

Table S1. Clinicopathological characteristics of individual cases of carcinoma and co-occurring IPMN.

Patient ID	Age	Gender	Cancer						IPMN						Surgical procedure	Clinical follow-up Status (overall survival / follow-up period in months)
			Diagnosis	Location	Size (cm)	Stage		Grade	Location	Size (cm)	Type	Subtype	Grade			
						T	N									
IPP01	82	F	Ductal adenocarcinoma	Neck	3	3	1	2	Neck	2	BD	Pancreatobiliary	HGD	W	Dead (26.8)	
IPP02	79	M	Ductal adenocarcinoma	Tail	8	3	1	2	Tail	1	BD	Gastric	HGD	D	Dead (14.7)	
IPP03	60	M	Ductal adenocarcinoma	Tail	4	4	1	3	Tail	2	BD	Gastric	LGD	D	Dead (66.2)	
IPP04	62	F	Ductal adenocarcinoma	Head	3.5	3	1	3	Head	1.5	BD	Gastric	HGD	W	Dead (49.4)	
IPP05	50	M	Ductal adenocarcinoma	Multifocal	5.5	2	1	3	Multifocal	14	MD	Pancreatobiliary	HGD	W	Dead (24.4)	
IPP06	79	F	Ductal adenocarcinoma	Head	3	4	0	2	Head	2	N/A	Gastric	HGD	T	Dead (20.5)	
IPP07	58	M	Ductal adenocarcinoma	Head	3	3	1	2	Head	2	BD	Pancreatobiliary	HGD	W	Dead (43.7)	
IPP08	80	M	Ductal adenocarcinoma	Head	3.5	3	0	2	Head	6	BD	Pancreatobiliary	HGD	W	Alive (30.2)	
IPP09	53	M	Ductal adenocarcinoma	Head	3.5	3	1	2	Head	4.5	Mixed	Oncocytic/Gastric	HGD	W	Dead (8.1)	
IPP10	67	M	Ductal adenocarcinoma	Neck	3.5	3	1	2	Neck	1.3	N/A	Gastric	HGD	W	Alive (112.8)	
IPP11	65	M	Ductal adenocarcinoma	Head	3.5	3	0	2	Multifocal	1.2	N/A	Gastric	LGD	W	Dead (9.9)	
IPP12	59	F	Ductal adenocarcinoma	Tail	2.5	2	0	2	Multifocal	1.5	BD	Gastric	LGD	D	Dead (33.8)	
IPP13	79	M	Ductal adenocarcinoma	Head	4	3	0	2	Head	2.5	BD	Gastric	LGD	W	Dead (36.8)	
IPP14	67	M	Ductal adenocarcinoma	Head	3.5	3	1	3	Head	1	BD	Gastric	LGD	W	Dead (7.0)	
IPP15	72	M	Ductal adenocarcinoma	Head	5	2	1	2	Head	1	BD	Pancreatobiliary	HGD	W	Dead (9.6)	
IPP16	72	M	Ductal adenocarcinoma	Neck	6	3	1	2	Neck	6	MD	Gastric	HGD	W	Dead (17.2)	
IPP17	88	M	Ductal adenocarcinoma	Head	3.5	3	1	2	Head	5	MD	Pancreatobiliary	HGD	W	Dead (6.2)	
IPP18	70	M	Ductal adenocarcinoma	Neck	2.5	2	0	2	Neck	5	Mixed	Intestinal	HGD	D	Dead (52.6)	
IPP19	60	F	Ductal adenocarcinoma	Head	2	1	0	2	Head	1	MD	Intestinal	HGD	W	Dead (52.3)	
IPP20	79	F	Ductal adenocarcinoma	Head	4	2	1	2	Head	1.5	MD	Pancreatobiliary	HGD	W	Alive (38.4)	
IPP21	65	M	Ductal adenocarcinoma	Multifocal	4.4	2	0	3	Tail	4.4	BD	Gastric	HGD	T	Dead (11.5)	
IPP22	92	F	Ductal adenocarcinoma	Body	1.5	1	0	1	Body	2.2	Mixed	Gastric	HGD	D	Alive (28.6)	
IPP23	60	F	Ductal adenocarcinoma	Head	3.5	2	1	2	Head	2	N/A	Pancreatobiliary	HGD	W	Alive (32.8)	
IPP24	75	F	Ductal adenocarcinoma	Head	2.5	2	0	3	Head	2.5	BD	Gastric	LGD	W	Alive (20.2)	
IPP25	72	M	Ductal adenocarcinoma	Head	3.2	3	1	4	Head	2	BD	Gastric	HGD	W	Alive (35.1)	
IPP26	79	F	Ductal adenocarcinoma	Head	3	2	1	3	Head	2	BD	Gastric	HGD	W	Dead (16.2)	
IPP27	65	M	Ductal adenocarcinoma	Head	2.4	2	1	2	Head	1.2	BD	Gastric	HGD	W	Alive (0.8)	
IPP28	66	F	Ductal adenocarcinoma	Head	1.7	1	0	1	Head	1	BD	Gastric	HGD	W	Alive (59.3)	
IPP29	78	M	Ductal adenocarcinoma	Neck	4.5	3	1	2	Neck	8.4	BD	Gastric	LGD	D	Alive (0.3)	
IPP30	74	F	Ductal adenocarcinoma	Head	2.5	2	1	4	Head	N/A	Mixed	Gastric	LGD	W	Alive (0.5)	
IPP31	66	M	Ductal adenocarcinoma	Tail	2.3	3	1	2	Tail	9.5	BD	Pancreatobiliary	HGD	D	Dead (16.6)	
IPP32	72	M	Ductal adenocarcinoma	Head	1.9	3	1	2	Head	3.4	MD	Gastric	LGD	W	Dead (17.5)	
IPP33	87	M	Ductal adenocarcinoma	Head	2.3	2	0	2	Head	2	MD	Gastric	HGD	W	Dead (42.2)	
IPP34	75	M	Ductal adenocarcinoma	Tail	2.4	3	1	2	Tail	1.5	BD	Gastric	HGD	D	Alive (0.7)	
IPP35	83	F	Ductal adenocarcinoma	Tail	3	2	0	3	Tail	3.5	MD	Pancreatobiliary	HGD	D	Dead (6.5)	
IPP36	64	M	Ductal adenocarcinoma	Head	3	2	1	2	Head	6	MD	Gastric/Oncocytic	HGD	W	Dead (16.2)	
IPP37	69	M	Ductal adenocarcinoma	Body	2.5	2	1	2	Neck	1.6	N/A	Gastric	LGD	D	Alive (3.9)	
IPP38	50	F	Ductal adenocarcinoma	Head	3.5	3	1	3	Head	4	Mixed	Gastric	LGD	W	Alive (42.6)	

IPP39	69	M	Ductal adenocarcinoma	Head	3.5	3	1	2	Head	N/A	BD	Gastric	HGD	W	Alive (15.0)
IPP40	65	M	Ductal adenocarcinoma	Head	2.8	3	1	2	Head	2.8	BD	Gastric	HGD	W	Dead (14.0)
IPP41	62	F	Ductal adenocarcinoma	Head	4.5	3	1	3	Head	1.5	MD	Gastric	LGD	W	Dead (7.0)
IPP42	80	M	Ductal adenocarcinoma	Head	2.3	2	1	2	Head	2.3	BD	Oncocytic	HGD	W	Alive (35.9)
IPP43	79	F	Ductal adenocarcinoma	Tail	2.5	2	1	2	Tail	2	N/A	Gastric	HGD	D	Alive (29.4)
IPP44	76	F	Ductal adenocarcinoma	Tail	1	1	0	N/A	Tail	5.2	BD	Gastric	HGD	W	Alive (27.5)
IPP45	44	M	Ductal adenocarcinoma	Head	6	3	1	3	Head	2.2	MD	Pancreatobiliary	HGD	W	Alive (23.9)
IPP46	68	F	Ductal adenocarcinoma	Body	1.5	1	1	4	Body	1.4	Mixed	Intestinal	HGD	D	Alive (27.8)
IPP47	66	M	Ductal adenocarcinoma	Head	2.5	2	1	2	Head	1.3	N/A	Intestinal	HGD	W	Alive (20.8)
IPP48	79	F	Ductal adenocarcinoma	Head	2.5	3	1	2	Head	1	BD	Gastric	HGD	W	Alive (8.9)
IPP49	81	M	Ductal adenocarcinoma	Head	3	2	0	3	Head	1.2	BD	Gastric	HGD	W	Alive (18.3)
IPP50	64	M	Ductal adenocarcinoma	Head	11	3	1	2	Head	2	N/A	Pancreatobiliary	HGD	W	Alive (27.2)
IPP51	40	M	Ductal adenocarcinoma	Head	5.8	2	1	2	Head	1	N/A	Pancreatobiliary	HGD	W	Alive (14.6)
IPP52	85	M	Ductal adenocarcinoma	Head	3.9	2	1	2	Head	3.9	BD	Gastric	HGD	W	Dead (24.0)
IPP53	73	F	Ductal adenocarcinoma	Head	2.8	3	1	3	Head	1	MD	Gastric	LGD	W	Alive (12.2)
IPP54	84	M	Ductal adenocarcinoma	Head	2.9	2	0	3	Head	1	MD	Gastric	HGD	W	Dead (4.9)
IPP55	73	M	Ductal adenocarcinoma	Body	1.5	1	0	2	Body	2.5	BD	Gastric	HGD	W	Alive (17.0)
IPP56	71	F	Ductal adenocarcinoma	Multifocal	8	3	1	3	Multifocal	8	MD	Oncocytic	HGD	T	Dead (28.9)
IPC01	56	M	Colloid carcinoma	Head	1.5	1	1	1	Head	2.5	MD	Intestinal	HGD	W	Dead (77.0)
IPC02	64	M	Colloid carcinoma	Head	2	2	0	1	Body	9.5	MD	Intestinal	HGD	T	Alive (27.3)
IPC03	44	M	Colloid carcinoma	Head	4	2	0	2	Head	4	BD	Intestinal	HGD	W	Alive (90.3)
IPC04	74	F	Colloid carcinoma	Head	1	1	0	1	Head	5	MD	Intestinal	HGD	W	Dead (21.5)
IPC05	55	M	Colloid carcinoma	Body	2	1	0	2	Body	4.8	Mixed	Intestinal	HGD	W	Alive (2.8)
IPC06	76	F	Colloid carcinoma	Head	1.5	3	0	1	Head	8	MD	Intestinal	HGD	W	Alive (88.7)
IPC07	80	M	Colloid carcinoma	Head	1.8	1	0	2	Head	4.5	MD	Intestinal	HGD	W	Dead (23.7)
IPC08	62	M	Colloid carcinoma	Head	6	3	0	1	Head	6	MD	Intestinal	HGD	W	Dead (16.5)
IPC09	76	F	Colloid carcinoma	Head	8.5	3	0	1	Head	4.5	MD	Intestinal	HGD	W	Alive (2.4)
IPC10	48	M	Colloid carcinoma	Head	4.8	2	0	2	Head	5	MD	Intestinal	HGD	W	Alive (33.7)
IPC11	59	M	Colloid carcinoma	Head	1	1	0	1	Head	5	MD	Intestinal	HGD	W	Alive (9.3)
IPC12	73	M	Colloid carcinoma	Head	1.2	1	0	2	Head	3.5	Mixed	Intestinal	HGD	W	Alive (27.4)
IPC13	46	M	Colloid carcinoma	Head	1	1	0	1	Head	2	Mixed	Intestinal	HGD	W	Alive (16.5)
IPA01	76	M	Ampullary carcinoma	Ampulla	1	3	1	3	Head	1.1	BD	Pancreatobiliary	HGD	W	Dead (15.8)
IPA02	77	F	Ampullary carcinoma	Distal bile duct	2.4	3	1	2	Head	1	BD	Gastric	LGD	W	Dead (8.2)
IPA03	69	F	Ampullary carcinoma	Distal bile duct	2.9	3	1	2	Head	1	BD	Gastric	HGD	W	Dead (8.8)
IPA04	56	F	Ampullary carcinoma	Duodenal	3.2	4	1	3	Head	1	BD	Gastric	LGD	W	Dead (14.2)
IPA05	81	M	Ampullary carcinoma	Ampulla	1.3	3	1	2	Head	1	Mixed	Gastric	HGD	W	Dead (7.6)
IPA06	77	M	Ampullary carcinoma	Ampulla	1.9	3	1	3	Head	1.2	BD	Gastric	HGD	W	Alive (30.7)
IPA07	83	F	Ampullary carcinoma	Duodenal	6.6	4	1	2	Head	1.4	MD	Gastric	LGD	W	Alive (1.5)

IPMN Types: MD= Main duct; BD= Branch duct

IPMN Grades: LGD= low-grade; HGD= high-grade (two-tiered system based on Baltimore consensus meeting 2016)

Surgical procedures: W=Whipple, D=Distal pancreatectomy, T= Total pancreatectomy

