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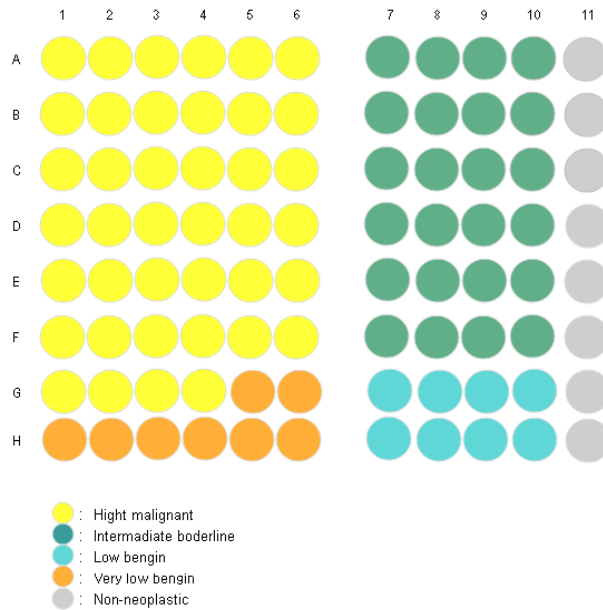
Specifications:

- No. of cases: 40
- Tissue type: Gastrointestinal stromal tumor tissues
- No. of spots: 2 spots from each tumor case (80 spots)
8 non-neoplastic spots (8 spots)
- Total spots: 88
- 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:



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Summary of tissue spots

No	Coordinate	Sex	Age	Key word	Grade	
1	A	1,2	m	61	Stomach: GIST	high
2		3,4	m	67	Jejunum: GIST	high
3		5,6	m	62	Stomach: GIST	high
4		7,8	m	44	Stomach: GIST	intermediate
5		9,10	f	46	Stomach: GIST	intermediate
6		11	m	44	Esophagus: non-neoplastic	
7	B	1,2	m	62	Stomach: GIST	high
8		3,4	m	60	Stomach: GIST	high
9		5,6	f	68	Stomach: GIST	high
10		7,8	f	35	Stomach: GIST	intermediate
11		9,10	m	50	Stomach: GIST	intermediate
12		11	m	44	Esophagus: non-neoplastic	
13	C	1,2	m	56	Stomach: GIST	high
14		3,4	m	64	Stomach: GIST	high
15		5,6	f	26	Stomach: GIST	high
16		7,8	f	51	Stomach: GIST	intermediate
17		9,10	m	43	Stomach: GIST	intermediate
18		11	m	60	Stomach: non-neoplastic	
19	D	1,2	m	49	Stomach: GIST	high
20		3,4	m	73	Stomach: GIST	high
21		5,6	m	75	Stomach: GIST	high
22		7,8	f	33	Small intestine: leiomyosarcoma	intermediate
23		9,10	m	45	Small intestine: GIST	intermediate
24		11	m	60	Stomach: non-neoplastic	
25	E	1,2	m	48	Small intestine: leiomyosarcoma	high
26		3,4	m	34	Small intestine: GIST	high
27		5,6	f	80	Small intestine: GIST	high
28		7,8	f	49	Small intestine: GIST	intermediate
29		9,10	m	61	Small intestine: GIST	intermediate
30		11	m	54	Duodenum: non-neoplastic	

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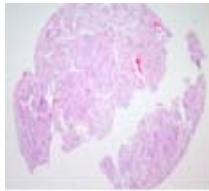
Summary of tissue spots

No	Coordinate	Sex	Age	Key word	Grade	
31	F	1,2	m	60	Small intestine: GIST	high
32		3,4	f	41	Small intestine: GIST	high
33		5,6	f	40	Small intestine: GIST	high
34		7,8	f	53	Small intestine: GIST	intermediate
35		9,10	m	50	Duodenum: GIST	intermediate
36		11	m	54	Duodenum: non-neoplastic	
37	G	1,2	m	59	Colon: GIST	high
38		3,4	f	63	Stomach: GIST	high
39		5,6	m	71	Esophagus: GIST	very low
40		7,8	f	57	Stomach: GIST	low
41		9,10	m	40	Small intestine: GIST	low
42		11	f	60	Jejunum: non-neoplastic	
43	H	1,2	m	67	Stomach: leiomyoma	very low
44		3,4	f	68	Stomach: GIST	very low
45		5,6	f	64	Stomach: GIST	very low
46		7,8	m	59	Duodenum; GIST	low
47		9,10	f	27	Duodenum; GIST	low
48		11	f	60	Jejunum: non-neoplastic	

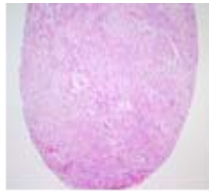
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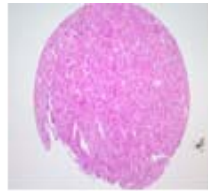
QC sheet_LOT#122120503141
Hematoxylin and Eosin staining



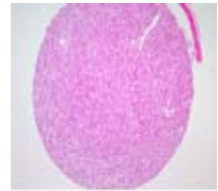
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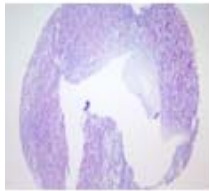
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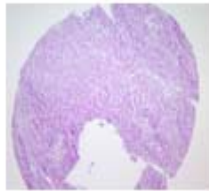
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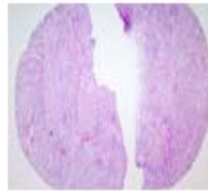
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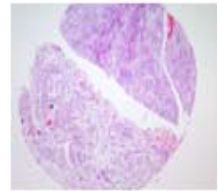
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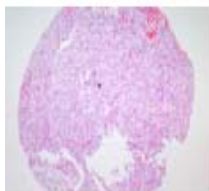
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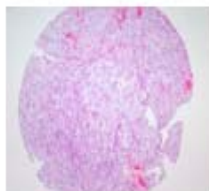
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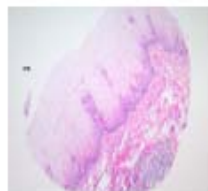
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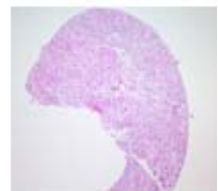
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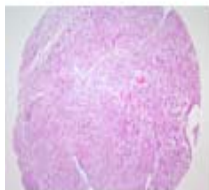
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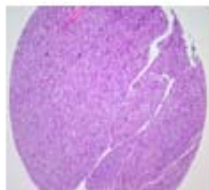
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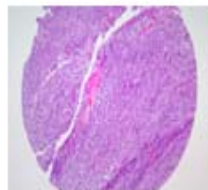
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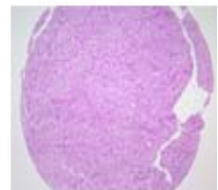
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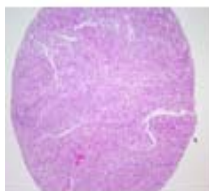
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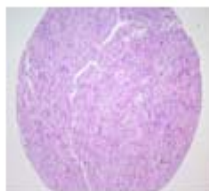
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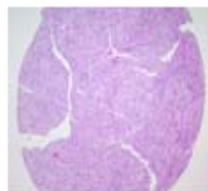
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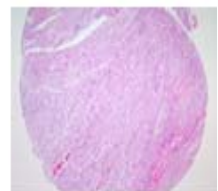
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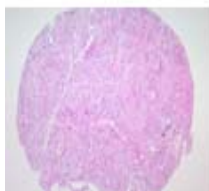
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B8



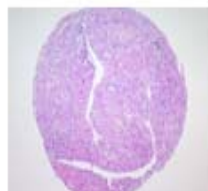
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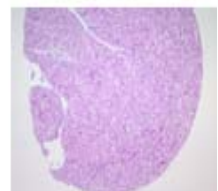
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B11



C1



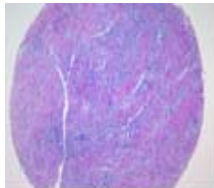
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A225: Gastrointestinal stromal tumor tissues

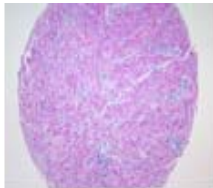
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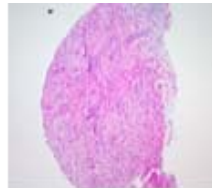
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Hematoxylin and Eosin staining



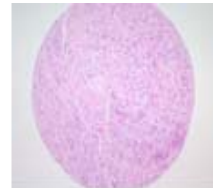
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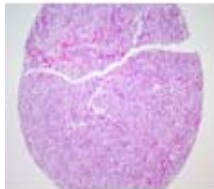
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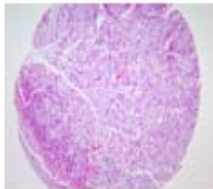
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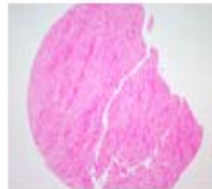
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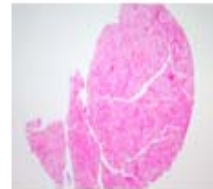
C7



C8



C9



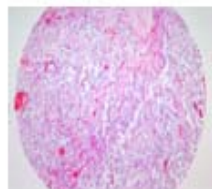
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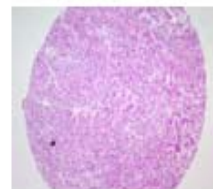
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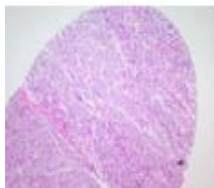
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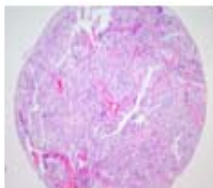
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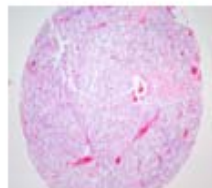
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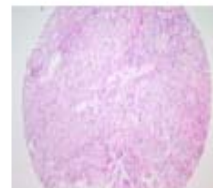
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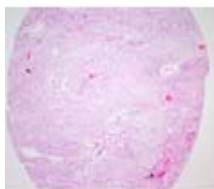
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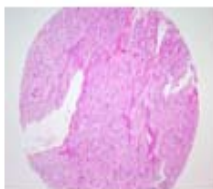
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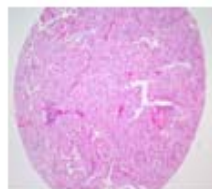
D7



D8



D9



D10



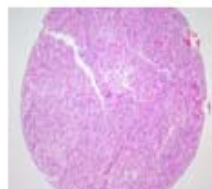
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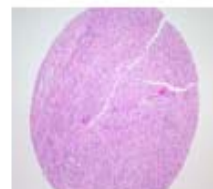
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E2



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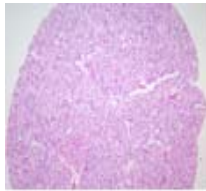


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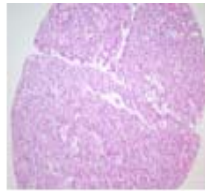
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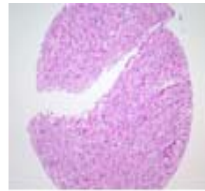
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Hematoxylin and Eosin staining



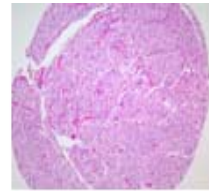
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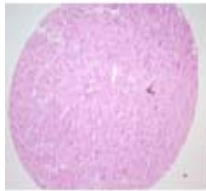
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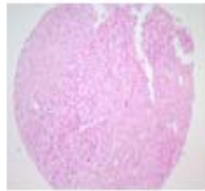
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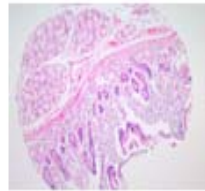
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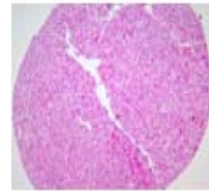
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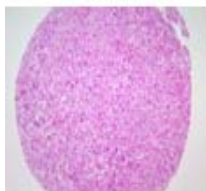
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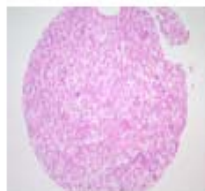
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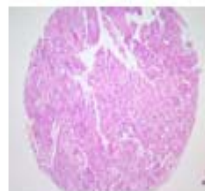
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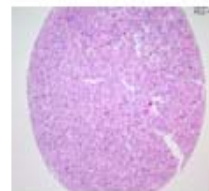
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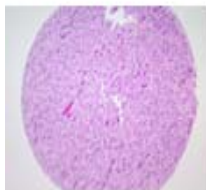
F3



F4



F5



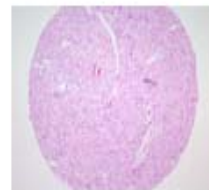
F6



F7



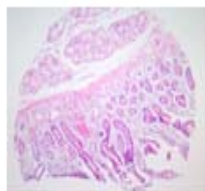
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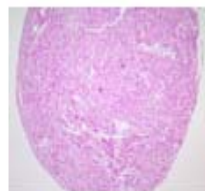
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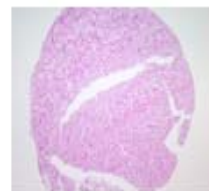
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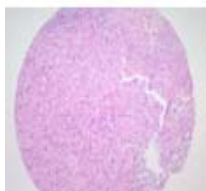
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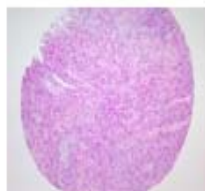
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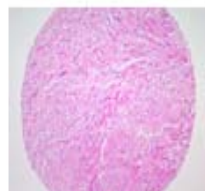
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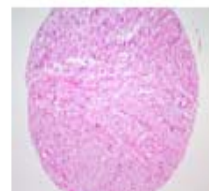
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G4



G5

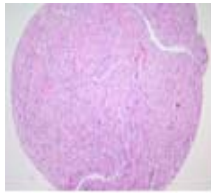


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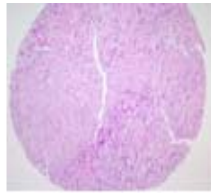
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For research use only

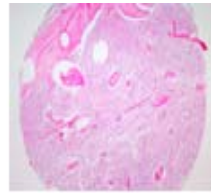
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Hematoxylin and Eosin staining



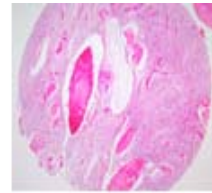
G7



G8



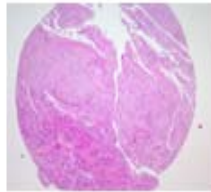
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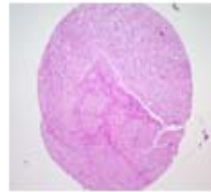
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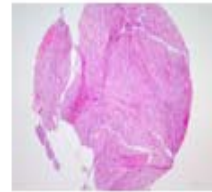
G11



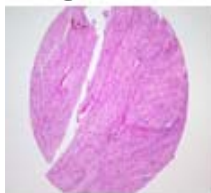
H1



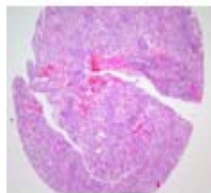
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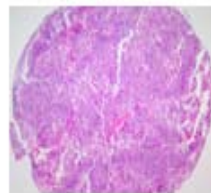
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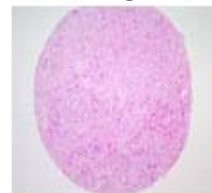
H4



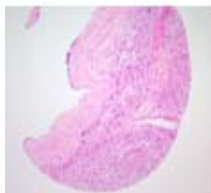
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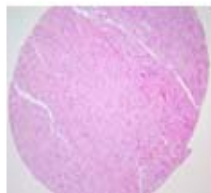
H6



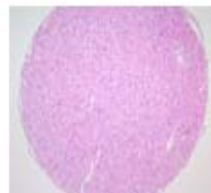
H7



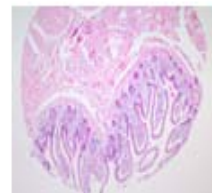
H8



H9



H10



H11

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
1	A 1,2	m	61	stomach: GIST	Stomach, wedge resection: gastrointestinal stromal tumor(GIST), malignant, lower grade. <Additional report> EM> Ultrastructural features show undifferentiated mesenchymal cells without evidence of specific differentiation.	high
2	A 3,4	m	67	jejunum: GIST	1. Jejunum, segmental resection: gastrointestinal stromal tumor with combined neural and smooth muscle differentiation, malignant, involving proper muscle and serosa 1) resection margins, proximal and distal: free of tumor 2) lymph nodes, mesenteric(0/37), mesocolic(0/7):(0/44): free of tumor in 44 lymph nodes 2. Colon, segmental resection: free of tumor showing marked serosal inflammation and granulation tissue formation 3. Stomach and jejunum, gastrojejunostomy anastomosing site, segmental resection: chronic gastritis with serosal inflammation and granulation tissue formation.	high

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
3	A 5,6	m	62	stomach: GIST	<p>Stomach, pancreas, spleen, gastrointestinal stromal tumor, malignant</p> <p>1) Immunohistochemical stain: CD34 (+), S-100(+), smooth muscle actin(-) 2) resection margin, pancreas: free of tumor 3) spleen: congestion.</p> <p><Additional report> Flow cytometric analysis result: Tissue type: Fresh. Total events: 8121. G1 CV: 3.7. Cell Cycle statistics: G1: 65.4 S: 28.2 G2+M: 6.4 Total: 100% Interpretation of pathologist: Diploid tumor.</p>	high
4	A 7,8	m	44	stomach: GIST	<p>Stomach, excision: gastrointestinal stromal tumor, low grade malignant, see note Note: Close follow up is recommended.</p>	intermediate
5	A 9,10	f	46	stomach: GIST	<p>Stomach, total gastrectomy:</p> <p>1) epithelioid GIST(gastrointestinal stromal tumor) with uncertain malignant potential, involving submucosa and proper muscle 2) helicobacter pylori-chronic gastritis 3) resection margins, proximal and distal: free of tumor 4) regional lymph nodes, No.3(0/15), No.4(0/8), No.5(0/7), No.6(0/3), No.7(0/6), No.8(0/7), No.11(0/1):(0/47): free of tumor.</p> <p><Additional report> Smooth muscle actin(-), CD34(+).</p>	intermediate

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
6	A 11	m	44	esophagus: non-neoplastic	Stomach and esophagus, proximal gastrectomy: leiomyoma, benign 1) resection margins, proximal and distal: free from tumor extension 2) regional lymph nodes, perigastric(0/13): reactive hyperplasia 3) Immunohistochemical staining: c-kit, CD34, S-100 protein: negative reactivities, Actin: positive reactivity.	
7	B 1,2	m	62	stomach: GIST	Stomach, excisional biopsy: stromal tumor, high grade Note: Mitotic count(3-4/10 HPF).	high
8	B 3,4	m	60	stomach: GIST	Stomach, wedge resection: 1) gastrointestinal stromal tumor, malignant 2) immunohistochemical staining: c-Kit, CD34: Strong positive reaction S-100: Focal positive reaction Actin: Negative reaction .	high
9	B 5,6	f	68	stomach: GIST	Stomach and esophagus, proximal gastrectomy: gastrointestinal stromal tumor, low grade malignant potential with 1) size: 4cm in the greatest diameter 2) intact resection margin 3) reactive hyperplasia without tumor metastasis(0/2).	high
10	B 7,8	f	35	stomach: GIST	Stomach, wedge resection: gastrointestinal stromal tumor, with uncertain malignant potential (low grade malignancy).	intermediate
11	B 9,10	m	50	stomach: GIST	Stomach, wedge resection: 1) gastrointestinal stromal tumor (GIST) of uncertain malignant potential (MI: 2/10 HPF), see note 2) result of immunohistochemical staining: C-kit(+), Actin(-), S-100(-), MIB-1(+,-) Note: Underlying resection margin is closely attached to the tumor.	intermediate

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
12	B 11	m	44	esophagus: non-neoplastic	<p>Stomach and esophagus, proximal gastrectomy: leiomyoma, benign</p> <p>1) resection margins, proximal and distal: free from tumor extension 2) regional lymph nodes, perigastric(0/13): reactive hyperplasia 3) immunohistochemical staining: c-kit, CD34, S-100 protein: negative reactivities, Actin: positive reactivity.</p>	
13	C 1,2	m	56	stomach: GIST	<p>1. Stomach, subtotal gastrectomy: 1) gastrointestinal stromal tumor(GIST), malignant - size: 21x14cm - marked necrosis and cystic change - incomplete resection margin at the omentum 2) resection margins, proximal and distal: free of tumor 3) regional lymph nodes: free of tumor in all nodes(0/12), in detail, N3(0/0), N4(0/6), N10(0/6) 4) results of immunohistochemical staining: c-Kit(+), Vimentin(+), Cytokeratin(-), CD34(-), SMA(-), Desmin(-) 2. Spleen, splenectomy: free of tumor.</p>	high
14	C 3,4	m	64	stomach: GIST	<p>Stomach, radical proximal gastrectomy: gastrointestinal stromal tumor, malignant, in posterior body with</p> <p>1) size: 14x11x9cm 2) mitotic count: about 5/10 HPF 3) high cellularity but not significant pleomorphism 4) expanding growth but invasion to mucosa, perigastric fatty tissue and serosa 5) extensive necrosis 6) intact proximal and distal resection margin 7) no omental lymph node metastasis (0/23): No.1(0/0), No.2(0/2), No.3(0/6), No.4(0/8), No.7(0/5), No.8(0/2), No.11(0/0) and No.15(0/0).</p>	high

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
15	C 5,6	f	26	stomach: GIST	<p>Stomach, wedge resection: gastrointestinal stromal tumor, uncertain malignant potential, completely excised (safety margin: less than 0.5cm), see note</p> <p>1) results of immunohistochemical staining: CD34, actin: negative reactivities S-100 protein and c-kit: equivocal reactivities</p> <p>Note: It is very difficult to predict the biologic behavior in this. However, the possibility that this tumor could be recur locally and metastasize is still present. Close follow up is recommended.</p>	high
16	C 7,8	f	51	stomach: GIST	<p>Stomach, wedge resection: gastrointestinal stromal tumor, probably malignant with</p> <p>1) multiple mitotic figures (more than 5/50 HPF) 2) size: 4cm in the largest dimension of resected specimen 3) results of immunohistochemical staining: c-kit: positive reaction, S-100 protein, CD34: weakly positive reactions, Actin: negative reaction.</p>	intermediate
17	C 9,10	m	43	stomach: GIST	<p>Stomach, proximal gastrectomy:</p> <p>1) gastrointestinal stromal tumor, benign, showing prominent smooth muscle differentiation 2) lymph nodes (0/11): reactive hyperplasia 3) results of immunohistochemical staining: c-kit: weakly positive reaction, S-100 protein and smooth muscle actin: positive reactions, CD34: negative reaction.</p>	intermediate

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
18	C 11	m	60	stomach: non-neoplastic	<p>Stomach with omentums, subtotal gastrectomy: early gastric carcinoma (EGC type IIc+III), adenocarcinoma, moderately differentiated, in distal antrum with</p> <ol style="list-style-type: none"> 1) size: 2.3x2cm 2) intestinal type (by Lauren classification) 3) focal invasion to submucosal space (depth of invasion: upper 1/3 of total submucosal thickness) 4) intact both resection margins 5) no metastasis to regional omental lymph nodes (No.3(0/3), No.4(0/5), No.5(0/0), No.6(0/10), No.7(0/10), No.8(0/2)) 6) multifocal atrophic gastritis with intestinal metaplasia especially in antrum. 	
19	D 1,2	m	49	stomach: GIST	<p>Stomach, wedge resection: gastrointestinal stromal tumor, epithelioid type, malignant, with</p> <ol style="list-style-type: none"> 1) size: 10x9.5x3.5cm 2) expanding growth with focal infiltration 3) low mitotic figure 4) marked myxoid and cystic change 5) intact mucosal resection margins. 	high
20	D 3,4	m	73	stomach: GIST	<ol style="list-style-type: none"> 1. Stomach with omentum, subtotal gastrectomy: gastrointestinal stromal tumor, malignant with 1) size: 10.5x8.5x3.5cm 2) expanding growth with multifocal infiltration to surrounding tissue including subserosal space, muscle proper and submucosal space 3) high mitotic figures: 10/10 HPF 4) focal necrosis 5) intact proximal and distal resection margins 6) no metastasis to omental lymph nodes (No.3(0/4) and No.4(0/6)) 7) subserosal cystic structure lined by acellular hemorrhagic and fibrotic tissue 2. Colon, separately submitted: free from tumor extension. 	high

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
21	D 5,6	m	75	stomach: GIST	<p>Stomach with omentum, gastrointestinal stromal tumor, probably malignant.</p> <p>1) resection margins, proximal(esophagus) and distal(stomach): free from tumor extension</p> <p>2) regional lymph nodes, omental: free from tumor extension(0/10: No.1-2(0/5), No.3(0/5))</p> <p>3) results of immunohistochemical staining:</p> <ul style="list-style-type: none"> - c-Kit, CD34, S-100 protein: positive reactivities - Actin: negative reactivity . 	high
22	D 7,8	f	33	small intestine: leiomyosarcoma	<p>Small bowel, segmental resection: submucosal stromal sarcoma, low grade(leiomyosarcoma), with serosal involvement.</p> <p>1) resection margin, proximal and distal: free of tumor</p> <p>2) regional lymph nodes(0/4): free of tumor</p> <p>Note: The tumor shows high cellularity with bland cytologic feature and its size is 4cm in maximal diameter. The mitotic count is 2/10HPF in average. Necrosis or pleomorphism is not present.</p>	intermediate
23	D 9,10	m	45	small intestine: GIST	<p>Small intestine, segmental resection:</p> <p>1) gastrointestinal stromal tumor, uncertain malignant potential (borderline malignancy)</p> <p>2) resection margins, proximal and distal: free from tumor extension.</p> <p>3) result of immunohistochemical staining:</p> <ul style="list-style-type: none"> c-kit and S-100 protein: positive immunoexpressions, SMA: negative immunoexpression. 	intermediate
24	D 11	m	60	stomach: non-neoplastic	<p>Stomach with omentums, subtotal gastrectomy: early gastric carcinoma (EGC type IIc+III), adenocarcinoma, moderately differentiated, in distal antrum with</p> <p>1) size: 2.3x2cm</p> <p>2) intestinal type (by Lauren classification)</p> <p>3) focal invasion to submucosal space (depth of invasion: upper 1/3 of total submucosal thickness)</p> <p>4) intact both resection margins</p> <p>5) no metastasis to regional omental lymph nodes (No.3(0/3), No.4(0/5), No.5(0/0), No.6(0/10), No.7(0/10), No.8(0/2))</p> <p>6) multifocal atrophic gastritis with intestinal metaplasia especially in antrum.</p>	

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
25	E 1,2	m	48	small intestine: leiomyosarcoma	Small intestine, jejunum, segmental resection: 1) leiomyosarcoma involving muscularis mucosa and subserosa 2) resection margins, proximal and distal, free of tumor extension.	high
26	E 3,4	m	34	small intestine: GIST	Small intestine and omentum, segmental resection and omentectomy: 1) malignant gastrointestinal stromal tumor (GIST), high grade, with extensive involvement of serosa and diffuse metastasis to omentum 2) small intestine, bilateral, resection margins: free from tumor extension.	high
27	E 5,6	f	80	small intestine: GIST	Small bowel, segmental resection: gastrointestinal stromal tumor, malignant. 1) resection margin, proximal and distal: free of tumor 2) mesentery: stromal tumor, malignancy 3) results of immunohistochemical stains: CD34(+), NSE(+), chromogranin A(-), SMA(-).	high
28	E 7,8	f	49	small intestine: GIST	Small bowel, jejunum, segmental resection: 1) gastrointestinal stromal tumor(GIST), malignant - tumor size(7x6cm totally) - mitosis 1-2/20 HPF - with central necrosis 2) resection margins, proximal and distal: free of tumor 3) mesocolic mass: Mesenteric fat with suppurative inflammation 4) regional lymph nodes: Free of tumor in all nodes(0/33) 5) results of immunohistochemical staining: C-kit(+), SMA(-), S-100(-), CD34(-), Desmin(-).	intermediate
29	E 9,10	m	61	small intestine: GIST	Small intestine, segmental resection: 1) gastrointestinal stromal tumor with uncertain malignant potential (borderline malignancy) 2) chronic destructive enteritis with ulceration, see note. Note: The etiology of this lesion is not uncertain because there is no pathologic finding to specify a diagnosis. However, Crohn's disease is one possibility to induce this lesion. In addition, the circulatory disturbance regardless etiology is another possibility. Clinical correlation is recommended. Results of immunohistochemical staining for c-kit and CD34 monoclonal antibodies: positive reactivities.	intermediate

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
30	E 11	m	54	duodenum: non-neoplastic	<p>Stomach with omentums, radical subtotal gastrectomy: ulcerofungating carcinoma (Borrmann type II), mucinous carcinoma, in pylorus and distal antrum with</p> <ol style="list-style-type: none"> 1) size: 9x6cm 2) expanding growth 3) extension to outer muscle layer (confined to proper muscle layer) 4) intact proximal and distal resection margins 5) no metastasis to regional omental lymph nodes (No.3(0/6), No.4(0/4), No.5(0/0), No.6(0/19), No.7(0/7), No.8(0/5), No.9(0/4), No.11(0/8), and No.12(0/2)) 6) multifocal atrophic gastritis with intestinal metaplasia in nonneoplastic mucosa. 	
31	F 1,2	m	60	small intestine: GIST	<p>Small bowel, jejunum, segmental resection: malignant gastrointestinal stromal tumor(GIST), with extension to peri-jejunal soft tissue, see note.</p> <ol style="list-style-type: none"> 1) resection margins, proximal and distal: free of tumor 2) regional lymph node(0/1): free of tumor <p>Note: The tumor is composed of pleomorphic spindle cells with high mitotic figures(around 16/10HPF).The tumor involves whole layer of small bowel wall including mucosa. The most lateral surgical margins are focally involved by the tumor.</p> <p><Additional report> EM> Ultrastructural features of the tumor shows undifferentiated mesenchymal cells without evidence of smooth muscle or neural differentiation.</p>	high
32	F 3,4	f	41	small intestine: GIST	<p>Small intestine, segmental resection: consistent with gastrointestinal stromal tumor, with low grade malignant potential(malignant gastrointestinal stromal tumor, low grade), see note.</p> <p>Note: The immunoeexpressions for c-Kit, S-100 protein, actin and CD34 are positive in the cytoplasm of tumor cells. Besides, the tumor has large size, necrosis, hypercellularity and cellular pleomorphism, which is indicative of poor biologic behavior. However, the mitotic figure, most important factor for predicting biologic behavior is very rare.</p>	high

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
33	F 5,6	f	40	small intestine: GIST	Small intestine with mesentery, segmental resection: gastrointestinal stromal tumor, malignant with 1) size: 17.5x10x9cm 2) invasion into mucosa and proper muscle layer 3) mitotic count: about 5/10HPF 4) high cellularity with mild pleomorphism.	high
34	F 7,8	f	53	small intestine: GIST	Small intestine, segmental resection: gastrointestinal stromal tumor, low grade malignant. Note: Result of immunohistochemical staining: c-kit, CD34, S-100 protein, SMA: positive	intermediate
35	F 9,10	m	50	duodenum: GIST	Duodenum, first portion, resection: gastrointestinal stromal tumor, with uncertain malignant potential (borderline malignancy). Note: Result of immunohistochemical staining c-Kit and CD34: Positive reactivity .	intermediate
36	F 11	m	54	duodenum: non-neoplastic	Stomach with omentums, radical subtotal gastrectomy: ulcerofungating carcinoma (Borrmann type II), mucinous carcinoma, in pylorus and distal antrum with 1) size: 9x6cm 2) expanding growth 3) extension to outer muscle layer (confined to proper muscle layer) 4) intact proximal and distal resection margins 5) no metastasis to regional omental lymph nodes (No.3(0/6), No.4(0/4), No.5(0/0), No.6(0/19), No.7(0/7), No.8(0/5), No.9(0/4), No.11(0/8), and No.12(0/2)) 6) multifocal atrophic gastritis with intestinal metaplasia in nonneoplastic mucosa.	
37	G 1,2	m	59	colon: GIST	Colon, left, hemicolectomy: gastrointestinal stromal tumor, multiple, malignant, recurred, mainly located in mesocolon 1) resection margin, proximal and distal: free of tumor 2) regional lymph nodes(0/12): free of tumor in all 12 lymph nodes 3) soft tissue: gastrointestinal stromal tumor, malignant Note: The results of immunohistochemical stain: SMA(-), CD34(-).	high

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
38	G 3,4	f	63	stomach: GIST	Stomach, wedge resection: gastrointestinal stromal tumor with uncertain malignant potential showing cystic degeneration and myxoid change <Additional report> EM> Ultrastructural features show plump cells coated by basal lamina material. Abundant-cytoplasm show numerous mitochondriae, RER, ribosomes and abundant intermediate filaments with focal densities. Occasionally pinocytotic vesicles are identified. These findings suggest possible smooth muscle differentiation.	high
39	G 5,6	m	71	esophagus: GIST	Esophagus, esophagectomy: ulcerofungating squamous cell carcinoma, moderately differentiated, with 1) size: 8x3cm 2) infiltrative growth 3) extension to 2/3 of submucosal space 4) no vascular and perineural invasion 5) intact proximal and distal resection margins 6) no metastasis to regional lymph nodes (celiac(0/2), periesophageal(0/7)) 7) gastrointestinal stromal tumor, benign, in upper body of stomach.	very low
40	G 7,8	f	57	stomach: GIST	Stomach, fundic, wedge resection: gastrointestinal tumor, with uncertain malignant potential, incompletely excised, see note. Note: Close follow up is recommended.	low
41	G 9,10	m	40	small intestine: GIST	Small intestine, jejunum, segmental resection: gastrointestinal stromal tumor(GIST), benign. Note: Results of immunohistochemical staining: c-Kit(+), S-100(+), SMA(-).	low

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
42	G 11	f	60	jejunum: non-neoplastic	<p>1. Small intestine, segmental resection:</p> <p>1) gastrointestinal stromal tumor, epithelioid type, with intermediate risk of aggressive behavior</p> <p>2) lymph nodes, omentum: free from tumor extension(0/12)</p> <p>2. Skin, separately submitted:</p> <p>1) capillary hemangioma</p> <p>2) pigmented nevocellular nevus, intradermal</p> <p>Note: Immunohistochemical staining: c-kit, SMA, S-100 protein: Positive reactivities, CD34: Equivocal positive reactivity.</p>	
43	H 1,2	m	67	stomach: leiomyoma	<p>Stomach, excision of tumor, FS:</p> <p>gastrointestinal stromal tumor, consistent with leiomyoma.</p> <p>Note: The results of immunohistochemistry: S-100(-), Actin(-), Desmin(-), MIB-1(low).</p>	very low
44	H 3,4	f	68	stomach: GIST	<p>Stomach, wedge resection:</p> <p>gastrointestinal stromal tumor(GIST), benign.</p>	very low
45	H 5,6	f	64	stomach: GIST	<p>Stomach, excision:</p> <p>1) gastrointestinal stromal tumor, benign.</p> <p>2) results of immunohistochemical staining: c-kit and CD34: Mild positive reactions, SMA and S-100 protein: Negative reactions.</p>	very low
46	H 7,8	m	59	duodenum; GIST	<p>1. Duodenum, wedge resection: stomral tumor of unknown malignant potential</p> <p>2. Liver, biopsy: the additional report will follow</p> <p>- Ultrastructural findings -</p> <p>The tumor is composed of spindle cells with elongated nuclei showing heterochromatin pattern with marked marginal chromatin condensation and prominent nucleoli. Slight indentation of nuclei is observed. No intercellular junctions are found. Elongated cytoplasm are filled with numerous mitochondriae, RERs, small amount of thin filaments, lysosomes and a few lipid droplets. Definite evidence of neurogenic or smooth muscle differentiation is not observed. Intervening stroma contains collagen fibers. These findings are compatible with mesenchymal cells of GIST.</p>	low
47	H 9,10	f	27	duodenum; GIST	<p>Duodenum, excision:</p> <p>gastrointestinal stromal tumor with uncertain malignant potential (borderline malignancy), incompletely excised.</p>	low

A225: Gastrointestinal stromal tumor tissues

No	Coordinate	Sex	Age	Key word	Histological Diagnosis	Grade
48	H 11	f	60	jejunum: non-neoplastic	<p>1. Small intestine, segmental resection:</p> <p>1) gastrointestinal stromal tumor, epithelioid type, with intermediate risk of aggressive behavior</p> <p>2) lymph nodes, omentum: free from tumor extension(0/12)</p> <p>2. Skin, separately submitted:</p> <p>1) capillary hemangioma</p> <p>2) pigmented nevocellular nevus, intradermal</p> <p>Note: Immunohistochemical staining: c-kit, SMA, S-100 protein: positive reactivities, CD34: equivocal positive reactivity.</p>	