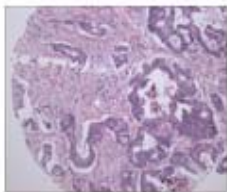
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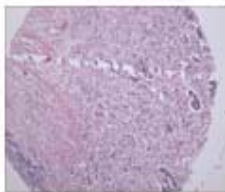
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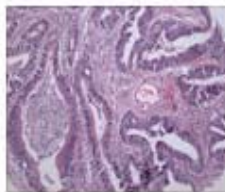
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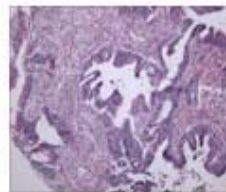
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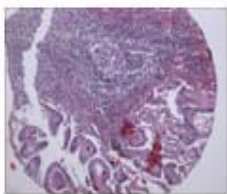
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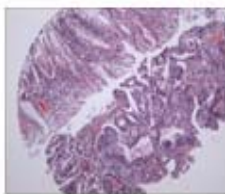
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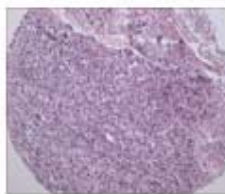
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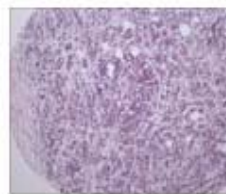
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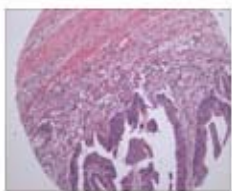


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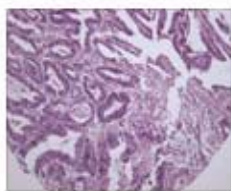


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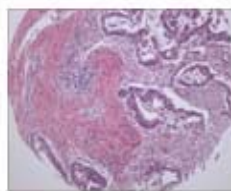
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Haematoxylin and Eosin staining



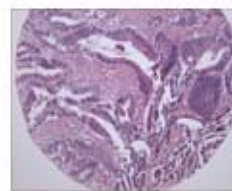
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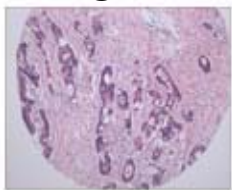
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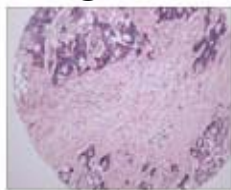
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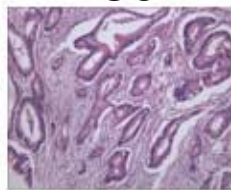
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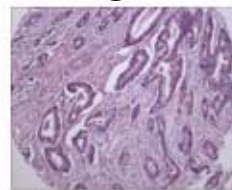
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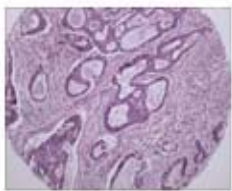
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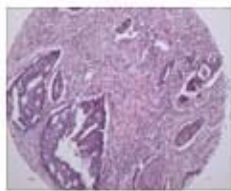
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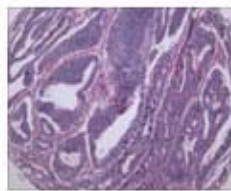
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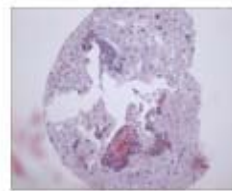
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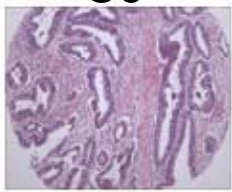
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C11



C12



D1



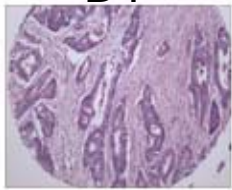
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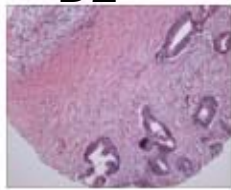
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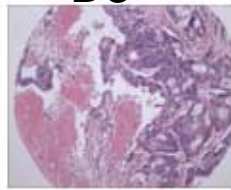
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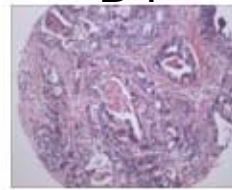
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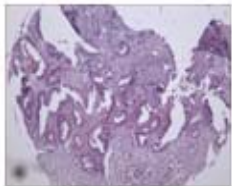
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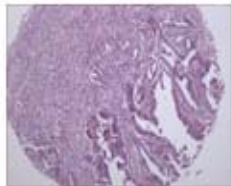
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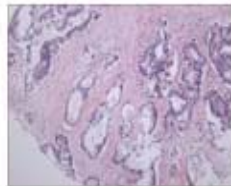
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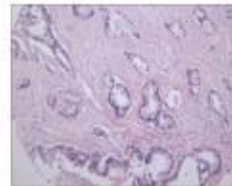
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D10

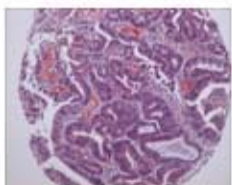


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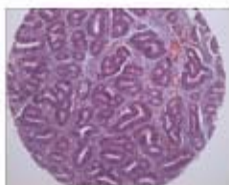


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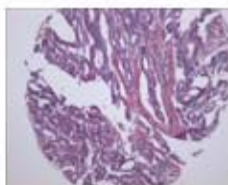
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Haematoxylin and Eosin staining



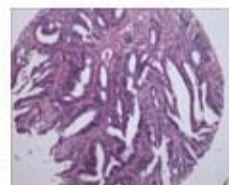
E1



E2



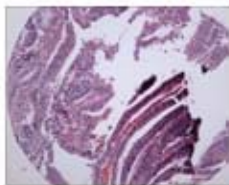
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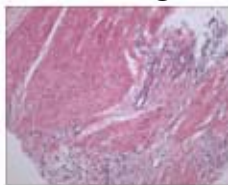
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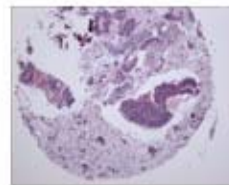
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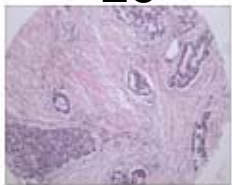
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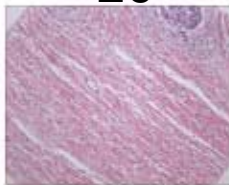
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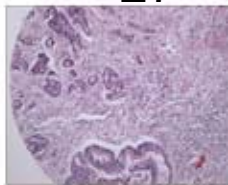
E8



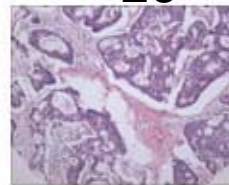
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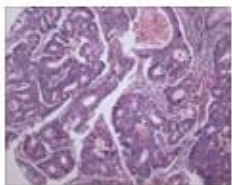
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E11



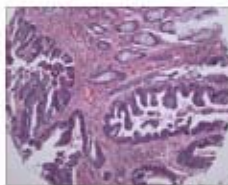
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F1



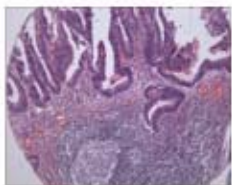
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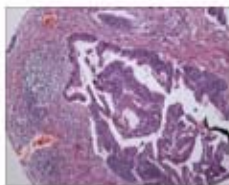
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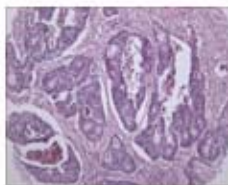
F4



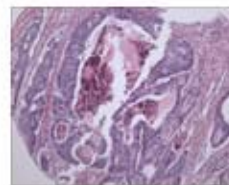
F5



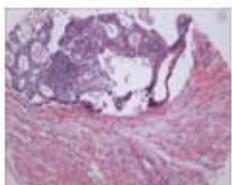
F6



F7



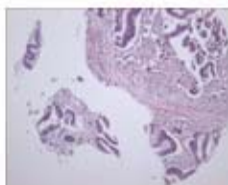
F8



F9



F10

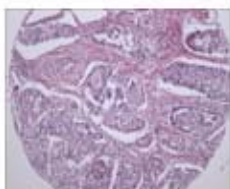


F11

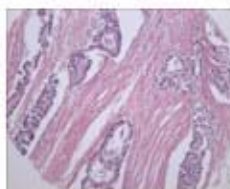


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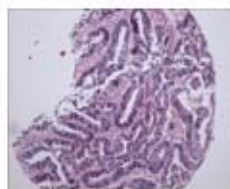
QC sheet_LOT#122120307051-4 Haematoxylin and Eosin staining



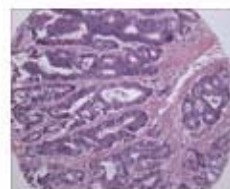
G1



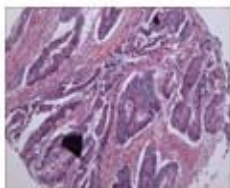
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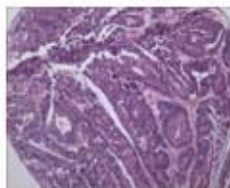
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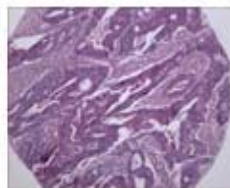
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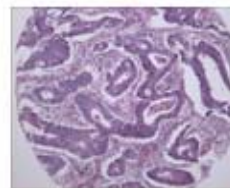
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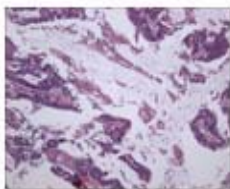
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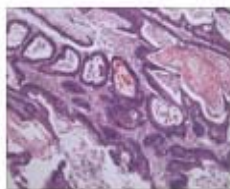
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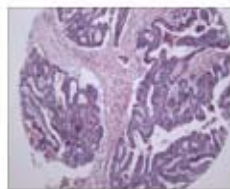
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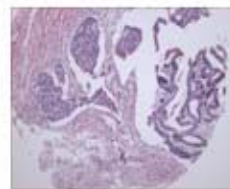
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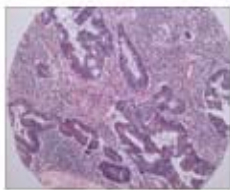
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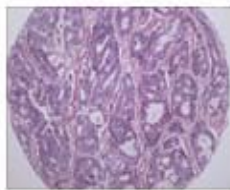
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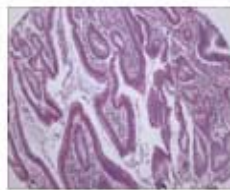
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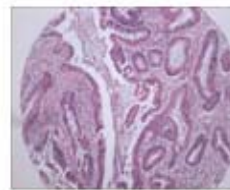
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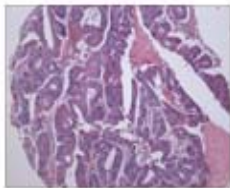
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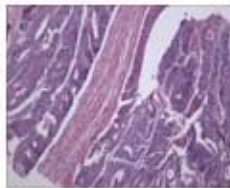
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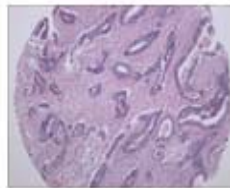
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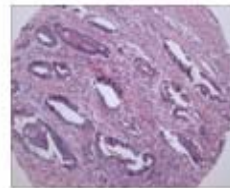
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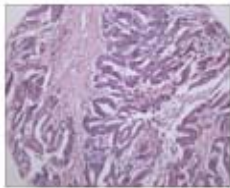
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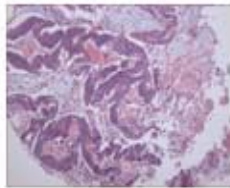
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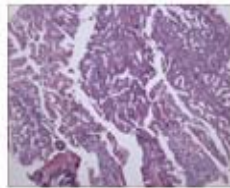
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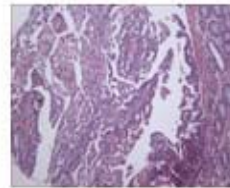
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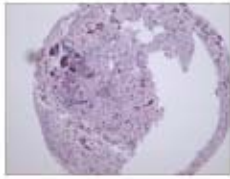


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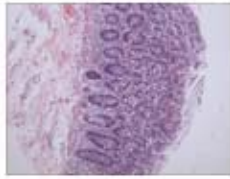


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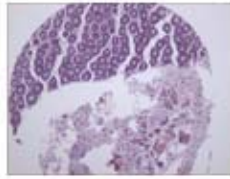
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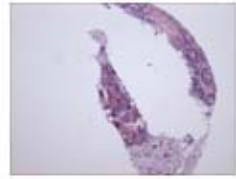
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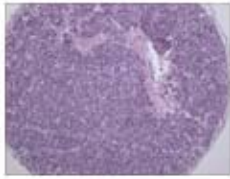
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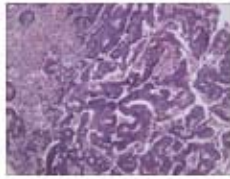
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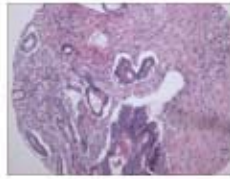
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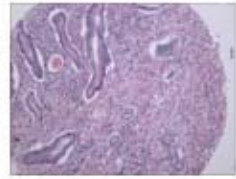
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I10



I11



I12

A203: Colon cancer tissues

No.	Coordinate		Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
1	A	1, 2	m	86	rectum: adenocarcinoma	Rectum: 1. Adenocarcinoma, moderately well differentiated fungating type with 1) extension to the outer muscle layer 2) tubular adenoma 3) tubular adenoma 2. Resection margin, labelled as lower, free of tumor 3. Resection margin, labelled as upper, free of tumor 4. Regional lymph nodes (0/48), reactive hyperplasia	resection	G1	B1
2	A	3, 4	m	56	rectum: adenocarcinoma rectum: tubular adenoma rectum: hyperplastic polyp	Rectum, Miles' operation: 1. Adenocarcinoma, well differentiated with 1) ulcerofungating gross type 2) extension to the perirectal fat tissue (3 mm from muscle layer) 3) adenoma remnants 4) no lymphatic permeation 5) no vascular permeation 6) no perineural invasion 2. Tubular adenoma 3. Hyperplastic polyp 4. Resection margin, proximal, distal and lateral: free of tumor 4. Regional lymph nodes (0/8): free of tumor in all 8 lymph nodes 5. Soft tissue, site not specified: free of tumor	Miles' operation	G1	B2

A203: Colon cancer tissues

No.	Coordinate		Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
3	A	5, 6	f	70	rectosigmoid: adenocarcinoma	<p>Rectosigmoid, low anterior resection:</p> <ol style="list-style-type: none"> Adenocarcinoma, well differentiated, ulcerofungating type, with <ol style="list-style-type: none"> extension to the perirectal fatty tissue (16 mm apart from proper muscle layer) perineural invasion mucin production no lymphatic and venous invasion Resection margin, proximal, distal and lateral: free of tumor Lymph nodes, principal (1/3), pericolic and rectal (7/14) : (8/17): Tumor metastasis in 8 out of 17 lymph nodes 	anterior resection	G1	C2
4	A	7, 8	f	47	rectum: adenocarcinoma	<p>Rectum, low anterior resection:</p> <ol style="list-style-type: none"> Adenocarcinoma, well differentiated,with <ol style="list-style-type: none"> ulcerofungating gross type penetration of muscle coat and extension to the perirectal fat tissue and to the serosal surface Resection margin, proximal, distal and lateral: free of tumor Regional lymph nodes, perirectal (1/12), intermediated (0/19), Principal (0/0) : (1/31): Tumor metastasis in 1 out of 31 lymph nodes 	anterior resection	G1	C2

A203: Colon cancer tissues

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage	
5	B	1, 2	f	53	rectum: adenocarcinoma	<p>Rectum, anterior resection:</p> <ol style="list-style-type: none"> 1. Adenocarcinoma, well differentiated, with <ol style="list-style-type: none"> 1) ulcerofungating gross type 2) extension to the perirectal fat tissue (pT3) 3) no lymphatic and perineural invasion 4) multifocal necrosis and severe fibrosis 2. Resection margin, proximal and distal: free of tumor 3. Resection margin, lateral: free of tumor 4. Ureter: free of tumor 5. Regional lymph nodes, paraaortic (0/1), perirectal (2/20) : (2/21): Tumor metastasis in 2 out of 21 lymph nodes 6. Appendix, appendectomy: no pathological diagnosis 	anterior resection	G1	C2
6	B	3, 4	f	72	rectum: adenocarcinoma	<p>Rectum, lower anterior resection:</p> <ol style="list-style-type: none"> 1. Adenocarcinoma, well differentiated with <ol style="list-style-type: none"> 1) ulcerofungating gross type 2) extension to perirectal fat tissue (PT3a) 3) No lymphatic or perineural invasion 2. Resection margins, proximal, distal and lateral: free of tumor 3. Regional lymph nodes, principle (0/2), regional (0/17) : (0/19): free of tumor 4. Appendix, incidental appendectomy: no pathological diagnosis 	anterior resection	G1	B2

A203: Colon cancer tissues

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
7	B 5, 6	f	70	colon: adenocarcinoma	<p>Colon, sigmoid, colectomy:</p> <ol style="list-style-type: none"> 1. Adenocarcinoma, well differentiated with <ol style="list-style-type: none"> 1) ulcerative gross type 2) extension to the pericolic fat tissue (pT3c) 3) lymphatic invasion and no vascular invasion 4) no perineural invasion 2. Resection margins, proximal and distal: free of tumor 3. Resection margin, lateral: free of tumor 4. Regional lymph nodes, principal (1/9), pericolic (6/18) : (7/27): <ol style="list-style-type: none"> 1) metastatic carcinoma in 7 out of 27 lymph nodes 2) multiple mesenteric tumor deposition 	colectomy	G1	C2
8	B 7, 8	f	46	colon: adenocarcinoma	<p>Colon and rectum, total proctocolectomy and abdominal pelvic resection:</p> <ol style="list-style-type: none"> 1. Well differentiated adenocarcinoma extending to pericolonic fat tissue of ascending colon (pT3c) 2. Separate focus of well differentiated adenocarcinoma extending to the inner layer of muscularis propria of anal canal: 3. Ametastatic adenocarcinoma in 83 regional mesocolic lymph nodes 4. Resection margins, IMA root lymph nodes (0/8) and mid colic a root lymph nodes (0/6) are free of tumor Multiple tubulovillous adenomatosis 5. Specimen, site not specified: non neoplastic fibrous nodule with dystrophic calcification, surrounded by reactive mesothelial surface 	total proctocolectomy	G1	C2

A203: Colon cancer tissues

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage	
9	C	1, 2	m	39	rectum: adenocarcinoma	Rectum, low anterior resection: 1. Adenocarcinoma, well differentiated with 1) Extension tot he pericolic fat tissue (pT3b: 3 mm) 2) No definite lymphovascular permeation 2. Resection margins, lateral, proximal and distal: free of tumor 3. Regional lymph nodes, principal (0/0), mesocolonic (4/25): metastatic adenocarcinoma in 4 out of 25 lymph nodes	anterior resection	G1	C2
10	C	3, 4	f	66	rectum: adenocarcinoma	Rectum, low anterior resection: 1. Well differentiated adenocarcinoma infiltrating through the muscularis propria to involve serosa (Astler-Coller stage B2, pT3c) 2. Resection margins, proximal, distal and lateral: free of tumor 1)regional lymph nodes, principal (0/3), perirectal (0/18) : (0/21): free of tumor in all 21 lymph nodes	anterior resection	G1	B2
11	C	5, 6	m	45	rectum: adenocarcinoma	Rectum, Hartmann's operation: 1.Ulcerative adenocarcinoma, moderately differentiated with 1) extension to the pericolic fat tissue (pT3d) 2) presence of lymphovascular permeation 3) frequent perineural invasion 2. Resection margin, proximal: free of tumor 3. Resection margin, distal: free of tumor 4. Resection margin, lateral: tumor positive 5. Regional lymph nodes, perirectal (1/5) 6. Metastatic carcinoma in one out of 5 lymph nodes	Hartmann's operation	G1	C2

A203: Colon cancer tissues

No.	Coordinate		Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
12	C	7, 8	f	45	anus: adenocarcinoma lymph node: metastatic carcinoma	Anus and rectum, Mile's operation: 1. Adenocarcinoma, well differentiated, with extension to the peri anal soft tissue 2. Resection margin, proximal, distal and lateral: free of tumor 3. Vagina: free of tumor 4. Lymph nodes, regional (10/11), promontary (1/1): 1) metastatic carcinoma to 11 out of 12 lymph nodes 2) multiple mesenteric tumor deposits and lymphatic	Mile's operation	G1	C2
13	D	1, 2	f	86	colon: adenocarcinoma	Colon, sigmoid, colectomy: 1. Well differentiated adenocarcinoma, infiltrating through the muscularis propria of sigmoid colon with invasion of subserosa 2. Regional lymph nodes and resection margins are free of neoplastic involvement (0/17) (pT3a: Astler-Coller stage B2.)	colectomy	G1	B2
14	D	3, 4	f	66	rectum: adenocarcinoma	Rectum, segmental resection: 1. Adenocarcinoma, well differentiated, ulceroinfiltrative, with 1) extension to the perirectal fat tissue 2) occasional lymphatic invasion 2. Resection margins, proximal and distal: free of tumor 3. Lymph nodes, regional (0/21) and principal (0/2): free of tumor metastasis in all 23 nodes	segmental resection	G1	B2

A203: Colon cancer tissues

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage	
15	D	5, 6	m	74	rectum: adenocarcinoma	Rectum, low anterior resection: 1. Adenocarcinoma, well differentiated, ulcerative with 1) extension to the perirectal fat tissue but not to the serosal surface (distance between tumor and serosal surface : 0.5 mm) without definitive lymphatic invasion 2) resection margins, proximal and distal: free of tumor 3) lymph nodes, principal (0/1) and regional (0/29): free of tumor in all 30 nodes	anterior resection	G1	B2
16	D	7, 8	f	53	colon: adenocarcinoma	Colon, ascending, appendix and ileum, right, hemicolectomy: 1. Adenocarcinoma, well differentiated, ulcerative, with 1) extension to the serosal surface and occasional lymphatic invasion 2) resection margins, proximal and distal: free of tumor 3) lymph nodes, regional (2/27): Metastasis in 2 out of 27 nodes 2. Appendix: No pathological diagnosis	hemicolectomy	G1	C2
17	E	1, 2	f	81	rectum: adenocarcinoma rectum: adenoma	Rectum, Miles' operation: 1. Adenocarcinoma, moderately differentiated with 1) extension to perirectal fat tissue 2) ulcerofungating gross type 2. Tubulovillous adenoma with high grade epithelial dysplasia 3. Resection margin, proximal, distal and lateral: free of tumor 4. Regional lymph nodes, mesocolonic (0/11): free of tumor in all 11 nodes	Miles' operation	G2	B2

A203: Colon cancer tissues

No.	Coordinate		Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
18	E	3, 4	f	72	rectum: adenocarcinoma	Rectum, low anterior resection: 1. Adenocarcinoma, moderately differentiated with 1) extension to perirectal fat tissue 2) resection margins, proximal, distal and lateral: free of tumor 2. Regional lymph nodes, mesocolon (0/11), mesorectum (0/1), principal node (0/0): free of tumor in all 12 nodes	anterior resection	G2	B2
19	E	5, 6	f	69	rectum: adenocarcinoma liver: metastatic carcinoma	Rectum, low anterior resection: 1. Adenocarcinoma, moderately differentiated, infiltrating through the rectal wall to involve perirectal fat(Astler-Coller stage:D) 2. Liver, excisional biopsy: 1) metastatic colonic adenocarcinoma 2) moderate steatohepatitis with glycogenic nuclei of hepatocytes 3. Gallbladder: Mild chronic cholecystitis 4. Separately sent specimen without labelling: Old fat necrosis 5. Resection margin, proximal and distal: free of tumor 6. Regional lymph nodes, perirectal (9/14): 7. Metastatic adenocarcinoma involving 9 lymph nodes out of 14 lymph nodes	anterior resection	G2	D

A203: Colon cancer tissues

No.	Coordinate		Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
20	E	7, 8	m	62	rectum: adenocarcinoma	<p>Rectum, low anterior resection:</p> <ol style="list-style-type: none"> 1. Adenocarcinoma, moderately differentiated with <ol style="list-style-type: none"> 1) ulcerofungating type 2) extension into the perirectal fat tissue (Astler-Coller stage B2) 3) occasional lymphatic permeation 2. Specimen labelled as "small bowel side": free of tumor 3. Specimen labelled as "large bowel side": free of tumor 4. Resection margins, proximal, distal and lateral: free of tumor 5. Regional lymph nodes, mesorectal (0/55), principal (0/3): free of tumor in all 58 lymph nodes 	anterior resection	G2	B2
21	F	1, 2	f	49	colon: adenocarcinoma	<p>Colon, right ascending, hemicolectomy:</p> <ol style="list-style-type: none"> 1. Adenocarcinoma, moderately differentiated with <ol style="list-style-type: none"> 1) extension into the pericolic fat tissue 2) ulcerofungating gross type 2. Resection margins, proximal and distal: free of tumor 3. Regional lymph nodes, mesenteric (0/2), mesocolonic (1/55), No.16 (0/5): Metastatic adenocarcinoma in 1 out of 62 nodes 	hemicolectomy	G2	C2
22	F	3, 4	m	70	rectum: adenocarcinoma	<p>Rectum, Miles' operation:</p> <ol style="list-style-type: none"> 1. Adenocarcinoma, moderately differentiated with <ol style="list-style-type: none"> 1) ulceroinfiltrative gross type 2) extension into the perirectal fat tissue 2. Tubular adenomas, with low grade epithelial dysplasia, multifocal 3. Resection margins, proximal, distal and lateral: free of tumor 4. Regional lymph nodes, principal (0/1), mesorectal (1/9): metastatic adenocarcinoma in 1 out of 10 nodes 	Miles' operation	G2	C2

A203: Colon cancer tissues

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
23	F 5, 6	m	40	rectum: adenocarcinoma lymph node: metastatic adenocarcinoma appendix: lymphoid hyperplasia	Rectum, Miles' operation: 1. Adenocarcinoma, moderately differentiated with 1) ulcerofungating gross type 2) extension to the outer muscle layer (pT2) 3) no vascular permeation 4) no perineural invasion 2. Resection margins, proximal, distal and lateral: free of tumor 3. Lymph node, regional: Principal (0/7), mesorectal (1/32) : (1/39): metastatic adenocarcinoma in one out of 39 nodes 4. Appendix, incidental appendectomy: lymphoid hyperplasia	Miles' operation	G2	C1
24	F 7, 8	f	68	sigmoid colon: adenocarcinoma	Sigmoid colon, sigmoid colectomy: 1. Adenocarcinoma, moderately differentiated with 1) ulcerative gross type 2) infiltrating through the colonic wall into the subserosa (Astler-Coller stage B2: pT3c) 3) tubular adenoma with low grade epithelial dysplasia 2. Resection margins, proximal and distal: free of tumor 3. Lymph node, regional, principal (0/13), mesocolonic (0/33) : (0/46): free of tumor	colectomy	G2	B2

A203: Colon cancer tissues

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
25	G 1, 2	m	65		<p>Sigmoid colon, sigmoid colectomy:</p> <ol style="list-style-type: none"> 1. Adenocarcinoma, moderately differentiated with <ol style="list-style-type: none"> 1) ulcerative gross type 2) extension to the pericolonic fat tissue and serosa (pT3c) 3) occasional lymphatic permeation 4) occasional perineural invasion 5) occasional vascular invasion 2. Resection margins, proximal and distal: free of tumor 3. Regional lymph nodes, principal (0/3), pericolonic (8/13) : (8/16): metastatic adenocarcinoma in 8 out of 16 lymph nodes <p><Revised report : 7/7/99> Extension to the pericolic fat tissue and subserosa (pT3c)</p>	colectomy	G2	C2
26	G 3, 4	m	53	rectum : adenocarcinoma	<p>Rectum, Hartmann's operation:</p> <ol style="list-style-type: none"> 1. Adenocarcinoma, moderately differentiated with <ol style="list-style-type: none"> 1) ulcerofungating gross type 2) extension to the perirectal fat tissue(pT3c) 3) occasional venous invasion 4) no lymphatic or perineural invasion 2. Resection margins, proximal, distal, lateral: free of tumor 3. Regional lymph nodes, principal (0/11), perirectal (0/24) : (0/35): free of tumor in all 35 lymph nodes 4. Appendix, incidental appendectomy: No pathological diagnosis 	Hartmann's operation	G2	B2

A203: Colon cancer tissues

No.	Coordinate		Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
27	G	5, 6	f	63	rectum : adenocarcinoma	<p>Rectum and anus, Miles' operation:</p> <ol style="list-style-type: none"> 1. Fungating adenocarcinoma, moderately differentiated, probably with arising in adenomatous polyp <ol style="list-style-type: none"> 1) size: 6.5x5.5 cm 2) infiltrative growth 3) penetration of sphincteric muscle layer and extension to perirectal soft tissue and anus but not vagina 4) vascular invasion 2. Resection margins, proximal and distal: free of tumor 3. Lymph nodes, regional (5/26): metastasis in 5 out of 26 nodes 	Miles' operation	G2	C2
28	G	7, 8	m	63	rectum : adenocarcinoma	<p>Rectum, Miles' operation:</p> <ol style="list-style-type: none"> 1. Adenocarcinoma, moderately differentiated, fungating type with extension to the proper muscle 2. Resection margins, proximal, distal and lateral: free of tumor 3. Lymph nodes, separately submitted as principal (0/3): free of tumor 4. Lymph nodes, regional (0/14): free of tumor 5. Soft tissue, separately submitted as mesorectum: free of tumor 	Miles' operation	G2	B1
29	H	1, 2	m	50	colon : adenocarcinoma	<p>Colon, rectum, Miles' operation:</p> <ol style="list-style-type: none"> 1. Ulcerofungating adenocarcinoma, moderately differentiated, with <ol style="list-style-type: none"> 1) extension to the pericolic fat tissue (pT3b) 2) lateral margin: free of tumor 3) lymphovascular permeation: positive 2. Resection margins, proximal and distal: free of tumor 3. Regional lymph nodes: tumor metastasis to 1 out of 24 (1/24), in detail, principal (0/1), regional (1/23) 	Miles' operation	G2	C2

A203: Colon cancer tissues

No.	Coordinate		Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
30	H	3, 4	f	62	colon: adenocarcinoma lymph node : tumor metastasis	Distal ileum, cecum and ascending colon, right hemicolectomy: 1. Ulcerofungating adenocarcinoma, moderately differentiated, with 1) spreading to the pericolic fat tissue, not serosa (pT3c) 2) lymphovascular permeation: positive 2. Resection margins, proximal and distal: free of tumor 3. Appendix: no pathological diagnosis 4. Regional lymph nodes: tumor metastasis to 2 out of 16 (2/16)	hemicolectomy	G2	C2
31	H	5, 6	m	61	rectum: adenocarcinoma	Rectum, anterior resection: 1. Adenocarcinoma, moderately differentiated, 1) ulcerofungating type 2) size: 4.5x4.0 cm 3) extension to perirectal fat tissue 4) very close to lateral margin (within 0.5 mm) 5) no lymphovascular permeation 2. Tubular adenoma with low grade dysplasia 3. Regional lymph nodes, principal (0/2), peri-rectal (2/24) : (2/26): tumor metastasis in 2 out of 26 nodes 4. Separately submitted nodes with perinodal tumor extension: tubular adenoma with low grade dysplasia	anterior resection	G2	C2
32	H	7, 8	f	69	rectum: adenocarcinoma	Rectum, anterior resection: 1. Adenocarcinoma, moderately differentiated, ulcerofungating type, with extension to perirectal fat tissue and very close to serosa (<0.8 mm) 2. Resection margins, proximal and distal: free of tumor 3. Regional lymph nodes, principal (0/10), perirectal (0/29) : (0/39): free of tumor	anterior resection	G2	B2

A203: Colon cancer tissues

No.	Coordinate		Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
33	A	9, 10	m	59	colon: adenocarcinoma	Colon, lt hemicolectomy: 1. Colonic adenocarcinoma, grade iii, infiltrating thru the muscularis propria to involve serosa, one of the twenty nine mesenteric lymph nodes shows metastasis (1/29) (astler-coller stage c2) 2. Intermediate nodes: benign reactive lymph nodes (0/5) 3. Principal nodes: benign reactive lymph nodes (0/6)	Hemicolectom	G3	C2
34	A	11, 12	m	46	colon: adenocarcinoma	Colon, right: 1. Adenocarcinoma, poorly differentiated, fungating type, with 1) extension to the pericolic fat tissue with lymphatic invasion 2) lymphoid hyperplasia and edema around tumor 2. Resection margin, proximal and distal free of tumor 3. Lymph node, mesental (0/19), peritumor (0/35), distal (0/23), free of tumor 4. Appendix, no pathological diagnosis	Hemicolectom	G3	B2
35	B	9, 10	f	62	rectum: adenocarcinoma rectum: adenoma	Rectum, low anterior resection: 1. Adenocarcinoma, poorly differentiated, slightly elevated and focally erosive, confined to the mucosa and upper submucosa 2. Adjacent adenoma, high grade 3. Resection margins, proximal and distal: free of tumor 4. Lymph nodes, principal (0/2), regional (0/9): free of tumor in all 11 lymph nodes	anterior resection	G3	B1

A203: Colon cancer tissues

No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage	
36	B	11, 12	f	28	rectum: adenocarcinoma	Rectum, Hartmann's operation: 1. Diffuse infiltrative adenocarcinoma, poorly differentiated with 1) involvement of whole layer of intestine 2) frequent vascular and perineural invasion 2. Resection margins, proximal, distal and lateral: tumor involvement 3. Regional lymph nodes, perirectal: metastatic adenocarcinoma in 8 out of 8 lymph nodes	Hartmann's operation	G3	C2
37	C	9, 10	m	46	rectum: adenocarcinoma lymph node: metastatic carcinoma skin: seborrheic keratosis	Rectum, anterior resection: 1. Fungating adenocarcinoma, poorly differentiated 1) extension to the perirectal fat tissue (pT3a) 2) presence of vascular invasion 3) no perineural invasion 2. Resection margin, proximal, lateral and lateral: free of tumor 3. Regional lymph nodes, principal (0/2), perirectal (2/8) : (2/10): metastatic adenocarcinoma in 2 out of 10 lymph nodes. skin, excision: seborrheic keratosis	anterior resection	G3	C2
38	C	11, 12	m	70	sigmoid colon: adenocarcinoma sigmoid colon: tubular adenoma	Sigmoid colon, radial sigmoid colectomy: 1. Adenocarcinoma, poorly differentiated, ulceroinfiltrative type with 1) extension to pericolic fat tissue and is very close to lateral margin (about 0.5 mm) 2) tubular adenoma with high grade dysplasia 2. Resection margins, proximal and distal: free of tumor 3. Regional lymph nodes, principal (0/7), pericolic (2/22) : (2/29): tumor metastasis in 2 out of 29 lymph nodes	colectomy	G3	C2

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39	D	9, 10	m	69	Ileum: adenocarcinoma appendix: obliteration lymph node: free of tumor	Distal ileum, cecum and ascending colon, right hemicolectomy: 1. Ulcerofungating adenocarcinoma, poorly differentiated, 1) involving cecal base 2) extension to the pericolic fat tissue (pT3c) 3) lymphovascular permeation: positive 2. Appendix: fibroadipose obliteration 3. Resection margins, proximal and distal: free of tumor 4. Regional lymph nodes: free of tumor in all nodes (0/20)	hemicolectomy	G3	B2
40	D	11, 12	m	75	anus: adenocarcinoma lymph node: metastatic carcinoma	En-bloc resection of rectum, urinary bladder and regional nodes: 1. Moderately well differentiated adenocarcinoma infiltrating thru the rectal wall to involve the perirectal fat, metastatic adenocarcinoma in one of the regional 2. Lymph nodes (astler-collar stage c2), urinary bladder, perivesical fat, seminal vesicles, prostate and surgical margins free of neoplastic change Note: none of the other designated node groups (promontory node etc) are involved by metastatic tumor.	En-bloc resecti	G1+G2	C2
41	E	9, 10	m	65	colon: adenocarcinoma	Colon, right: 1. Adenocarcinoma, moderately well differentiated, fungating type, with 1) extension to the pericolic fat tissue 2) tubular adenoma 2. Resection margin upper, free of tumor 3. Resection margin lower, free of tumor 4. Resection margin lateral, free of tumor 5. Regional lymph nodes, mesocolon (0/17), mesentery (0/23), no.1 smv (0/6), n0.2 (0/3), no.3 (0/5), 6. Reactive hyperplasia 7. Chronic granulomatous inflammation with caseous necrosis, consistent with tuberculosis	hemicolectomy	G2+G1	B2

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42	E	11, 12	f	73	rectum: adenocarcinoma	Rectum: 1. Adenocarcinoma, moderately well differentiated, ulcerofungating type, with 1) extension to the perirectal fat tissue 2. Resection margin, proximal, free of tumor 3. Resection margin, distal, free of tumor 4. Resection margin, lateral, free of tumor 5. Lymph nodes, regional (0/6), 1) multiple tumor deposits in fat tissue 2) reactive hyperplasia	Miles' operation	G2+G1	B2
43	F	9, 10	m	72	colon: adenocarcinoma colon: tubular adenoma	Colon, transverse colectomy: 1. Moderately well differentiated colonic adenocarcinoma, Infiltrating thru the transverse colonic wall to reach to the serosal fat, none of the regional lymph nodes(0/15) or resection margin show neoplasm, 2. Another sessile tubular adenoma	Colectom	G2+G1	B2
44	F	11, 12	m	38	rectum: adenocarcinoma	Anus and rectosigmoid colon, Miles' operation: 1. Moderately-well differentiated adenocarcinoma infiltrating thru muscularis propria and extending to perirectal fat tissue. (distance between tumor and lateral margin: 2 mm), Astler-Coller stage B2 2. Resection margin, lateral proximal and distal, free of tumor 3. Regional lymph nodes, hypogastric (0/2), inferior mesenteric artery (0/3), perirectal (0/16), no tumor metastasis out of 21	Miles' operation	G2+G1	C2

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No.	Coordinate		Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage
45	G	9, 10	m	66	colon: adenocarcinoma colon: abscess colon: tubular adenoma	Colon, right, hemicolectomy: 1. Adenocarcinoma, moderately/well differentiated infiltrating through the muscularis propria to involvesubserosa of proximal ascending colon (Astler-Coller stage B2) 2. Pericolic abscess 3. A separated tubular adenoma(0.3x0.3 cm) 4. Resection margin, proximal, distal and lateral: free of tumor 5. Regional lymph nodes, pericolic (0/23): free of tumor in all 23 lymph nodes	hemicolectomy	G2+G1	B2
46	G	11, 12	m	53	rectum: adenocarcinoma lymph node: metastatic carcinoma	Rectum, Miles' operation: 1. Adenocarcinoma, moderately/well differentiated infiltrating through muscularis propria to involve serosa (without extending to spincter muscle, Astler-Coller stage C2, pT3b) 2. Separate foci of tubular adenoma with low grade dysplasia and anal tag 3. Resection margins, proximal, distal and lateral: free of tumor 4. Regional lymph nodes, principal (0/3),perirectal (3/12) : (3/15): metastatic carcinoma in 3 out of 15 lymph nodes	Miles' operation	G2+G3	C2
47	H	9, 10	f	55	colon: adenocarcinoma	Colon, right, hemicolectomy: 1. Adenocarcinoma, moderately/well differentiated, infiltrating through the cecal wall to involve subserosa, with extension to ileocecal valve and involvement of regional lymph nodes (2/23) (Astler-Coller stage C2, pT3c) 2. Resection margins, proximal and distal: free of tumor	hemicolectomy	G2+G1	C2

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No.	Coordinate	Sex	Age	Key Word	Histological Diagnosis	Surgery	Grade	TNM Stage	
48	H	11,12	m	44	<p>rectum: adenocarcinoma lymph node: metastatic adenocarcinoma</p>	<p>Rectum, low anterior resection: 1. Fungating adenocarcinoma, moderately to poorly differentiated, with 1) extension to the pericolic fat tissue (pT3a) 2) marked lymphovascular permeation 3) two distinct histologic features (moderately differentiated + poorly differentiated adenocarcinoma) 4) resection margins, proximal, distal and lateral: free of tumor 5) lymph nodes, principal (0/2), perirectal (4/10) : (4/12): 6) metastatic adenocarcinoma in 4 out of 12 lymph nodes 2. Appendix, incidental appendectomy: no pathological diagnosis</p>	anterior resection	G2+G3	C2
49	I	9, 10	m	54	<p>rectum: adenocarcinoma</p>	<p>Rectum with perirectal soft tissue, low anterior resection: 1. Fungating adenocarcinoma, moderately and poorly differentiated, probably arising in adenomatous poly with 1) size: 2.8x2.8 cm 2) infiltrative growth 3) extension to pericolic fatty tissue 4) vascular invasion 5) intact proximal, distal and lateral resection margins 6) metastasis to 4 out of 7 pericolic regional lymph nodes (pericolic (4/7), principal, separately submitted (0/0)) 2. Colon, separately submitted, segmental resection: free from tumor extension</p>	anterior resection	G2+G3	C2

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50	I	11, 12	m	70	sigmoid colon: adenocarcinoma	Sigmoid colon with mesentery, segmental resection: 1. Ulcerofungating adenocarcinoma, well to moderately differentiated, with 1) size: 6x5.5 cm 2) infiltrative growth 3) penetration of muscle layer and extension to subserosal fatty tissue 4) no vascular and perineural invasion 5) no metastasis to regional lymph nodes (0/15, pericolic (0/15) and principal, separately submitted (0/0))	segmental resection	G1+G2	B2
51	I	1Non-neoplastic	m	76	sigmoid colon: adenocarcinoma	ulcerative adenocarcinoma, moderately differentiated with 1) Size :3.5*3.5cm 2) Expanding growth 3) Penetration of muscle layer and extension to pericolic fatty tissue. 4) Lymphovascular invasion 5) Intact proximal and distal resection margins 6) Metastasis tot 1out of 9 pericolic fatty tissue (1/9:pericolic(1/9) and principal,separately submitted(0/0))	sigmoid colon with pericolic fatty tissue, anterior resection	G2	C2
52	I	2Non-neoplastic	m	75	colon: adenocarcinoma	colorectum with perirectal fatty tissue: 1.ulcerofungating adenocarcinoma, moderately to poorly differentiated with 1) size: 4.5*4.3cm 2) infiltrative growth 3) extension to perirectal soft tissue and serosa 4) lymphovascular and perineural invasion 5) intact proximal,distal and perirectal lateral resection margins 2. Metastasis to 7 out of 21 perirectal lymph nodes (perirectal (7/21), principal,separately submitted (0/0))	colorectum with perirectal fatty tissue, resection	G2+G3	C2

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53	I	3Non-neoplastic	m	71	colon: adenocarcinoma	colon, cecum and transverse colon: 1.ulcerofungating adenocarcinoma, moderately differentiated in ascending colon with 1) size: 5.5*4.5 cm 2) extension to pericolic fatty tissue 3) diffuse infiltrative growth 4) perineural and lymphovascular invasion 5) intact proximal and distal resection margins 2.No metastasis to pericolic fatty tissue (0/22)	right hemicolectomy	G2	B2
54	I	4Non-neoplastic	m	74	colon: adenocarcinoma	Colorectum with pericolic fatty tissue, left hemicolectomy: 1. Ulcerofungating adenocarcinoma, moderately differentiated, probably arising in adenomatous polyp 1) size: 5.5x5 cm 2) expanding growth 3) extension to inner muscle	left hemicolectomy	G2	B1

Tumor stage

- : Extending into the muscularis propria but not penetrating through it: uninvolved nodes
- B2 : Penetrating through the muscularis propria: uninvolved nodes
- c1 : Extending into the muscularis propria but not penetrating through it: involved nodes
- c2 : Penetrating through the muscularis propria: involved nodes
- D : Distant metastatic spread

Grade

- G1 : Well differentiated
- G2 : Moderately differentiated
- G3 : Poorly differentiated