

Supplementary Figure 1: Overview of the qPCR-test consisting of 2 separate amplification reactions. Reaction 1 amplifies all possible IgG subtypes through the use of 1 universal forward primer and 1 generic IgG reverse primer. Reaction 2 amplifies IgG4 message specifically using the universal forward primer but another, specific, reverse primer for IgG4.

Supplementary Figure 2: The validation of the qPCR-test in (A) the discovery cohort (n=15 IgG4-RD, n=7 PSC and n=8 CA patients), (B) the replication in the Dutch cohort (n=26 IgG4-RD, n=11 PSC and n=19 CA patients) and (C) the British cohort (n=9 IgG4-RD and 30 PSC patients). The red dotted line delineates the test's cut-off value of 5%. *** p<0.001. (D) IgG4 serum titers in 49 IgG4-RD patients, 48 PSC and 27 CA patients. The red dotted line delineates the upper limit of normal (1.4 g/L), *** p<0.001. (E) Table showing the sensitivity and specificity (95%-confidence intervals) of the *qPCR-test* in the first test cohort (*discovery cohort*, n=30), the replication in the Amsterdam cohort (*Dutch replication*, n=56), the replication in the British cohort (*British replication*, n=39), and all these 3 cohorts combined (n=125).

Supplementary Figure 3: (A) scatterplot showing the IgG+ repertoires in 6 patients suffering from chronic pancreatitis (*CP01-CP06*). Every dot represents a unique IgG+ clone. IgG4+ clones are marked in red. (B) Dotplot showing the percentage specific IgG4 RNA molecules of total IgG RNA molecules, in 40 patients suffering from auto-immune pancreatitis (*AIP*) and 10 chronic pancreatitis patients (*CP*). The red dotted line delineates the cut-off value of 5%, *** p<0.001.

Supplementary Figure 4: Scatter dotplot showing (A) the qPCR-test in IgG4-RD patients split into the 3 HISORt groups (*group A, B and C*), and the control groups (*PSC and CA*). The red dotted line delineates the cut-off for the qPCR-test (5%). (B) serum IgG4 titers in IgG4-RD patients split into the 3 HISORt groups (*group A, B and C*), and the control groups (*PSC and CA*). The red dotted line delineates the upper limit of normal (1.4 g/L).

Supplementary Figure 5: Serum biochemical tests before and 4 weeks after high-dose corticosteroids in IgG4-RD. The means of 20 IgG4-RD patients are depicted for alkaline phosphatase (ALP), gamma-glutamyltransferase (GGT), total bilirubin and IgG4 levels (sIgG4). * $p < 0.05$.

Supplementary Table 1A: Patient characteristics – *Next-Generation Sequencing*

‡ The group with *IgG4-related disease* consists of patients suffering from IgG4-associated cholangitis (IAC) and/or autoimmune pancreatitis (AIP) according to the HISORt criteria for IAC and AIP. ¶ The group with *malignancies* consists of patients suffering from pathology-proven carcinoma of the biliary tree or pancreas. * $n=31$. # $n=25$. IgG4 = immunoglobulin G4, ULN=upper limit of normal.

Supplementary Table 1B: Patient characteristics – *qPCR-test*

‡ The group with *IgG4-related disease* consists of patients suffering from IgG4-associated cholangitis (IAC) and/or autoimmune pancreatitis (AIP) according to the

HISORt criteria for IAC and AIP. ¶ The group with *malignancies* consists of patients suffering from pathology-proven carcinoma of the biliary tree or pancreas. * n=47. # n=39. IgG4 = immunoglobulin G4, ULN=upper limit of normal.

Supplementary Table 2: Patient characteristics

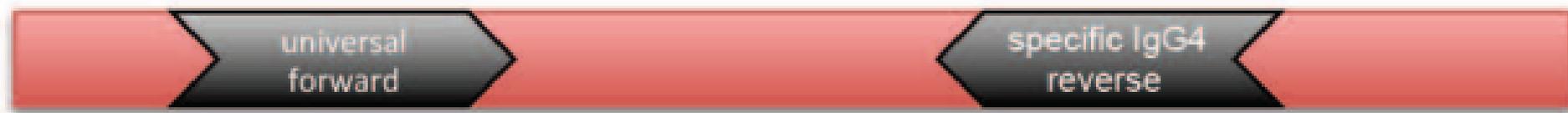
Table describing patient characteristics for all cases and controls.

1

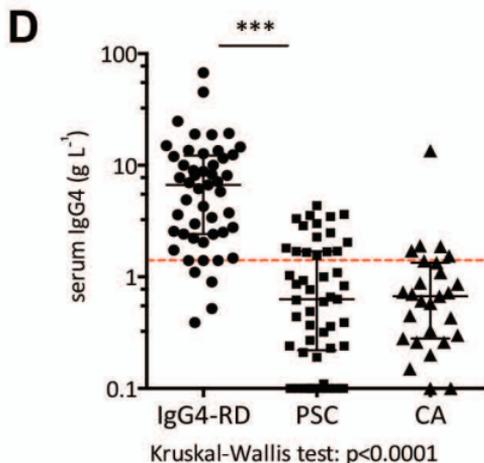
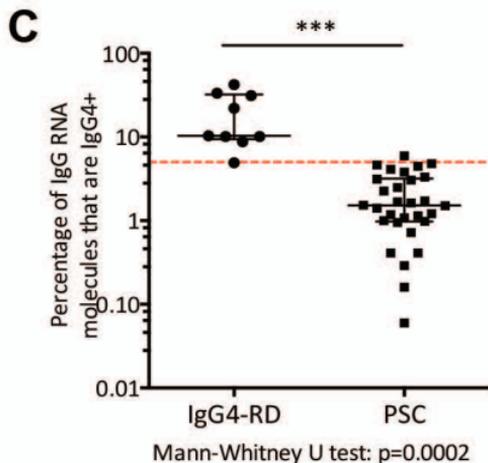
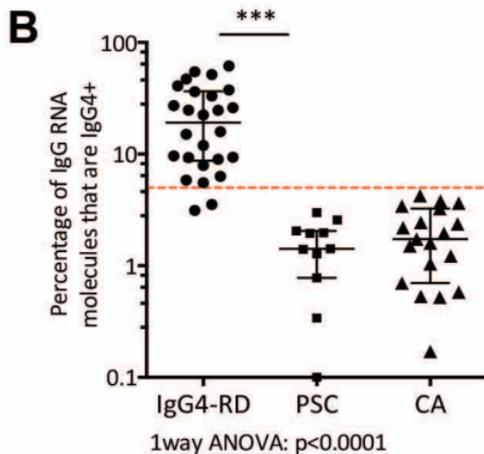
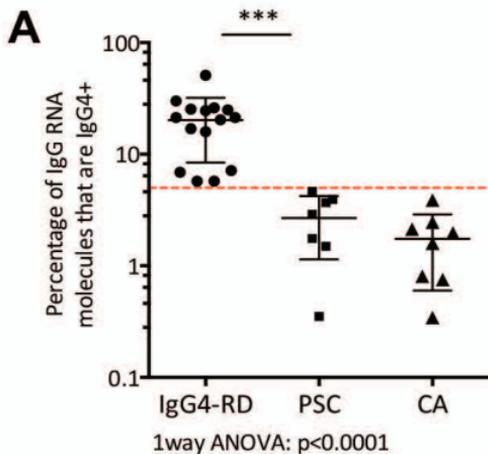


IgG1 – C_H1
IgG2 – C_H1
IgG3 – C_H1
IgG4 – C_H1

2

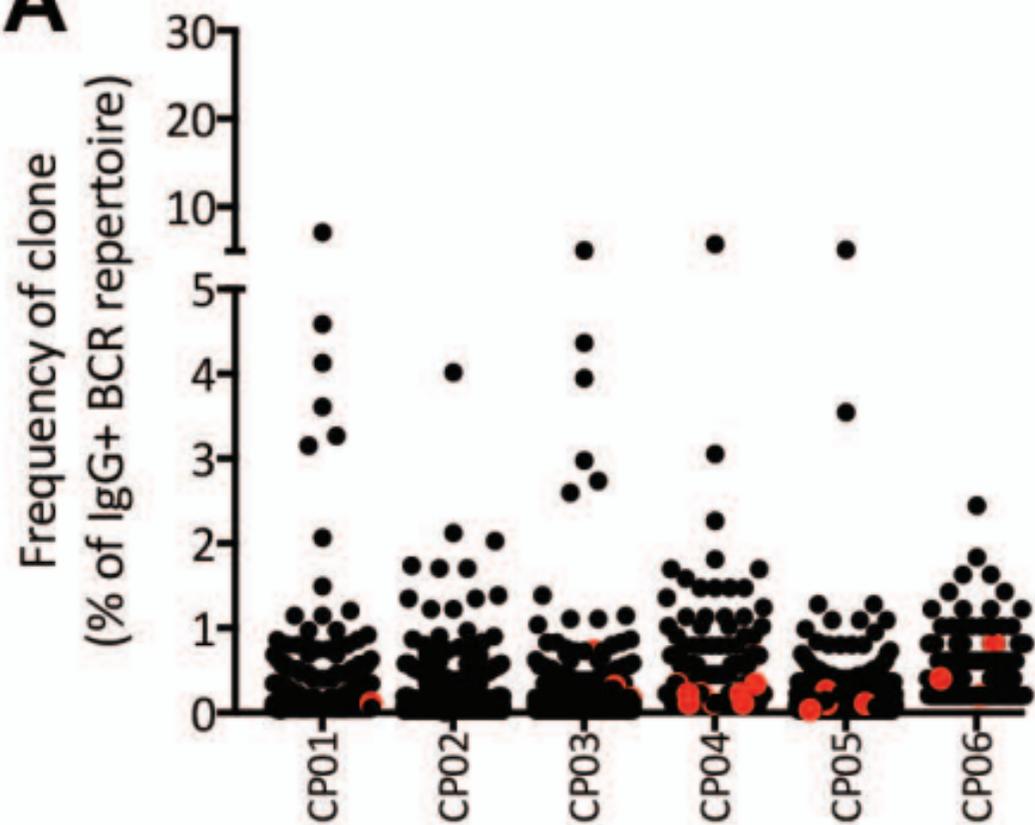
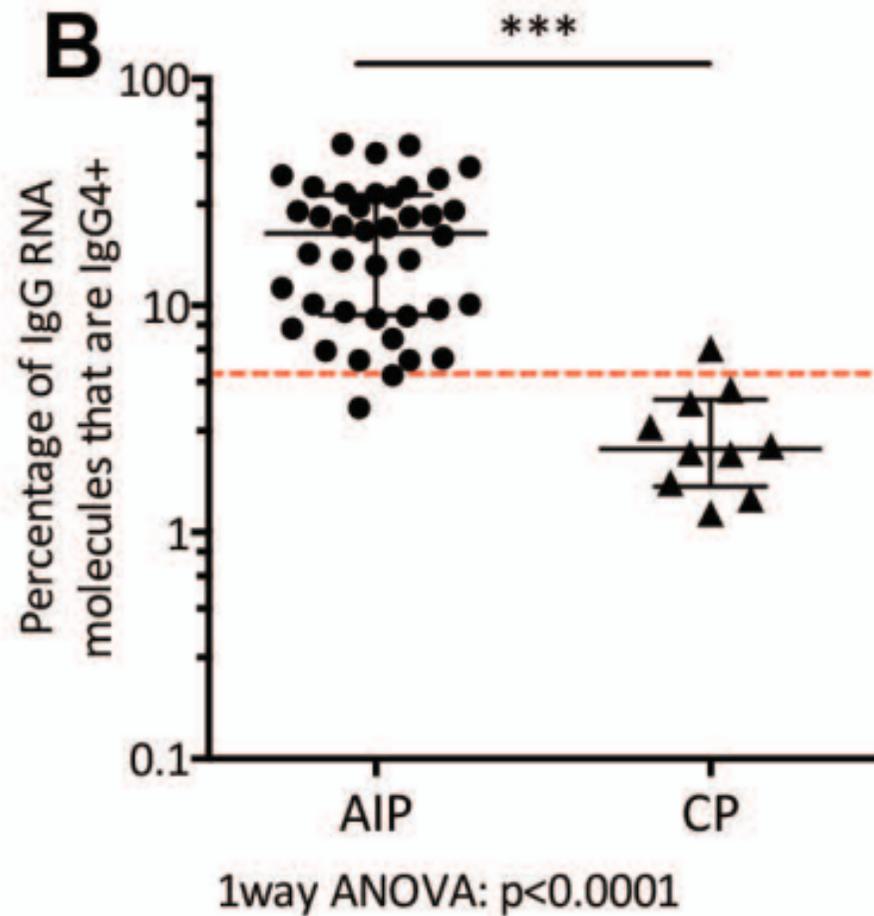


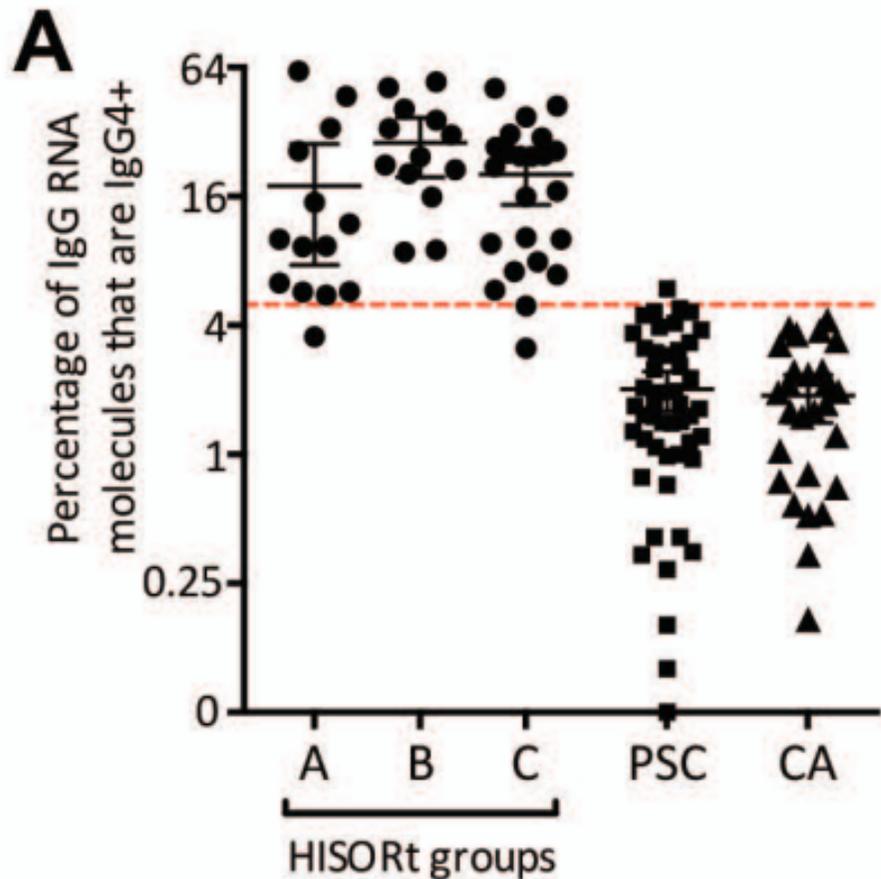
IgG4 – C_H1



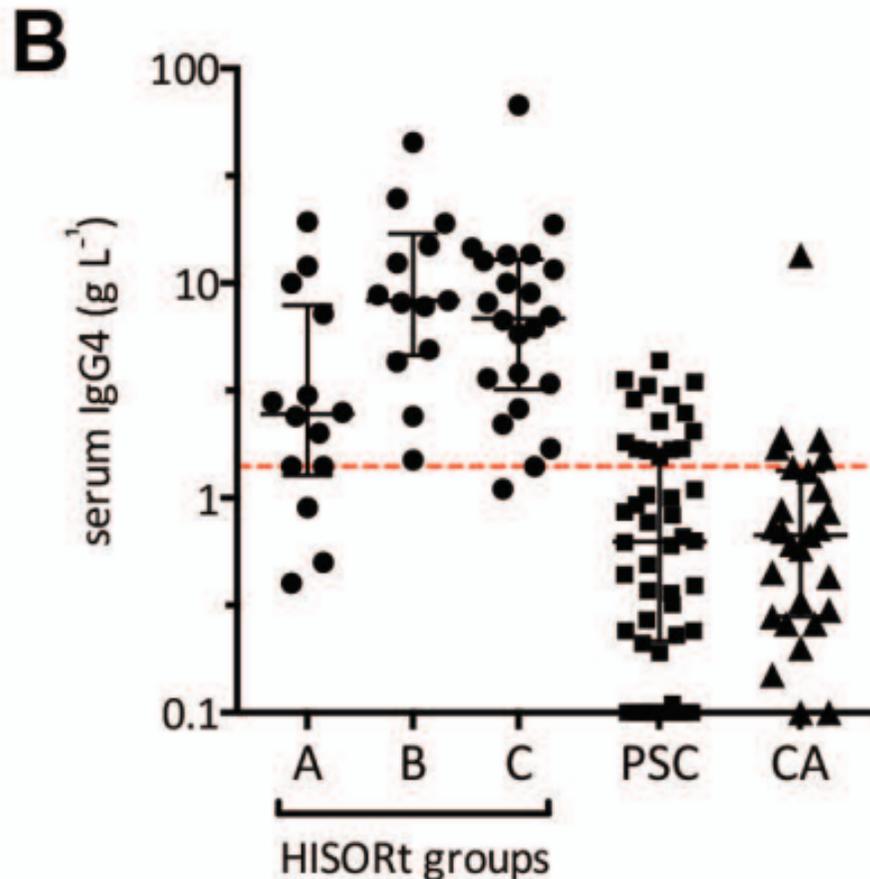
E

	discovery cohort (n=30)	Dutch replication (n=56)	British replication (n=39)	combined (n=125)
Sensitivity	100% (78.2-100%)	92.3% (74.9-99.1%)	88.9% (51.8-99.7%)	94.0% (83.5-98.8%)
Specificity	100% (78.2-100%)	100% (88.4-100%)	96.7% (82.8-99.9%)	98.7% (92.8-100%)

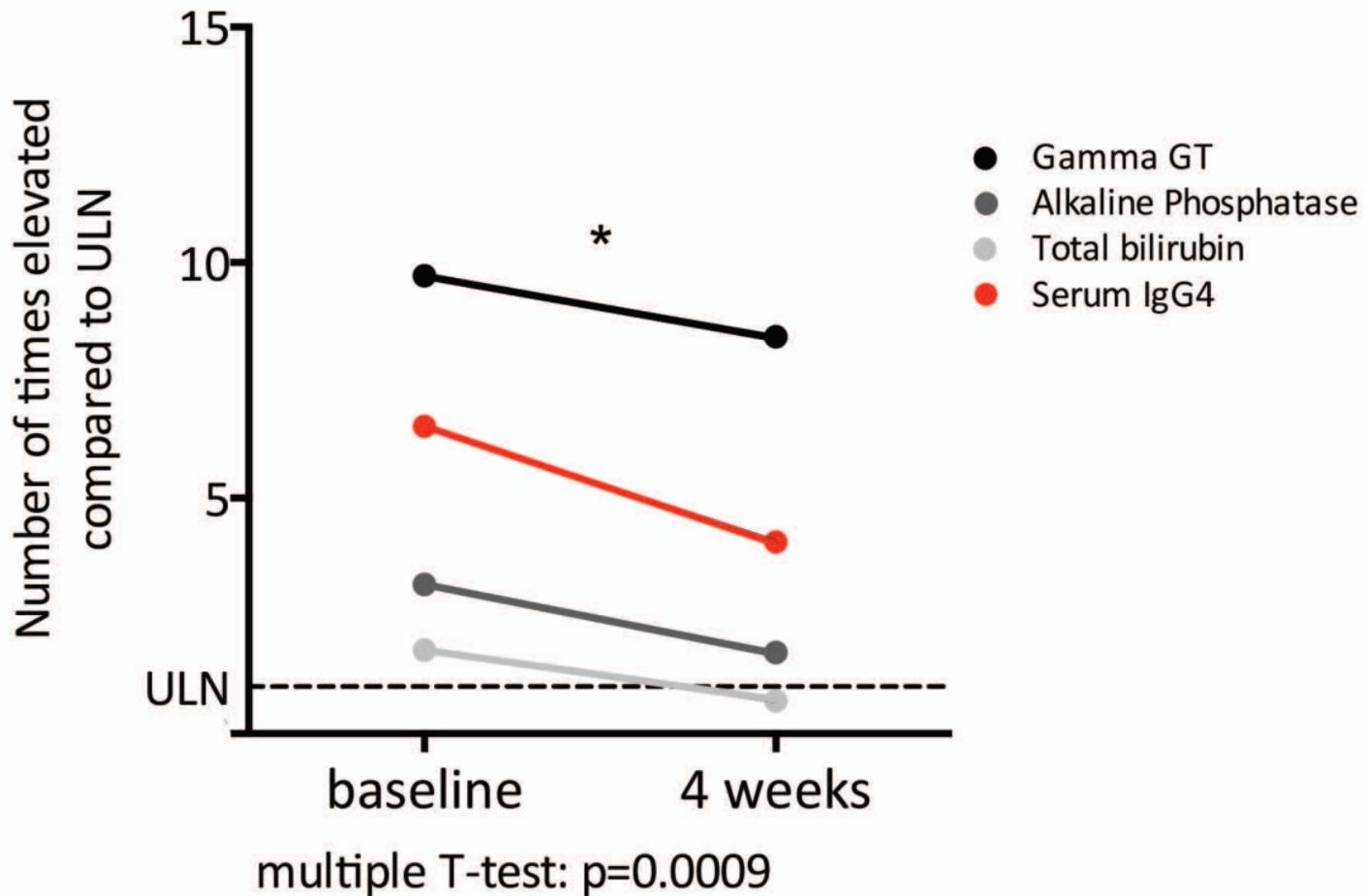
A**B**



Kruskal-Wallis test: $p < 0.0001$



Kruskal-Wallis test: $p < 0.0001$



	IgG4-related disease ‡ n=34			primary sclerosing cholangitis n=17	malignancies ¶ n=17	chronic pancreatitis n=6
	Group A (n=11)	Group B (n=11)	Group C (n=12)			
Male sex — no. (%)	9 (82)	7 (64)	11 (92)	11 (65%)	10 (59)	4 (67)
Age — no. years (range)	67 (58-80)	67 (53-84)	69 (52-82)	57 (32-87)	65 (47-78)	55 (48-63)
slgG4 — median (range) *	2.2 (0.4-19)	8.3 (1.5-45)	6.7 (1.4-67)	0.9 (0.05 – 3.3)	0.6 (0 – 1.9)	0.7 (0.1 – 1.8)
>1x ULN — no. (%)	6 (60)	11 (100)	10 (91)	5 (29)	2 (12)	1 (17)
>2x ULN — no. (%)	2 (20)	9 (82)	8 (73)	1 (6)	0 (0)	0 (0)
>4x ULN — no. (%)	2 (20)	8 (73)	8 (73)	0 (0)	0 (0)	0 (0)
Response to therapy — no. (%) #	5 (100)	9 (100)	11 (100)	NA	NA	NA

Supplementary Table 1A: Patient characteristics – Next-Generation Sequencing

‡ The group with *IgG4-related disease* consists of patients suffering from IgG4-associated cholangitis (IAC) and/or autoimmune pancreatitis (AIP) according to the HISORT criteria for IAC and AIP. ¶ The group with *malignancies* consists of patients suffering from pathology-proven carcinoma of the biliary tree or pancreas.

* n=31. # n=25. IgG4 = immunoglobulin G4, slgG4 = serum IgG4 titer, ULN=upper limit of normal.

	IgG4-related disease ‡ n=50			primary sclerosing cholangitis n=48	malignancies ¶ n=27	chronic pancreatitis n=10
	Group A (n=15)	Group B (n=13)	Group C (n=22)			
Male sex — no. (%)	13 (87)	9 (69)	21 (96)	30 (63)	16 (57)	6 (60)
Age — no. years (IQR)	65 (49-80)	66 (53-84)	68 (42-82)	53 (25-87)	64 (47-78)	54 (46-68)
slgG4 — median (range) *	2.5 (0.4-19)	8.1 (1.5-45)	7.5 (1.1-67)	0.6 (0.01 – 4.4)	0.6 (0 – 14)	0.7 (0.1 – 1.8)
>1x ULN — no. (%)	9 (64)	13 (100)	18 (90)	15 (31)	5 (18)	1 (10)
>2x ULN — no. (%)	4 (29)	11 (85)	16 (80)	6 (13)	1 (4)	0 (0)
>4x ULN — no. (%)	3 (21)	8 (62)	14 (70)	0 (0)	1 (4)	0 (0)
Response to therapy — no. (%) #	6 (100)	11 (100)	22 (100)	NA	NA	NA

Supplementary Table 1B: Patient characteristics – qPCR-test

‡ The group with *IgG4-related disease* consists of patients suffering from IgG4-associated cholangitis (IAC) and/or autoimmune pancreatitis (AIP) according to the HISORT criteria for IAC and AIP. ¶ The group with *malignancies* consists of patients suffering from pathology-proven carcinoma of the biliary tree or pancreas.

* n=47. # n=39. IgG4 = immunoglobulin G4, slgG4 = serum IgG4 titer, ULN=upper limit of normal.

**IgG4+ B-Cell Receptor Clones Distinguish IgG4-Related Disease (IRD) from
Primary Sclerosing Cholangitis and Pancreaticobiliary Malignancies**

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SUPPORTING DOCUMENT: SUPPLEMENTARY TABLE 2

Patient characteristics – IRD patients

ID	GENERAL					SOCIAL HISTORY	
	Center	Group	Suspected organ manifestation(s)	Age	Gender	Job History	Relevant exposures**
IRD01	Dutch	IRD	IAC, LLA	64	M	instrument maker/precision engineering	yes
IRD02	Dutch	IRD	IAC, AIP	84	M	shipping	yes
IRD03	Dutch	IRD	IAC*, AIP, Pa, GLA	70	F	hospital cleaner	yes
IRD04	Dutch	IRD	IAC*, AIP, Pr*	63	M	historian, builder	yes
IRD05	Dutch	IRD	IAC*, AIP, SMG, GLA	67	M	car industry worker	yes
IRD06	Dutch	IRD	IAC*, AIP*, RPF, Te*, LLA	65	M	plasterer	yes
IRD07	Dutch	IRD	IAC, AIP, GLA	52	M	road builder, pigeon holder	yes
IRD08	Dutch	IRD	IAC, AIP, SMG	67	F	nurse	no
IRD09	Dutch	IRD	AIP*, IAC, RPF, Pr, GLA	62	M	administrative work	no
IRD10	Dutch	IRD	AIP, IAC, LLA	60	M	truck driver	yes
IRD11	Dutch	IRD	IAC*	63	F	teacher	no
IRD12	Dutch	IRD	IAC*	70	M	car mechanic	yes
IRD13	Dutch	IRD	IAC, LLA	70	M	construction green houses	yes
IRD14	Dutch	IRD	IAC*, AIP*, LLA	71	M	construction/parks department	yes
IRD15	Dutch	IRD	IAC, AIP*, GLA	58	M	truck manufacturing company	yes
IRD16	Dutch	IRD	AIP, LP, GLA	65	M	carpenter/taxi driver	yes
IRD17	Dutch	IRD	AIP, IAC, (NP*)	74	F	librarian	no
IRD18	Dutch	IRD	AIP	64	F	nurse	no
IRD19	Dutch	IRD	AIP, IAC	65	M	fisherman, diesel motor boat	yes
IRD20	Dutch	IRD	IAC, AIP, Ki	53	M	truck driver	yes
IRD21	British	IRD	AIP	68	F	finance	yes
IRD22	Dutch	IRD	IAC, Ki, LLA	69	M	iron works	yes
IRD23	Dutch	IRD	AIP, IAC, Ao	68	M	IT	no
IRD24	Dutch	IRD	AIP	71	M	farmer, petrol station	yes
IRD25	British	IRD	AIP, LLA, (UC)	82	M	analytic chemist	yes
IRD26	British	IRD	AIP*, IAC*, GLA	70	M	electrical industry, lead cables, asbestos exposure	yes
IRD27	British	IRD	IAC*, AIP, SMG	80	F	secretarial	no
IRD28	British	IRD	IAC*, LLA, (UC)	62	M	electrician	yes
IRD29	British	IRD	AIP, IAC, GLA*, SMG*, Pa	79	M	blacksmith and small hold farmer	yes
IRD30	Dutch	IRD	IAC*	62	M	military	yes
IRD31	British	IRD	IAC*, AIP, LLA	67	M	sheet metal worker	yes
IRD32	Dutch	IRD	AIP, Pr	74	M	NA	NA
IRD33	British	IRD	IAC, MP, GLA, (CD)	65	M	farmer	yes
IRD34	Dutch	IRD	IAC, AIP, larynx*	80	M	NA	NA
IRD41	British	IRD	AIP*, LLA	52	M	Owns a garage	no
IRD42	Dutch	IRD	IAC, AIP, GLA	70	M	painter	yes
IRD43	Dutch	IRD	IAC, AIP, LLA	82	M	oil company	yes
IRD44	Dutch	IRD	IAC*, AIP	58	M	truck driver, road construction	yes
IRD45	Dutch	IRD	IAC, AIP*, LLA	49	M	no job	no
IRD46	Dutch	IRD	IAC, AIP	66	M	road construction	yes
IRD47	Dutch	IRD	IAC, AIP	59	M	sunscreen installer	yes
IRD48	Dutch	IRD	IAC	74	M	parks department	yes
IRD49	Dutch	IRD	IAC, AIP, lungs, LLA	42	M	plumber	yes
IRD50	Dutch	IRD	AIP, hypophysitis, SMG	64	M	car mechanic, sales industrial gases	yes

IRD=IgG4-related disease
 IAC=IgG4-associated cholangitis
 AIP=autoimmune pancreatitis
 SMG=submandibular gland
 Pa=parotids
 SLG=sublingual gland
 Or=ophthalmic pseudotumour
 NP=nasal polyps
 Ao=Aortitis
 RPF=retroperitoneal fibrosis
 MP=mesenteric panniculitis
 LP=liver pseudotumor
 Ki=kidney
 Pr=prostate

Te=testis
 LLA=localized lymphadenopathy
 GLA=generalized lymphadenopathy
 CD=Crohn's disease
 UC=ulcerative colitis
 *=histology proven (IRD only)
 ()= no established IRD manifestation
 M=male
 F=female

**relevant exposure= recalled regular occupational (or non-occupational) exposures to solvents, pigments, oil products, industrial and metal dusts (> 1 year)
 NA=not available/applicable

Patients IRD35-40 have been described in detail earlier (11)

ID	MEDICAL HISTORY						MEDICATIONS		
	Presentation	Allergies	Malignancies	New onset		IBD	ERT for EPI	IMT	UDCA
IRD01	abdominal discomfort, fatigue, abnormal serum liver tests	no	no	no	no	no	no	no	no
IRD02	obstructive jaundice, itch, weight loss	NA	Morbus Waldenström	no	no	no	no	no	no
IRD03	itch, weight loss, diarrhea, pale stools, fever	NA	no	no	no	no	no	no	no
IRD04	abdominal pain, weight loss, fever	paroxetine	no	yes	no	no	no	no	yes
IRD05	obstructive jaundice, itch, weight loss	NA	no	yes	yes	no	yes	no	yes
IRD06	abnormal serum liver tests under low dose prednisolone	no	no	yes	yes	no	yes	yes	no
IRD07	obstructive jaundice, weight loss, steatorrhea, fatigue	no	no	no	no	no	yes	no	no
IRD08	abdominal discomfort, weight loss, steatorrhea	NA	no	yes	yes	no	no	no	no
IRD09	obstructive jaundice, weight loss, urether stenosis	no	no	no	no	no	no	no	no
IRD10	obstructive jaundice, weight loss, steatorrhea, joint pain	no	no	no	no	no	yes	no	no
IRD11	weight loss, retrosternal pain, abnormal serum liver tests	penicillin	breast carcinoma	no	no	no	no	no	yes
IRD12	obstructive jaundice, abdominal pain, weight loss, fever	no	no	no	no	no	no	no	no
IRD13	obstructive jaundice, abdominal pain, weight loss	azathioprine	no	yes	no	no	no	no	no
IRD14	obstructive jaundice, weight loss	hay fever	no	yes	yes	no	yes	no	yes
IRD15	obstructive jaundice, abdominal pain, weight loss	no	no	yes	yes	no	yes	no	no
IRD16	obstructive jaundice, itch, weight loss	no	no	yes	yes	no	no	no	no
IRD17	obstructive jaundice, epigastric pain	no	no	yes	yes	no	yes	no	no
IRD18	weight loss, steatorrhea	nickel	no	yes	yes	no	yes	no	no
IRD19	abdominal pain, abnormal serum liver tests	NA	no	no	no	no	no	no	no
IRD20	abdominal pain, weight loss, pale stools	penicillin	no	yes	no	no	no	no	no
IRD21	abdominal discomfort, weight loss, steatorrhea	eczema	no	no	no	no	yes	no	no
IRD22	obstructive jaundice, weight loss	no	no	yes	no	no	no	no	no
IRD23	obstructive jaundice, weight loss	no	no	no	no	no	no	no	no
IRD24	weight loss	no	no	yes	no	no	yes	no	no
IRD25	abdominal discomfort, weight loss, diarrhea	eczema/shellfish	no	no	no	yes	yes	no	no
IRD26	obstructive jaundice, abdominal pain	no	no	yes	yes	no	yes	no	no
IRD27	weight loss, dry mouth/eyes	asthma	no	yes	yes	no	yes	no	no
IRD28	myalgia, fatigue, known UC, abnormal serum liver tests	no	no	no	no	yes	no	no	yes
IRD29	weight loss, fatigue, SMG swelling	no	no	no	no	no	yes	no	no
IRD30	obstructive jaundice, weight loss, fever	no	caecum carcinoma	no	no	no	no	no	no
IRD31	obstructive jaundice	NA	no	no	no	no	yes	no	no
IRD32	weight loss, steatorrhea	NA	no	yes	no	no	yes	no	no
IRD33	abdominal discomfort, abnormal serum liver tests	hayfever	no	no	no	yes	no	no	no
IRD34	abnormal liver biochemistry, fever	no	no	no	no	no	no	no	no
IRD41	obstructive symptoms	NA	no	yes	yes	no	yes	no	no
IRD42	obstructive jaundice, weight loss, abdominal pain	NA	prostate cancer	yes	no	no	no	no	no
IRD43	obstructive jaundice, weight loss, itch, abdominal pain	no	no	no	no	no	no	no	no
IRD44	obstructive jaundice, weight loss, itch, abdominal pain	no	no	no	no	no	no	no	no
IRD45	weight loss, abdominal pain	no	Hodgkin lymphoma	no	no	no	yes	no	no
IRD46	abnormal liver biochemistry (resolved spontaneously), abdominal pain	antibiotics/contrast fluid	no	yes	yes	no	no	no	no
IRD47	obstructive jaundice, weight loss, abdominal pain	no	no	no	no	yes	no	no	no
IRD48	weight loss, itch, fatigue	no	no	yes	yes	no	no	no	yes
IRD49	obstructive jaundice, weight loss	NA	no	no	no	no	no	no	no
IRD50	hypopituitarism, weight loss	augmentin	no	yes	yes	no	no	no	no

IRD=IgG4-related disease

DM=diabetes mellitus

IBD=inflammatory bowel disease

ERT= enzyme replacement

EPI=exocrine pancreatic insufficiency

IMT=immunomodulatory therapy

UDCA=ursodeoxycholic acid

SMG=submandibular gland

ID	LABORATORY FINDINGS 1															
	Pre-treatment															
	Bilirubin	AST	ALT	ALP	GGT	lipase	CA19.9	IgG1	IgG2	IgG3	IgG4	IgGtotal	IgG4:IgG1 ratio	IgG4 highest	qPCR	
IRD01	12	102	231	733	1833	44	112	6,8	2,12	0,39	1,74	8,8	0,256	2,1	6,89	
IRD02	20	124	205	329	595	NA	NA	6,81	6,92	0,39	8,13	14,2	1,194	9,8	24,53	
IRD03	12	41	34	360	263	18	NA	17,3	1,37	1,9	13,5	25,3	0,78	13,5	16,91	
IRD04	7	46	49	1018	470	NA	70	7,53	4,05	0,42	0,9	10,6	0,12	1,02	5,74	
IRD05	26	81	96	311	975	NA	903	8,67	2,14	0,56	19	20,6	2,191	19	31,02	
IRD06	42	78	90	476	300	NA	NA	NA	NA	NA	NA	NA	NA	1,94	5,73	
IRD07	11	21	25	140	61	NA	212	7,52	8,8	0,55	6,17	17,6	0,82	6,17	24,92	
IRD08	201	123	198	405	562	NA	NA	11,69	3,16	2,16	15	23,3	1,283	15	21,28	
IRD09	43	110	199	341	657	426	928	13,2	5,91	1,3	12,4	21,7	0,939	12,4	20,39	
IRD10	8	18	22	68	34	37	10	10,7	3,96	0,77	1,47	15	0,137	1,63	8,98	
IRD11	8	48	48	259	256	NA	NA	8,49	4,38	0,3	2,42	NA	0,285	3,19	9,29	
IRD12	4,3	47	40	329	392	NA	32	12,1	5,92	0,46	1,4	18,4	0,116	1,4	61,46	
IRD13	9	37	28	206	233	30	10	7,95	6,85	0,29	2,22	13,8	0,279	2,22	3,13	
IRD14	7	49	50	508	386	6	39	9,17	3,54	0,17	19,3	22,7	2,105	19,4	47,00	
IRD15	6	25	33	263	288	146	125	6,73	4,86	0,83	2,04	11	0,303	2,04	3,54	
IRD16	315	67	34	228	300	25	4785	11,3	2,15	0,19	45,2	37,9	4	56,6	33,16	
IRD17	6	27	21	71	9	11	19	7,2	3,37	0,4	8,82	14	1,225	10,8	51,51	
IRD18	4	22	38	127	17	12	10	7,44	4,03	0,21	7,75	13	1,042	8,3	36,24	
IRD19	15	39	69	709	747	NA	NA	NA	NA	NA	6,98	NA	NA	6,98	5,84	
IRD20	107	162	230	791	1657	NA	NA	13,1	6,22	2,05	4,89	20,3	0,373	4,89	15,89	
IRD21	8	NA	18	189	24	NA	23	7,86	5,4	0,29	2,41	13,6	0,307	2,41	8,78	
IRD22	14	37	36	291	355	39	13	10,7	3,27	0,32	8,1	18,9	0,757	8,1	24,63	
IRD23	31	54	115	225	212	145	63	6,39	2,07	0,21	1,4	9	0,219	1,47	11,93	
IRD24	5	22	18	97	49	9	24	9,17	2,82	0,42	2,51	12	0,274	2,51	15,03	
IRD25	7	34	16	152	25	NA	23	5,33	11,1	0,71	6,67	18,5	1,251	6,67	31,24	
IRD26	82	NA	100	649	189	NA	16	6,39	NA	NA	2,77	9,59	0,433	2,21	10,14	
IRD27	7	42	54	457	54	NA	NA	7,47	NA	NA	7,15	15,2	0,957	7,15	33,28	
IRD28	38	47	114	1336	1127	NA	9	10,3	NA	NA	67,4	70,4	6,544	67,4	42,30	
IRD29	9	NA	16	209	25	NA	26	13,4	NA	NA	9	20,1	0,672	9	10,13	
IRD30	10	31	60	209	372	35	37	6,51	4,13	0,16	0,39	10,1	0,06	0,39	5,53	
IRD31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,26	22,03	
IRD32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8,3	NA	NA	8,3	22,40	
IRD33	5	48	23	200	165	NA	18	NA	NA	NA	5,81	21,7	NA	5,81	10,27	
IRD34	8	38	38	162	240	NA	NA	5,19	3,79	0,24	1,4	8,6	0,269	1,4	26,04	
IRD41	2	NA	16	168	34	NA	9	8,06	2,72	0,35	2,56	11,5	0,318	1,89	4,92	
IRD42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,4	NA	NA	3,4	24,70	
IRD43	6	74	127	497	733	24	40	8,56	4,92	0,18	12,7	18,4	1,484	12,7	37,50	
IRD44	121	76	93	321	1352	10	43	6,64	2,45	0,42	0,52	9,2	0,078	2,38	6,31	
IRD45	20	29	20	174	293	10	17	11,9	5,64	0,69	3,75	17,9	0,315	4,12	9,63	
IRD46	6	24	19	86	15	NA	NA	8,24	3,9	0,71	2,98	NA	0,362	2,98	9,36	
IRD47	68	347	406	1185	713	110	24	4,82	3,14	0,42	4,28	8	0,888	4,28	40,80	
IRD48	6	32	31	307	107	8	45	6,34	4,49	1,05	24,8	26	3,912	31,6	54,70	
IRD49	53	91	74	964	349	NA	221	16,6	4,3	1,9	1,1	24,4	0,066	1,3	7,92	
IRD50	7	25	25	69	22	6	16	7,59	8,71	0,55	13,6	14,9	1,792	13,6	27,20	

IRD=IgG4-related disease
AST=aspartate aminotransferase
ALT=alanine aminotransferase
ALP=alkaline phosphatase
GGT=gamma-glutamyl transferase
CA19.9=carboxylic anhydrase 19.9
IgG=Immunoglobulin G
qPCR=quantitative PCR
NA=not available/applicable

LABORATORY FINDINGS 2													
4-6 weeks of treatment													
ID	Bilirubin	AST	ALT	ALP	GGT	lipase	CA19.9	IgG1	IgG2	IgG3	IgG4	IgGtotal	qPCR
IRD01	12	102	280	411	2276	45	147	4,87	1,64	0,24	1,11	6,8	4,92
IRD02	6	21	35	88	184	NA	NA	4,44	5,76	0,24	5,47	9,2	5,94
IRD03	16	62	47	339	314	44	NA	14,9	1,64	1,64	12,7	23,6	7,03
IRD04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD05	7	35	51	184	595	NA	128	5,97	3,16	0,38	11,3	12,7	NA
IRD06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD08	92	76	163	243	126	NA	NA	NA	NA	NA	NA	NA	NA
IRD09	11	35	59	130	526	282	253	8,43	4,22	0,71	10,4	14,9	NA
IRD10	6	16	21	63	31	35	12	7,84	2,94	0,48	0,72	10,9	6,09
IRD11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD12	9	29	45	238	319	NA	NA	10,1	4,12	0,3	0,97	NA	3,17
IRD13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD14	8	47	77	416	544	6	76	7,16	4,89	0,39	9,82	17	8,11
IRD15	8	15	22	135	126	38	39	3,69	3,45	0,5	1,1	8,4	1,87
IRD16	40	47	50	145	556	23	242	6,05	2,67	0,67	16,2	16,8	9,64
IRD17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD18	5	26	35	102	17	13	9	6,65	3,54	0,14	5,36	11	7,95
IRD19	6	27	20	143	218	NA	NA	7,09	3,65	0,65	3,58	11,9	3,36
IRD20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD21	7	NA	25	178	23	NA	NA	6,67	4,32	0,23	2,19	14,3	NA
IRD22	7	36	42	176	286	36	12	9,34	3,88	0,26	6,14	14,7	6,49
IRD23	10	20	56	95	251	61	23	6,65	1,83	0,16	0,98	8,2	NA
IRD24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD25	11	NA	17	134	30	NA	NA	5,04	NA	NA	4,58	15,1	NA
IRD26	11	NA	22	300	19	NA	NA	3,65	NA	NA	1,63	6,62	NA
IRD27	6	NA	28	247	24	NA	NA	NA	NA	NA	3,73	10	NA
IRD28	33	NA	85	674	1025	NA	6	8,84	NA	NA	42	45,1	NA
IRD29	13	NA	21	130	17	NA	NA	12,2	NA	NA	3,67	16,8	NA
IRD30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD31	10	NA	15	208	NA	NA	NA	6,06	2,02	0,22	1,26	12,2	NA
IRD32	10	19	22	72	19	9	NA	NA	NA	NA	NA	NA	NA
IRD33	7	NA	22	209	67	NA	NA	NA	NA	NA	3,87	15,6	NA
IRD34	15	36	33	98	209	18	NA	NA	NA	NA	NA	NA	NA
IRD41	14	NA	21	114	34	NA	NA	8,9	2	0,38	1,46	11,7	NA
IRD42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD47	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD48	6	31	48	252	137	NA	NA	NA	NA	NA	16,9	NA	NA
IRD49	24	47	75	226	712	NA	NA	6,3	2,6	0,5	0,7	NA	NA
IRD50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

IRD=IgG4-related disease
AST=aspartate aminotransferase
ALT=alanine aminotransferase
ALP=alkaline phosphatase
GGT=gamma-glutamyl transferase
CA19.9=carbonic anhydrase 19.9
IgG=Immunoglobulin G
qPCR=quantitative PCR
NA=not available/applicable

ID	LABORATORY FINDINGS 3								Auto-antibodies	
	8 weeks of treatment								ANA	ANCA
	Bilirubin	AST	ALT	ALP	GGT	CA19.9	IgG4	qPCR		
IRD01	10	57	167	353	1789	187	0,93	3,29	0	ANCA
IRD02	5	19	27	44	53	NA	3,39	NA	NA	NA
IRD03	10	39	53	117	153	93	3,99	2,69	0	0
IRD04	NA	NA	NA	NA	NA	NA	NA	NA	0	0
IRD05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD06	NA	NA	NA	NA	NA	NA	NA	NA	0	atypic
IRD07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD08	NA	NA	NA	NA	NA	NA	NA	NA	0	0
IRD09	8	39	76	147	576	193	8,3	1,81	NA	NA
IRD10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD13	17	22	33	143	193	17	1,16	1,85	NA	NA
IRD14	7	62	118	336	673	67	5,09	1,35	NA	NA
IRD15	12	17	20	111	73	28	4,55	0,85	NA	NA
IRD16	14	39	58	120	762	453	11,5	1,65	NA	NA
IRD17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD18	7	24	31	87	18	14	4,03	3,09	NA	NA
IRD19	4	16	17	86	104	24	3,59	1,35	NA	NA
IRD20	NA	NA	NA	NA	NA	NA	NA	NA	0	NA
IRD21	NA	NA	NA	NA	NA	NA	NA	NA	0	0
IRD22	7	34	37	120	209	10	4,25	1,47	NA	NA
IRD23	6	25	55	82	200	21	0,83	2,99	NA	NA
IRD24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD25	NA	NA	NA	NA	NA	NA	NA	NA	0	0
IRD26	NA	NA	NA	NA	NA	NA	NA	NA	0	0
IRD27	NA	NA	NA	NA	NA	NA	NA	NA	0	0
IRD28	NA	NA	NA	NA	NA	NA	NA	NA	0	C-ANCA
IRD29	NA	NA	NA	NA	NA	NA	NA	NA	0	C-ANCA
IRD30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD31	NA	NA	NA	NA	NA	NA	NA	NA	0	0
IRD32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD33	NA	NA	NA	NA	NA	NA	NA	NA	0	C-ANCA
IRD34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD43	5	32	59	119	307	NA	8,2	NA	NA	NA
IRD44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD47	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD49	13	33	58	315	585	NA	NA	NA	NA	NA
IRD50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

IRD=IgG4-related disease

AST=aspartate aminotransferase

ALT=alanine aminotransferase

ALP=alkaline phosphatase

GGT=gamma-glutamyl transferase

CA19.9=carbonic anhydrase 19.9

IgG=Immunoglobulin G

qPCR=quantitative PCR

ANA=anti-nuclear antibody

ANCA=antineutrophil cytoplasmic antibody

C-=cytoplasmic

P-=perinuclear

NA=not available/applicable

IMAGING 1				
ID	Type	Localization stenosis/obstruction	Typical for AIP?*	Suggestive findings AIP?*
IRD01	CT, MRCP	hilar	no	no
IRD02	CT, ERCP, EUS	DCBD, IHBD	yes	no
IRD03	MRI, ERCP, EUS, PET	DCBD	no	yes
IRD04	CT, MRI, ERCP	IHBD	no	yes
IRD05	CT, PET, US	PCBD	yes	no
IRD06	CT, MRCP, ERCP	multifocal, DCBD	no	no
IRD07	CT, MRCP, ERCP, AUS	Hilar	no	yes
IRD08	CT, ERCP, EUS, AUS	DCBD, PD	yes	no
IRD09	CT, MRI, ERCP, PET, EUS	DCBD	yes	no
IRD10	CT, ERCP, EUS	CBD, IP	yes	no
IRD11	CT, MRI, AUS	hilar	no	no
IRD12	CT, MRI, PET, AUS	hilar	no	no
IRD13	CT, ERCP, AUS	hilar	no	no
IRD14	ERCP	DCBD	yes	no
IRD15	CT, ERCP, MRCP	CBD, IP	yes	no
IRD16	CT, MRI, ERCP, EUS, AUS	DCBD	yes	no
IRD17	CT, EUS, AUS	IP	yes	no
IRD18	CT, AUS	none	yes	no
IRD19	CT, ERCP, AUS, EUS	DCBD	no	yes
IRD20	CT, EUS	distal CBD	yes	no
IRD21	MRCP, CT	none	yes	no
IRD22	CT, ERCP, AUS	hilar	no	no
IRD23	CT, ERCP	DCBD	yes	no
IRD24	CT, AUS	DCBD	no	no
IRD25	MRCP, CT	none	no	yes
IRD26	CT, MRCP, ERCP	CBD	no	yes
IRD27	MRCP, CT, AUS, MRI neck	CBD	no	yes
IRD28	CT, MRCP, ERCP	multifocal (IHBD)	no	no
IRD29	MRI neck, CT	none	no	yes
IRD30	CT, ERCP	hilar	no	no
IRD31	MRCP, EUS, ERCP, CT	CBD	no	yes
IRD32	CT, EUS	none	yes	no
IRD33	MRCP, MRI, CT	CBD/IHBD	no	no
IRD34	CT, ERCP, AUS	hilar	no	yes
IRD41	CT, MRCP	DCBD	no	yes
IRD42	CT, PET, EUS	DCBD	no	yes
IRD43	CT, ERCP	Hilar	no	yes
IRD44	CT, MRI	Hilar	no	yes
IRD45	CT, MRI, ERCP	enhancement CBD	no	yes
IRD46	CT, MRI, EUS	enhancement CBD	yes	no
IRD47	CT, MRCP, ERCP, EUS, AUS	DCBD	yes	no
IRD48	MRCP, AUS	multifocal	no	no
IRD49	CT, MRCP, ERCP, PET	hilar	yes	no
IRD50	CT, AUS	none	no	yes

IRD=IgG4-related disease

AIP=autoimmune pancreatitis

*diffusely enlarged pancreas, irregular pancreatic duct

** (multi)focal pancreatic mass, focal pancreatic duct stricture, pancreatic atrophy

CT=computed tomography

MRI=magnetic resonance imaging

MRCP=magnetic resonance cholangiopancreatography

ERCP=endoscopic retrograde cholangiopancreatography

PET=positron emission tomography

AUS=abdominal ultrasound

EUS=endoscopic ultrasound

IHBD=intra hepatic bile ducts

CBD=common bile duct

DCBD= distal CBD

PD = pancreatic duct

NA=not available/applicable

IMAGING 2				
ID	Suspect for malignancy?	Malignancy type	Suspect for sclerosing cholangitis?*	Lymphadenopathy
IRD01	yes	Klatskin tumour Bismuth type IV	no	locoregional
IRD02	yes	NA	no	no
IRD03	no	NA	yes	para-aortal/lungs
IRD04	yes	CCA non-specified	no	no
IRD05	yes	Klatskin tumour Bismuth type IIIb	yes	hepatopancreatobiliary, mediastinal, lung hilum, lungs, inguinal
IRD06	yes	PCA	yes	locoregional
IRD07	yes	PCA	yes	lung hilum, mediastinal, paratracheal
IRD08	no	NA	no	no
IRD09	no	NA	no	mediastinal, inguinal
IRD10	yes	PCA	no	locoregional
IRD11	yes	CCA non-specified	no	no
IRD12	yes	Klatskin tumour Bismuth type IIIa	no	no
IRD13	yes	Klatskin tumour Bismuth type IIIb	no	locoregional
IRD14	yes	distal CCA/PCA	no	locoregional
IRD15	yes	PCA	no	locoregional, abdominal
IRD16	yes	distal CCA/PCA/liver metastasis	no	locoregional, abdominal, axial
IRD17	yes	PCA	no	no
IRD18	no	NA	no	no
IRD19	yes	PCA	no	no
IRD20	yes	distal CCA	no	no
IRD21	no	NA	no	no
IRD22	yes	Klatskin tumour Bismuth type IIIb	no	locoregional
IRD23	yes	distal CCA/PCA	no	no
IRD24	yes	PCA	no	no
IRD25	yes	IPMN	no	locoregional
IRD26	yes	PCA	no	locoregional, lung hilum, mesenteric
IRD27	yes	CCA	no	none
IRD28	no	NA	yes	locoregional
IRD29	yes	lymphoma	no	inguinal/mediastinal/paraortic
IRD30	yes	CCA non-specified	yes	no
IRD31	yes	PCA	no	locoregional
IRD32	no	NA	no	no
IRD33	no	NA	yes	mesenteric, locoregional
IRD34	yes	Klatskin type IIIa	yes	no
IRD41	yes	ampullary/duodenal neoplasm	no	locoregional
IRD42	yes	PCA	no	no
IRD43	yes	Klatskin type IIIb	no	no
IRD44	yes	Klatskin type IIIa	no	locoregional
IRD45	no	NA	no	locoregional
IRD46	yes	PCA	no	no
IRD47	yes	PCA	no	no
IRD48	no	NA	yes	no
IRD49	yes	Klatskin type IIIa	no	locoregional
IRD50	no	NA	no	no

IRD=IgG4-related disease

CCA=cholangiocarcinoma

PCA=pancreatic carcinoma

IPMN=intraductal papillary mucinous neoplasm

NA=not available/applicable

ID	HISTOPATHOLOGY 1			
	Cytology 1		Cytology 2	
	Biliary brushing	Punction type	Punction organ	Punction outcome
IRD01	NA	NA	NA	NA
IRD02	benign	NA	NA	NA
IRD03	NA	NA	NA	NA
IRD04	NA	NA	NA	NA
IRD05	atypic cells	NA	NA	NA
IRD06	NA	NA	NA	NA
IRD07	benign	NA	NA	NA
IRD08	NA	NA	NA	NA
IRD09	NA	NA	NA	NA
IRD10	benign	EUS	pancreas	benign
IRD11	NA	NA	NA	NA
IRD12	atypic cells	NA	NA	NA
IRD13	adenocarcinoma*	NA	NA	NA
IRD14	suspect	NA	NA	NA
IRD15	inflammation	NA	pancreas	benign
IRD16	NA	NA	NA	NA
IRD17	NA	EUS	pancreas	inflammation
IRD18	NA	NA	NA	NA
IRD19	benign	yes	pancreas	inflammation
IRD20	NA	NA	NA	NA
IRD21	NA	NA	NA	NA
IRD22	atypic cells	NA	NA	NA
IRD23	atypic cells	EUS	pancreas	benign
IRD24	NA	NA	NA	NA
IRD25	NA	NA	NA	NA
IRD26	benign	NA	NA	NA
IRD27	NA	FNA	SMG	benign
IRD28	NA	NA	NA	NA
IRD29	NA	NA	NA	NA
IRD30	NA	NA	NA	NA
IRD31	benign	FNA	pancreas/LN	benign
IRD32	NA	NA	NA	NA
IRD33	NA	NA	NA	NA
IRD34	benign	NA	NA	NA
IRD41	NA	NA	NA	NA
IRD42	NA	NA	NA	NA
IRD43	NA	US	pancreas	inflammation
IRD44	NA	EUS	pancreas	benign
IRD45	NA	EUS	pancreas	benign
IRD46	NA	EUS	pancreas	benign
IRD47	NA	EUS	pancreas	benign
IRD48	NA	NA	NA	NA
IRD49	atypic cells	EUS	pancreas	atypic cells
IRD50	NA	NA	NA	NA

IRD=IgG4-related disease

EUS=endoscopic ultrasound guided

US=ultrasound guided

NA=not available/applicable

*IRD13 was diagnosed with cholangiocarcinoma 2 years after inclusion

ID	HISTOPATHOLOGY 1			Histology 1						
	Cytology 1	Cytology 2		Type	Organ	IgG4+ cells/hpf	SF	OP	E	
	Biliary brushing	Punction type	Punction organ	Punction outcome						
IRD01	NA	NA	NA	NA	biopsy	liver	no	NA	NA	NA
IRD02	benign	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD03	NA	NA	NA	NA	biopsy	liver	10	NA	NA	NA
IRD04	NA	NA	NA	NA	resection	tumor	>10	no	yes	NA
IRD05	atypic cells	NA	NA	NA	biopsy	SMG	<10	NA	NA	NA
IRD06	NA	NA	NA	NA	resection	pancreas	20	NA	NA	NA
IRD07	benign	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD09	NA	NA	NA	NA	biopsy	duodenum	30	no	NA	yes
IRD10	benign	EUS	pancreas	benign	biopsy	duodenum	<10	no	NA	NA
IRD11	NA	NA	NA	NA	resection	tumor	75	NA	NA	NA
IRD12	atypic cells	NA	NA	NA	resection	tumor	52	yes	NA	NA
IRD13	adenocarcinoma*	NA	NA	NA	biopsy	gall bladder	>50	NA	NA	yes
IRD14	suspect	NA	NA	NA	resection	tumor	>50	NA	NA	yes
IRD15	inflammation	NA	pancreas	benign	biopsy	pancreas	>25	no	no	no
IRD16	NA	NA	NA	NA	biopsy	liver	<10	NA	NA	yes
IRD17	NA	EUS	pancreas	inflammation	biopsy	nasal polyps	>50	no	no	no
IRD18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD19	benign	yes	pancreas	inflammation	NA	NA	NA	NA	NA	NA
IRD20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD22	atypic cells	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD23	atypic cells	EUS	pancreas	benign	biopsy	pancreas	12	yes	no	no
IRD24	NA	NA	NA	NA	resection	pancreas	75	yes	yes	NA
IRD25	NA	NA	NA	NA	biopsy	colon	60	no	no	no
IRD26	benign	NA	NA	NA	resection	tumor	120	yes	yes	yes
IRD27	NA	FNA	SMG	benign	resection	tumor	>50	yes	yes	yes
IRD28	NA	NA	NA	NA	biopsy	liver	35	no	yes	yes
IRD29	NA	NA	NA	NA	biopsy	SMG	50	yes	no	yes
IRD30	NA	NA	NA	NA	resection	tumor	>20	yes	yes	yes
IRD31	benign	FNA	pancreas/LN	benign	biopsy	bile duct	>10	NA	NA	NA
IRD32	NA	NA	NA	NA	biopsy	prostate	>10	NA	NA	NA
IRD33	NA	NA	NA	NA	biopsy	colon	>50	no	no	yes
IRD34	benign	NA	NA	NA	biopsy	larynx	>10	NA	NA	NA
IRD41	NA	NA	NA	NA	resection	tumor	>50	yes	yes	yes
IRD42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD43	NA	US	pancreas	inflammation	NA	NA	NA	NA	NA	NA
IRD44	NA	EUS	pancreas	benign	resection	tumor	>20	yes	yes	yes
IRD45	NA	EUS	pancreas	benign	biopsy	pancreas	20	NA	NA	NA
IRD46	NA	EUS	pancreas	benign	NA	NA	NA	NA	NA	NA
IRD47	NA	EUS	pancreas	benign	NA	NA	NA	NA	NA	NA
IRD48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRD49	atypic cells	EUS	pancreas	atypic cells	NA	NA	NA	NA	NA	NA
IRD50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

IRD=IgG4-related disease

EUS=endoscopic ultrasound guided

US=ultrasound guided

NA=not available/applicable

*IRD13 was diagnosed with cholangiocarcinoma 2 years after inclusion

IRD=IgG4-related disease

SMG = submandibular gland

SF= storiform fibrosis

OP= obliterative phlebitis

E= eosinophilia

NA=not available/applicable

HISTOPATHOLOGY 2						
Histology 2						
ID	Type	Organ	IgG4+ cells/hpf	SF	OP	E
IRD01	NA	NA	NA	NA	NA	NA
IRD02	NA	NA	NA	NA	NA	NA
IRD03	NA	NA	NA	NA	NA	NA
IRD04	biopsy	prostate	>10	NA	NA	NA
IRD05	biopsy	duodenum	>10	NA	NA	NA
IRD06	testis	yes	>15	NA	NA	NA
IRD07	NA	NA	NA	NA	NA	NA
IRD08	NA	possibly	NA	NA	NA	NA
IRD09	NA	NA	NA	NA	NA	NA
IRD10	NA	NA	NA	NA	NA	NA
IRD11	NA	NA	NA	NA	NA	NA
IRD12	NA	NA	NA	NA	NA	NA
IRD13	NA	NA	NA	NA	NA	NA
IRD14	NA	NA	NA	NA	NA	NA
IRD15	NA	NA	NA	NA	NA	NA
IRD16	NA	NA	NA	NA	NA	NA
IRD17	NA	NA	NA	NA	NA	NA
IRD18	NA	NA	NA	NA	NA	NA
IRD19	NA	NA	NA	NA	NA	NA
IRD20	NA	NA	NA	NA	NA	NA
IRD21	NA	NA	NA	NA	NA	NA
IRD22	NA	NA	NA	NA	NA	NA
IRD23	NA	NA	NA	NA	NA	NA
IRD24	NA	NA	NA	NA	NA	NA
IRD25	NA	NA	NA	NA	NA	NA
IRD26	NA	NA	NA	NA	NA	NA
IRD27	NA	NA	NA	NA	NA	NA
IRD28	biopsy	colon	>35	no	no	no
IRD29	biopsy	LN	100	no	no	no
IRD30	NA	NA	NA	NA	NA	NA
IRD31	NA	NA	NA	NA	NA	NA
IRD32	NA	NA	NA	NA	NA	NA
IRD33	biopsy	ileum	50	no	no	yes
IRD34	NA	NA	NA	NA	NA	NA
IRD41	biopsy	duodenum	NA	no	no	no
IRD42	NA	NA	NA	NA	NA	NA
IRD43	NA	NA	NA	NA	NA	NA
IRD44	NA	NA	NA	NA	NA	NA
IRD45	NA	NA	NA	NA	NA	NA
IRD46	NA	NA	NA	NA	NA	NA
IRD47	NA	NA	NA	NA	NA	NA
IRD48	NA	NA	NA	NA	NA	NA
IRD49	NA	NA	NA	NA	NA	NA
IRD50	NA	NA	NA	NA	NA	NA

IRD=IgG4-related disease
SF= storiform fibrosis
OP= obliterative phlebitis
E= eosinophilia
NA=not available/applicable

ID	TREATMENT 1					TREATMENT 2			HISORT CRITERIA Group
	Biliary stents?	Resection presumed malignancy?	Resection type	IMT	Response to steroids?	Relapse	Re-treatment with IMT	IMT after 1 year of inclusion	
IRD01	no	no	NA	pred 20mg	yes	yes	pred 20mg+aza 75mg	pred 7.5mg+aza 75mg	C
IRD02	yes	no	NA	pred 20mg	yes	yes	pred 5mg	pred 7.5mg	B
IRD03	no	no	NA	pred 20mg	yes	no	NA	aza 50 mg	C
IRD04	no	yes	hemihpatectomy	no	NA	no	NA	NA	A
IRD05	no	no	NA	pred 20mg	yes	yes	pred 5mg+aza 75mg	pred 2.5mg, aza 50mg	B
IRD06	yes	yes	PPPD	pred 10mg + aza 50mg	NA (passed away)	NA	NA	passed away	A
IRD07	yes	no	NA	pred 20mg	yes	yes	NA	NA	C
IRD08	no	no	NA	pred 40mg	yes	no	NA	no	B
IRD09	yes	no	NA	pred 20mg	yes	yes	pred 20mg+aza 100mg	pred 2.5mg+aza 100mg	B
IRD10	yes	no	NA	pred 20mg	yes	yes	pred 7.5mg	pred 5mg + MTX 10mg/w	B
IRD11	no	yes	choledocho-jejunostomy	no	NA	yes	(percutaneous dilation strictures)	no	A
IRD12	yes	yes	hemihpatectomy	pred 20mg	yes	no	NA	NA	A
IRD13	yes	no	NA	pred 10mg	yes	yes	pred 20mg	pred 5mg	C
IRD14	yes	yes	choledocho-jejunostomy	pred 20mg	yes	no	NA	pred 5mg+aza 50mg	A
IRD15	yes	no	NA	pred 20mg	yes	NA	NA	NA	A
IRD16	no	no	NA	pred 20mg	yes	yes	pred 5mg+aza 100mg	pred 2.5mg+aza 50mg	B
IRD17	no	no	NA	no	NA	NA	NA	no	B
IRD18	no	no	NA	pred 20mg	yes	NA	NA	NA	B
IRD19	yes	no	NA	pred 20mg	yes	NA	NA	NA	C
IRD20	no	no	NA	no	NA	no	NA	no	B
IRD21	no	no	NA	pred 40mg	yes	yes	aza 1.5mg/kg	aza 1.5mg/kg	B
IRD22	yes	no	NA	pred 20mg	yes	no	NA	pred 2.5mg+aza 50mg	C
IRD23	yes	no	NA	pred 20mg	yes	yes	pred 20mg	NA	A
IRD24	no	yes	PPPD	no	NA	NA	NA	NA	A
IRD25	no	no	NA	pred 40mg	yes	yes	pred 40mg	aza	C
IRD26	yes	yes	pancreato-duodenectomy	no	NA	no	NA	NA	A
IRD27	no	yes	choledocho-jejunostomy	pred 30 mg	yes	yes	MMF 1000mg	MMF 1000mg	A
IRD28	no	no	NA	pred 40mg	yes	yes	pred 30mg+MMF 1000mg	Bud 3mg+MMF 500mg	C
IRD29	no	no	NA	pred 40mg	yes	yes	pred 40mg+MMF 1000mg	Ritux	C
IRD30	no	yes	hilar resection + extended hemihpatectomy	no	NA	no	NA	NA	A
IRD31	yes	no	NA	pred 40mg	yes	no	NA	NA	C
IRD32	99	no	NA	pred 10mg	yes	no	NA	no	B
IRD33	no	no	NA	pred 40mg	yes	yes	aza 1,5mg/kg	aza	C
IRD34	yes	no	NA	pred 20mg	yes	yes	(percutaneous dilation strictures)	no	C
IRD41	no	yes	pancreato-duodenectomy	no	NA	NA	NA	NA	A
IRD42	NA	no	NA	pred 40mg	yes	yes	pred 20mg+aza 75mg	pred 5mg + aza 75mg	C
IRD43	yes	no	NA	pred 20mg	yes	NA	NA	NA	C
IRD44	NA	yes	hemihpatectomy	no	NA	NA	NA	NA	A
IRD45	no	no	NA	no	NA	NA	NA	NA	A
IRD46	no	no	NA	pred 20mg	yes	NA	NA	NA	B
IRD47	no	no	NA	pred 20mg	yes	NA	NA	NA	B
IRD48	no	no	NA	pred 20mg	yes	NA	NA	NA	C
IRD49	NA	no	NA	pred 20mg	yes	NA	NA	NA	C
IRD50	no	no	NA	pred 20mg	yes	NA	NA	NA	C

IRD=IgG4-related disease

IMT=immunomodulatory therapy

PPPD=pylorus sparing pancreaticoduodenectomy

pred=prednisolone

aza=azathioprine

NA=not available/applicable

HISORT group

A= biliary/pancreatic resection or core biopsy of pancreas showing diagnostic features of IAC/AIP

B= clinical suspicion of pancreatic disease/biliary strictures + classical imaging of AIP + elevated serum IgG4

C= clinical suspicion of pancreatic disease/biliary strictures + absence of typical AIP findings

+ two of following: elevated serum IgG4; suggestive pancreatic imaging findings; other organ involvement; bile duct biopsy with >10 IgG4+ cells/hpf

+ response to steroid treatment with improvement of pancreatic morphology/biliary strictures + decrease of markers of cholestasis

Patient characteristics – PSC/CA/CP patients

ID	GENERAL					SOCIAL HISTORY	
	Center	Group	Suspected organ manifestation(s)	Age	Gender	Job History	Relevant exposures*
PSC01	British	PSC	PSC	59	M	office worker	no
PSC02	Dutch	PSC	PSC	56	M	NA	NA
PSC03	Dutch	PSC	PSC, CD	45	M	NA	NA
PSC04	Dutch	PSC	PSC	44	M	dentist, engineer	no
PSC05	British	PSC	PSC, CD	58	M	NA	NA
PSC06	British	PSC	PSC	75	M	telecommunications	no
PSC07	British	PSC	PSC, UC	83	F	developing photographs, cleaner, catering, fish&chips shop	yes
PSC08	British	PSC	PSC, UC	59	F	NA	NA
PSC09	Dutch	PSC	PSC, UC	37	M	IT	no
PSC10	British	PSC	PSC, UC	60	F	NA	NA
PSC11	British	PSC	PSC, UC	70	M	maintenance engineer, asbestos exposure	yes
PSC12	British	PSC	PSC, UC	87	M	NA	NA
PSC13	Dutch	PSC	PSC, UC	32	F	NA	NA
PSC14	Dutch	PSC	PSC	37	M	ship deconstruction industry	yes
PSC15	Dutch	PSC	PSC, UC	64	F	NA	NA
PSC16	Dutch	PSC	PSC	41	F	nurse	no
PSC17	Dutch	PSC	PSC, UC	54	M	IT	no
PSC21	Dutch	PSC	PSC	47	F	NA	NA
PSC22	Dutch	PSC	PSC, UC	60	F	district nurse	No
PSC23	Dutch	PSC	PSC	27	F	student	No
PSC24	Dutch	PSC	PSC	39	M	ICT	No
PSC25	Dutch	PSC	PSC	45	M	office	No
PSC26	Dutch	PSC	PSC, CD	39	M	office	No
PSC27	British	PSC	PSC, CD	64	M	Building/stone mason. Sales/retail/management	yes
PSC28	British	PSC	PSC, UC	70	M	Car factory assembly line. Office electric company	yes
PSC29	British	PSC	PSC	25	M	Stock management. Retail warehouse	yes
PSC30	British	PSC	PSC, UC	60	M	Design engineer. Exposed to hydraulic oil.	yes
PSC31	British	PSC	PSC, UC	66	F	Telecommunications.	no
PSC32	British	PSC	PSC, UC	69	F	NA	NA
PSC33	British	PSC	PSC, UC	47	F	NA	NA
PSC34	British	PSC	PSC	35	M	NA	NA
PSC35	British	PSC	PSC	75	F	NA	NA
PSC36	British	PSC	PSC, UC	51	F	NA	NA
PSC37	British	PSC	PSC	60	F	NA	NA
PSC38	British	PSC	PSC	62	M	Manager	NA
PSC39	British	PSC	PSC	60	M	NA	NA
PSC40	British	PSC	PSC, Coll	25	M	NA	NA
PSC41	British	PSC	PSC, IC	50	M	Refuse collector. Construction	yes
PSC42	British	PSC	PSC	67	M	Business director	NA
PSC43	British	PSC	PSC, UC	31	F	office work	no
PSC44	British	PSC	PSC	28	F	NA	NA
PSC45	British	PSC	PSC	68	M	NA	NA
PSC46	British	PSC	PSC, UC	59	M	Insurance broker	no
PSC47	British	PSC	PSC, UC	63	M	Sales Manager	no
PSC48	British	PSC	PSC	41	F	Outdoor instructor. Travel.	yes
CA01	Dutch	CA	CCA	54	F	NA	NA
CA02	Dutch	CA	PCA	56	M	fast food restaurant	no
CA03	Dutch	CA	CCA	74	M	NA	NA
CA04	Dutch	CA	CCA	78	M	NA	NA
CA05	Dutch	CA	PC	70	M	crane operator	yes
CA06	Dutch	CA	PCA	70	F	receptionist	no
CA07	Dutch	CA	CCA	54	M	tax advisor	no
CA08	Dutch	CA	CCA	65	F	NA	NA
CA09	Dutch	CA	CCA	72	M	architect	no
CA10	Dutch	CA	CCA	66	M	police officer	no
CA11	Dutch	CA	CCA	47	F	kindergarden	no
CA12	Dutch	CA	PCA	75	F	house wife	no
CA13	Dutch	CA	PCA	62	M	manager bank	no
CA14	Dutch	CA	CCA	72	M	electrician	yes
CA15	Dutch	CA	CCA/PCA	56	F	house cleaner	no
CA16	Dutch	CA	PCA	68	M	entrepreneur	no
CA17	Dutch	CA	CCA	74	F	assistant dentist	no
CA21	Dutch	CA	GCA	68	F	manager bakery	No
CA22	Dutch	CA	CCA	66	F	housewife	No
CA23	Dutch	CA	CCA	71	M	teacher	No
CA24	Dutch	CA	PCA	64	M	broker	No
CA25	Dutch	CA	CCA	61	M	forklift truck driver	Yes
CA26	Dutch	CA	CCA	69	M	NA	NA
CA27	Dutch	CA	CCA	61	F	NA	NA
CP01	Dutch	CP	ischemic	50	F	NA	NA
CP02	Dutch	CP	obstructive (stones) recurrent severe acute pancreatitis (necrotizing)	63	M	electrotechnician	Yes
CP03	Dutch	CP	toxic (alcohol)	56	M	NA	NA
CP04	Dutch	CP	toxic (alcohol)	48	M	maritime shipping	Yes
CP05	Dutch	CP	toxic (alcohol)	61	M	hair dresser	Yes
CP06	Dutch	CP	toxic (alcohol)/obstructive (pancreas divisum)	49	F	administration	No
CP07	Dutch	CP	toxic (alcohol)	46	M	teaching assistant	No
CP08	Dutch	CP	idiopathic	68	M	NA	NA
CP09	Dutch	CP	idiopathic	51	F	NA	NA
CP10	Dutch	CP	obstructive (stones)	48	F	NA	NA

PSC=primary sclerosing cholangitis
 CA=pancreatobiliary malignancy
 CP=chronic pancreatitis
 CD=Chrohn's disease
 UC=ulcerative colitis
 CC=collagenous colitis
 CCA=cholangiocarcinoma
 PCA=pancreatic carcinoma
 GCA=gall bladder carcinoma

PC=papillary carcinoma
 M=male
 F=female

*relevant exposure= recalled regular occupational (or non-occupational) exposures to solvents, pigments, oil products, industrial and metal dusts (> 1 year)
 NA=not available/applicable

Patients PSC18-20 and CA18-20 have been described in detail earlier (11)

ID	MEDICAL HISTORY						MEDICATIONS		
	Presentation	Allergies	Malignancies	New onset			ERT for EPI	IMT	UDCA
				DM	DM	IBD			
PSC01	jaundice, itch, ERCP 1990	no	no	no	no	no	no	no	yes
PSC02	abnormal serum liver tests	no	no	no	no	no	no	no	yes
PSC03	colitis, abnormal serum liver tests	lactose	no	no	no	yes	no	no	yes
PSC04	dominant stricture	NA	no	no	no	no	no	no	yes
PSC05	abdominal pain, abnormal serum liver tests	NA	no	no	no	yes	no	no	yes
PSC06	abnormal serum liver tests	no	prostate carcinoma	no	no	no	no	no	no
PSC07	known UC, screening scan	nuts	no	no	no	yes	no	no	no
PSC08	known UC, abnormal serum liver tests	NA	no	no	no	yes	no	no	yes
PSC09	fatigue, abdominal pain	no	no	no	no	no	no	no	yes
PSC10	abdominal pain, known UC, abnormal serum liver tests	NA	no	no	no	yes	no	no	yes
PSC11	known UC, abnormal serum liver tests	feathers	no	no	no	yes	no	no	yes
PSC12	known UC, abnormal serum liver tests	NA	lung carcinoma	no	no	yes	no	no	yes
PSC13	itch, fatigue	NA	no	no	no	yes	no	no	yes
PSC14	abnormal serum liver tests	no	no	no	no	no	no	no	yes
PSC15	known UC, abnormal serum liver tests	penicillin	colon carcinoma, melanoma	no	no	yes	no	no	yes
PSC16	joint pain, abnormal serum liver tests	animals	no	no	no	no	no	no	yes
PSC17	known UC, abnormal liver biochemistry	NA	no	no	no	yes	no	no	yes
PSC21	itch, abdominal pain, fatigue	No	no	yes	no	no	no	no	yes
PSC22	abnormal liver biochemistry	No	no	no	no	yes	no	no	yes
PSC23	itch, abnormal liver biochemistry	No	no	no	no	no	no	no	yes
PSC24	itch, fatigue, abnormal liver biochemistry	No	no	no	no	no	no	no	yes
PSC25	jaundice, abnormal liver biochemistry	NA	no	no	no	no	no	no	yes
PSC26	abnormal liver biochemistry	NA	no	no	no	yes	no	no	yes
PSC27	Jaundice, weight loss, abdominal pain	no	no	no	no	yes	no	past	yes
PSC28	Jaundice, abdominal pain, nausea, abnorm LFTs	no	no	yes	no	no	no	no	yes
PSC29	Abnormal LFTs	no	no	no	no	no	no	no	yes
PSC30	colitis, abnormal serum liver tests	no	no	no	no	yes	no	no	yes
PSC31	Colitis. Itching	no	no	no	no	no	no	no	yes
PSC32	Fatigue, itch, abnormal LFTs	hayfever	no	no	no	no	no	no	yes
PSC33	Colitis. Abnormal LFTs	no	no	no	no	no	no	no	yes
PSC34	NA	NA	NA	NA	NA	no	no	no	yes
PSC35	Abnormal LFTs	no	no	no	no	no	no	no	yes
PSC36	Itching, fatigue, abdo pain, weight loss	asthma	no	no	no	no	no	no	yes
PSC37	Fever, cholangitis	no	no	no	no	yes	no	no	yes
PSC38	Itching	no	no	no	no	no	no	no	yes
PSC39	Abnormal LFTs	no	no	no	no	yes	no	no	yes
PSC40	Itching, pain, fatigue, weight loss and cholangitis	no	no	no	no	no	no	no	yes
PSC41	colitis, abnormal serum liver tests	hayfever	no	no	no	yes	no	no	yes
PSC42	Itching and fatigue	no	no	no	no	yes	no	no	yes
PSC43	Asymptomatic, abnormal LFTs. Known UC	no	no	no	no	no	no	no	yes
PSC44	NA	NA	NA	NA	NA	yes	no	no	NA
PSC45	NA	NA	NA	NA	NA	no	no	no	NA
PSC46	Jaundice and abnormal LFTs	no	no	no	no	no	no	no	yes
PSC47	Jaundice and abnormal LFTs	wheat	no	no	no	yes	no	no	yes
PSC48	Abnormal LFTs	no	no	no	no	no	no	no	yes
CA01	abdominal discomfort, weight loss	hay fever	no	no	no	no	no	no	no
CA02	obstructive jaundice, itch, abdominal pain, weight loss	no	no	yes	yes	no	no	no	no
CA03	obstructive jaundice, abdominal pain, weight loss, nausea	no	no	no	no	yes	no	no	no
CA04	obstructive jaundice, weight loss, nausea	no	no	yes	no	no	no	no	no
CA05	obstructive jaundice, weight loss, nausea	no	no	yes	no	no	no	no	no
CA06	obstructive jaundice, itch, weight loss, back pain, fatigue	no	no	no	no	no	yes	no	no
CA07	obstructive jaundice, weight loss	antibiotics	no	no	no	no	no	no	no
CA08	obstructive jaundice, itch, abdominal pain, weight loss	ciprofloxacin	no	no	no	no	no	no	no
CA09	obstructive jaundice, itch, abdominal pain, weight loss	no	no	no	no	no	no	no	no
CA10	obstructive jaundice, abdominal pain, weight loss, fatigue	amoxicillin	prostate carcinoma	no	no	no	no	no	no
CA11	obstructive jaundice, itch, abdominal pain, weight loss	no	no	no	no	no	no	no	no
CA12	obstructive jaundice, itch, abdominal pain, weight loss	no	no	no	no	no	no	no	no
CA13	obstructive jaundice, itch, weight loss, nausea	ampicillin	no	no	no	no	no	no	no
CA14	obstructive jaundice, itch, weight loss, nausea, fatigue	no	urothelial cell carcinoma	no	no	no	yes	no	no
CA15	abdominal pain, weight loss	NA	no	no	no	no	no	no	no
CA16	abdominal pain, weight loss	NA	no	no	no	no	no	no	no
CA17	abdominal pain, weight loss, fatigue	several foods	no	no	no	no	no	no	no
CA21	abdominal pain, jaundice	No	breast carcinoma	no	no	no	no	no	no
CA22	obstructive jaundice, itch, weight loss	No	no	no	no	no	no	no	no
CA23	obstructive jaundice, itch	No	no	no	no	no	no	no	no
CA24	obstructive jaundice, itch, abdominal pain	No	urothelial cell carcinoma	no	no	no	no	no	no
CA25	obstructive jaundice, weight loss, itch	No	no	no	no	no	no	no	no
CA26	weight loss, itch	latex	no	no	no	no	yes	no	no
CA27	obstructive jaundice, weight loss, itch, fatigue	No	no	yes	no	no	no	no	no
CP01	epigastric pain radiating to back, nausea, vomiting, nicotine abuse	codeine	no	no	no	no	no	no	no
CP02	epigastric pain, weight loss	No	no	yes	yes	no	yes	no	no
CP03	weight loss, abdominal pain	contrast fluid	no	yes	yes	no	yes	no	no
CP04	weight loss, abdominal pain, alcohol abuse	No	no	yes	yes	no	yes	no	no
CP05	epigastric pain radiating to back, alcohol abuse	tramadol, diclofenac	no	no	no	no	yes	no	no
CP06	epigastric pain, nausea, vomiting, alcohol abuse	No	no	yes	yes	no	yes	no	no
CP07	epigastric pain radiating to back, nausea, vomiting, alcohol abuse	No	no	yes	yes	no	no	no	no
CP08	epigastric pain, weight loss	No	rectum carcinoma	no	no	no	yes	no	no
CP09	epigastric pain, weight loss, nausea, vomiting, nicotine abuse	NA	no	yes	no	no	yes	no	no
CP10	epigastric pain radiating to back, weight loss	NA	no	no	no	no	yes	no	no

PSC=primary sclerosing cholangitis
CA=pancreatobiliary malignancy
CP=chronic pancreatitis
DM=diabetes mellitus
IBD=inflammatory bowel disease
ERT= Enzyme replacement
EPI=exocrine pancreatic insufficiency
IMT=immunomodulatory therapy
UDCA=ursodeoxycholic acid
UC=ulcerative colitis
NA=not available/applicable

ID	LABORATORY FINDINGS 1 Pre-treatment															Auto-antibodies	
	Bilirubin	AST	ALT	ALP	GGT	lipase	CA19.9	IgG1	IgG2	IgG3	IgG4	IgGtotal	IgG4:IgG1 ratio	IgG4 highest	qPCR	ANA	ANCA
PSC01	16	24	63	422	54	NA	30	8,27	4,26	0,46	1,09	13,5	0,132	1,09	1,21	no	no
PSC02	36	120	131	369	172	50	39	11,1	3,75	0,97	0,62	14,7	0,056	0,81	2,90	no	atypic
PSC03	9	40	62	228	230	40	4	11,7	4,48	0,34	0,77	17,1	0,066	0,04	3,68	yes	atypic
PSC04	6	27	35	251	63	NA	NA	10,4	5,63	0,75	1,03	15,3	0,099	1,03	0,35	NA	NA
PSC05	28	26	82	614	351	NA	7	9,41	3,19	1,29	1	13,5	0,106	1	3,13	no	P-ANCA
PSC06	4	NA	16	223	152	NA	NA	9,31	NA	NA	1,55	14	0,166	1,55	1,14	NA	NA
PSC07	7	NA	12	131	19	NA	16	13,6	4,61	2,6	1,68	17	0,124	1,68	1,51	no	P-ANCA
PSC08	5	NA	23	271	114	NA	6	7,72	NA	NA	0,86	14,8	0,111	0,86	1,68	8	no
PSC09	20	90	64	283	68	23	34	15,9	3,61	0,64	0,83	21	0,052	0,83	2,57	unclear	p-ANCA
PSC10	24	20	21	117	28	NA	15	6,35	2,14	0,1	0,09	9,46	0,014	0,09	0,95	NA	NA
PSC11	12	24	52	426	77	NA	12	6,26	2,93	0,21	0,19	9,8	0,030	0,19	1,00	no	no
PSC12	8	NA	17	263	35	NA	2	16,5	2,44	0,57	1,81	19,8	0,110	1,81	1,41	no	P-ANCA
PSC13	8	60	53	320	55	28	14	20,5	5,77	0,27	3,33	29,1	0,162	3,33	3,93	no	NA
PSC14	21	237	370	270	2995	75	15	7,87	3,48	1,17	1,7	11,4	0,216	1,73	1,95	yes	NA
PSC15	9	28	24	162	54	23	6	9,39	2,73	0,38	0,24	12,2	0,026	0,24	0,10	yes	NA
PSC16	6	74	108	724	185	51	96	10,3	1,33	0,29	0,05	12,2	0,005	0,05	1,76	yes	atypic
PSC17	7	39	49	146	144	49	8	9,71	1,18	0,35	0,09	11,5	0,009	0,09	0,78	no	no
PSC21	9	43	49	379	157	NA	24	16,2	4,44	0,51	3,55	3,38	0,219	3,69	1,40	yes	no
PSC22	19	36	24	140	16	37	11	8,40	3,52	0,41	0,04	12,4	0,005	0,04	0,34	no	atypic
PSC23	8	68	66	309	78	NA	16	7,2	1,96	0,26	0,37	9,4	0,051	0,41	2,99	yes	9999
PSC24	12	96	191	433	233	42	39	10,1	2,8	0,37	0,01	13,7	0,001	0,01	2,05	no	p-ANCA
PSC25	10	55	104	109	315	28	8	7,53	1,71	0,3	0,24	8,9	0,032	0,24	1,28	no	NA
PSC26	12	35	50	195	111	31	24	6,94	2,43	0,36	0,66	9,2	0,095	0,66	1,42	NA	NA
PSC27	72	NA	36	901	NA	78	9	7,29	NA	NA	2,87	14,9	0,394	2,87	2,49	no	no
PSC28	374	NA	76	1607	NA	NA	13	8,11	NA	NA	2,48	11,4	0,306	2,48	4,46	no	no
PSC29	12	NA	119	711	NA	90	NA	15	NA	NA	1,66	25	0,111	1,66	1,63	yes	NA
PSC30	NA	NA	NA	NA	NA	NA	norm	14,6	NA	NA	4,35	18,4	0,298	4,35	1,53	no	P-ANCA
PSC31	8	NA	16	230	14	NA	18	6,7	NA	NA	0,32	8,8	0,048	0,32	0,72	no	NA
PSC32	5	NA	11	543	36	113	6	15	NA	NA	0,01	19	0,001	0,01	0,16	NA	NA
PSC33	8	NA	108	990	430	NA	8	7	NA	NA	0,27	9,9	0,039	0,27	0,98	no	P-ANCA
PSC34	9	NA	57	331	207	NA	10	NA	NA	NA	0,05	5,5	NA	0,05	0,41	no	NA
PSC35	10	NA	21	164	NA	NA	NA	NA	NA	NA	0,44	12	3,912	0,44	4,79	no	NA
PSC36	6	NA	80	307	NA	NA	17	6,28	NA	NA	0,49	10,5	0,066	0,49	0,41	yes	NA
PSC37	14	NA	21	258	46	NA	14	10,5	NA	NA	0,63	12,7	3,912	0,63	4,62	no	NA
PSC38	19	NA	22	295	NA	NA	15	14	NA	NA	0,21	14,2	0,066	0,21	3,32	no	P-ANCA
PSC39	14	NA	28	304	86	NA	13	13,7	NA	NA	0,93	17,1	3,912	0,93	3,06	no	NA
PSC40	59	NA	2046	394	572	NA	31	7,6	NA	NA	0,36	11,3	0,066	0,36	1,72	yes	no
PSC41	10	NA	53	427	201	102	12	15,6	NA	NA	2,04	22,8	3,912	2,04	3,81	yes	P-ANCA
PSC42	21	NA	116	487	771	NA	25	10,9	NA	NA	0,6	14,6	0,066	0,6	2,26	yes	NA
PSC43	13	NA	33	345	123	NA	13	NA	NA	NA	0,11	18,8	NA	0,11	1,18	no	NA
PSC44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0,08	NA	NA	0,08	0,06	NA	NA
PSC45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0,39	NA	NA	0,39	0,29	NA	NA
PSC46	24	NA	26	111	35	NA	5	6,90	NA	NA	3,01	13	0,436	3,01	4,10	yes	P-ANCA
PSC47	82	NA	106	1627	536	26	45	15,3	NA	NA	2,27	20	3,912	2,27	5,93	yes	P-ANCA
PSC48	8	NA	33	235	39	22	normal	7,5	NA	NA	1,69	11,6	0,066	1,69	1,08	yes	no
CA01	20	56	80	283	382	182	236	6,77	2,84	0,63	0,45	10,2	0,066	0,45	1,59	NA	NA
CA02	76	114	198	554	1252	3302	91	5,92	4,45	0,45	0,86	10,2	0,145	0,86	1,73	NA	NA
CA03	22	57	81	298	846	NA	NA	7,28	0,16	0,32	0	7,4	0,000	0	3,88	NA	NA
CA04	14	37	40	215	485	124	87	10,4	2,22	0,79	0,28	13,2	0,027	0,28	0,75	NA	NA
CA05	36	22	35	246	489	97	45	7,29	3,34	0,19	0,73	10,5	0,100	0,73	1,50	NA	NA
CA06	30	56	75	615	457	9	1270	7,26	3	0,24	1,39	9,8	0,191	1,39	3,41	NA	NA
CA07	28	63	72	121	301	137	34	11,2	3,41	0,31	0,7	14,3	0,063	0,7	0,81	NA	NA
CA08	41	80	86	326	328	28	360	9,1	4,29	0,49	0,43	12,8	0,047	0,43	3,63	NA	NA
CA09	192	47	48	252	258	49	67	4,87	3,35	0,17	0,88	10,1	0,181	0,88	3,79	NA	NA
CA10	103	64	84	351	256	76	107	6,89	2,02	0,36	0,26	9,1	0,038	0,26	0,58	NA	NA
CA11	40	126	57	679	585	39	161	10,1	2,18	0,2	0,15	13	0,015	0,22	0,17	NA	NA
CA12	109	234	370	1210	2416	201	221	5,27	3,69	0,36	1,9	9,9	0,361	1,9	1,97	NA	NA
CA13	326	100	175	341	419	154	370	3,49	2,66	0,15	0,33	7,6	0,095	0,33	0,53	NA	NA
CA14	396	193	229	496	572	62	2383	9,67	2,43	0,42	0,58	11,8	0,060	0,58	4,24	NA	NA
CA15	13	52	41	926	895	43	795	11,6	6,32	0,97	1,54	17,8	0,133	1,54	2,19	NA	NA
CA16	8	23	33	112	91	44	2598	5,58	3,7	0,38	1,09	9,7	0,195	1,09	2,36	NA	NA
CA17	9	30	30	323	766	33	2568	7	1,72	0,31	0,3	9	0,043	0,3	1,95	NA	NA
CA21	20	107	350	1023	1323	37	1033	5,91	4,04	0,42	0,61	10,7	0,103	0,61	1,59	NA	NA
CA22	61	73	85	716	1559	32	184	8,87	4,49	0,84	0,67	13	0,076	0,67	0,70	NA	NA
CA23	14	56	85	278	981	20	30	5,14	4,03	0,39	0,72	9,5	0,140	0,74	2,44	NA	NA
CA24	18	23	30	92	71	71	11	10,4	0,44	0,63	0,03	12,5	0,003	0,03	0,52	NA	NA
CA25	38	37	70	161	67	33	24	6,18	3,04	0,29	1,71	1,71	0,277	1,81	3,25	NA	NA
CA26	81	119	135	860	519	26	NA	7,02	4,4	0,37	0,26	11,3	0,037	0,26	1,22	NA	NA
CA27	22	107	106	402	1329	27	4207	9,25	3,28	0,35	1,34	12	0,145	1,34	1,04	NA	NA
CP01	4	10	8	164	35	80	9	8,63	1,98	0,43	0,79	10,4	0,092	0,79	2,40	NA	NA
CP02	14	57	80	534	409	11	12	8,73	3,09	0,58	0,97	11,9	0,111	0,97	1,21	NA	NA
CP03	8	52	91	383	405	9	17	6,17	4,38	0,39	0,56	10,3	0,091	0,56	1,65	NA	NA
CP04	7	19	21	97	190	87	75	5,84	4,98	1,45	1,82	11,4	0,312	1,88	4,25	NA	NA
CP05	10	21	14	88	40	82	9	8,53	1,25	0,28	0,26	9,9	0,030	0,26	2,25	NA	NA
CP06	3	21	16	40	12	16	8	5,41	1,04	0,11	0,09	6,5	0,017	0,09	2,21	NA	NA
CP07	9	191	138	452	2055	13	81	7	2,2	1,01	1,09	9,6	0,156	1,09	6,45	NA	NA
CP08	2	15	16	92	75	29	0	3,84	3,14	0,61	0,4	7	0,104	0,4	1,40	NA	NA
CP09	4	41	58	160	227	14	1	4,08	0,76	0,06	0,41	5	0,100	0,41	3,71	NA	NA
CP10	6	12	9	109	17	33	68	8,42	3,36	0,98	0,79	12	0,094	0,79	2,91	NA	NA

PSC=primary sclerosing cholangitis
CA=pancreatobiliary malignancy
CP=chronic pancreatitis
AST=aspartate aminotransferase
ALT=alanine aminotransferase
ALP=alkaline phosphatase
GGT=gamma-glutamyl transferase

CA19.9=carbonic anhydrase 19.9
IgG=Immunoglobulin G
qPCR=quantitative PCR
NA=not available/applicable

IMAGING 1						
ID	Type	Localization stenosis/obstruction	Suspect for malignancy?	Malignancy type	Suspect for sclerosing cholangitis?*	Lymphadenopathy
PSC01	ERCP, MRCP, CT, AUS	none	no	NA	yes	NA
PSC02	MRCP, ERCP	multifocal	no	NA	yes	NA
PSC03	MRCP	multifocal (IHBD)	no	NA	yes	NA
PSC04	ERCP	multifocal	no	NA	yes	NA
PSC05	MRCP, ERCP, CT	none	no	NA	yes	NA
PSC06	MRCP, AUS	DCBD/PD	yes	CCA	yes	no
PSC07	MRCP, CT	none	yes	CCA	yes	locoregional
PSC08	MRCP, US	none	no	NA	yes	NA
PSC09	CT, MRCP, ERCP	multifocal	no	NA	yes	NA
PSC10	MRCP, AUS	CBD	no	NA	yes	NA
PSC11	MRCP, ERCP, AUS, CT	hilar	no	NA	yes	NA
PSC12	MRCP, CT, AUS	none	no	NA	yes	NA
PSC13	MRCP, ERCP	multifocal (IHBD)	no	NA	yes	NA
PSC14	MRCP, ERCP	CBD	no	NA	yes	NA
PSC15	MRCP, AUS	multifocal	no	NA	yes	NA
PSC16	MRCP, ERCP	IHBD	no	NA	yes	NA
PSC17	CT, MRCP	CBD	no	NA	yes	NA
PSC21	MRCP, ERCP, AUS	multifocal	no	NA	yes	no
PSC22	MRCP	multifocal	no	NA	yes	NA
PSC23	MRCP	multifocal (IHBD)	no	NA	yes	NA
PSC24	MRCP, ERCP	multifocal	no	NA	yes	locoregional
PSC25	MRCP, AUS	multifocal (IHBD)	no	NA	yes	no
PSC26	MRCP, AUS	multifocal (IHBD)	no	NA	yes	NA
PSC27	ERCP, MRCP, CT	IHD	no	NA	yes	no
PSC28	MRCP, AUS, ERCP, CT	CHD, LIHD	no	NA	yes	no
PSC29	MRCP	none	no	NA	yes	no
PSC30	ERCP, MRCP, CT, AUS	IHD and EHD	no	NA	yes	yes
PSC31	ERCP, MRCP	EHD and IHD	no	NA	yes	no
PSC32	MRCP, AUS	IHD	no	NA	yes	no
PSC33	MRCP	IHD and EHD	no	NA	yes	no
PSC34	NA	NA	NA	NA	NA	NA
PSC35	MRCP	IHD	no	NA	yes	no
PSC36	MRCP, ERCP, AUS	IHD and EHD	no	NA	yes	yes
PSC37	MRCP	IHD	no	NA	yes	no
PSC38	MRCP, AUS	EHD and IHD	no	NA	yes	no
PSC39	MRCP	none	no	NA	yes	no
PSC40	ERCP, MRCP, AUS	EHD and IHD	no	NA	yes	no
PSC41	ERCP, MRCP, AUS	IHD	no	NA	yes	no
PSC42	MRCP, AUS	IHD	no	NA	yes	no
PSC43	MRCP, AUS	IHD	no	NA	yes	no
PSC44	NA	NA	NA	NA	NA	NA
PSC45	NA	NA	NA	NA	NA	NA
PSC46	ERCP, MRCP	CHD/LHD	no	NA	yes	no
PSC47	MRCP, CT	IHD/EHD	no	NA	yes	no
PSC48	MRCP, CT	none	no	NA	yes	no
CA01	CT	Hilar	yes	Klatskin tumour Bismuth type IV	no	no
CA02	CT, ERCP	DCBD	yes	PCA	no	locoregional
CA03	CT, MRI	Hilar	yes	Klatskin tumour Bismuth type IV	no	locoregional
CA04	CT, MRI	Hilar	yes	Klatskin tumour Bismuth type IIIa	no	locoregional, retroperitoneal
CA05	CT, MRI, EUS	DCBD	yes	papillary carcinoma	no	no
CA06	CT, ERCP	DCBD	yes	PCA	no	locoregional, lungs
CA07	CT	Hilar	yes	Klatskin tumour Bismuth type IIIa	no	locoregional
CA08	CT, MRI, ERCP	hilar	yes	Klatskin tumour Bismuth type IV	no	locoregional
CA09	CT, MRI, ERCP	DCBD	yes	distal CCA	no	no
CA10	CT, ERCP	Hilar	yes	Klatskin tumour Bismuth type IIIa	no	locoregional
CA11	CT	hilar	yes	Klatskin tumour Bismuth type IV	no	locoregional
CA12	CT, EUS	DCBD	yes	PCA	no	locoregional
CA13	CT, MRI, ERCP	DCBD	yes	PC	no	no
CA14	CT, MRCP, ERCP	hilar	yes	Klatskin tumour Bismuth type IV	no	locoregional
CA15	CT, MRCP	hilar	yes	CCA/PCA	no	locoregional
CA16	CT, EUS	none	yes	PCA	no	locoregional
CA17	CT, MRI	hilar	yes	Klatskin tumour Bismuth type IIIb	no	locoregional, abdominal, paracardial
CA21	CT	DCBD, Hilar	yes	Gall bladder cancer	no	no
CA22	CT, MRI, ERCP	Hilar	yes	Klatskin type IV	no	no
CA23	CT, MRCP, ERCP	hilar	yes	Klatskin type IIIa	no	no
CA24	CT, ERCP	DCBD	yes	PCA	no	locoregional
CA25	CT, ERCP, AUS	Hilar	yes	Klatskin type IIIa/IV	no	locoregional
CA26	CT, ERCP, AUS	hilar	yes	Klatskin type IV	no	no
CA27	CT, MRI, ERCP, AUS	hilar	yes	Klatskin type IIIa	no	no
CP01	CT, AUS	NA	yes	NA	no	no
CP02	CT, ERCP, EUS	DCBD/IP	yes	PCA	no	locoregional
CP03	CT, MRI, ERCP, AUS	DCBC	yes	7777	no	locoregional
CP04	CT, EUS	IP	yes	PCA	no	locoregional
CP05	CT, MRCP, ERCP, EUS, AUS	DCBD	yes	PCA	no	no
CP06	CT, MRCP, ERCP, AUS	IP	yes	PCA	no	no
CP07	CT, ERCP, AUS	IP	yes	NA	no	no
CP08	CT, MRI, ERCP, EUS	IP	yes	NA	no	locoregional
CP09	CT, MRI, AUS	NA	yes	NA	no	no
CP10	CT, MRI	DCBD/IP	yes	NA	no	no

PSC=primary sclerosing cholangitis

CA=pancreatobiliary malignancy

CP=chronic pancreatitis

CT=computed tomography

MRI=magnetic resonance imaging

MRCP=magnetic resonance cholangiopancreatography

ERCP=endoscopic retrograde cholangiopancreatography

PET=positron emission tomography

AUS=abdominal ultrasound

EUS=endoscopic ultrasound

IHBD=intra hepatic bile ducts

CBD=common bile duct

DCBD= distal CBD

PD = pancreatic duct

NA=not available/applicable

ID	HISTOPATHOLOGY 1			
	Cytology 1		Cytology 2	
	Biliary brushing	Function type	Function organ	Function outcome
PSC01	NA	NA	NA	NA
PSC02	atypic cells (reactive)	NA	NA	NA
PSC03	NA	NA	NA	NA
PSC04	NA	NA	NA	NA
PSC05	NA	NA	NA	NA
PSC06	NA	NA	NA	NA
PSC07	NA	NA	NA	NA
PSC08	NA	NA	NA	NA
PSC09	atypic cells (reactive)	NA	NA	NA
PSC10	NA	NA	NA	NA
PSC11	benign	NA	NA	NA
PSC12	NA	NA	NA	NA
PSC13	NA	NA	NA	NA
PSC14	benign	NA	NA	NA
PSC15	NA	NA	NA	NA
PSC16	NA	NA	NA	NA
PSC17	NA	NA	NA	NA
PSC21	inflammation	NA	NA	NA
PSC22	NA	NA	NA	NA
PSC23	NA	NA	NA	NA
PSC24	inflammation	NA	NA	NA
PSC25	NA	NA	NA	NA
PSC26	NA	NA	NA	NA
PSC27	NA	NA	NA	NA
PSC28	benign	NA	NA	NA
PSC29	NA	NA	NA	NA
PSC30	NA	NA	NA	NA
PSC31	NA	NA	NA	NA
PSC32	NA	NA	NA	NA
PSC33	NA	NA	NA	NA
PSC34	NA	NA	NA	NA
PSC35	NA	NA	NA	NA
PSC36	benign	NA	NA	NA
PSC37	NA	NA	NA	NA
PSC38	NA	NA	NA	NA
PSC39	NA	NA	NA	NA
PSC40	benign	NA	NA	NA
PSC41	NA	NA	NA	NA
PSC42	NA	NA	NA	NA
PSC43	NA	NA	NA	NA
PSC44	NA	NA	NA	NA
PSC45	NA	NA	NA	NA
PSC46	NA	NA	NA	NA
PSC47	NA	NA	NA	NA
PSC48	NA	NA	NA	NA
CA01	NA	NA	NA	NA
CA02	NA	US	liver	adenocarcinoma
CA03	adenocarcinoma	NA	NA	NA
CA04	normal	NA	NA	NA
CA05	NA	EUS	tumor	adenocarcinoma
CA06	adenocarcinoma	NA	NA	NA
CA07	adenocarcinoma	NA	NA	NA
CA08	atypic cells	US	abdominal lymph node	benign
CA09	normal	NA	NA	NA
CA10	insufficient material	NA	NA	NA
CA11	NA	US	abdominal lymph node	benign
CA12	atypic cells	EUS	pancreas head	unclear
CA13	NA	NA	NA	NA
CA14	atypic cells	NA	NA	NA
CA15	NA	NA	NA	NA
CA16	NA	EUS	pancreas	adenocarcinoma
CA17	NA	US	tumor	adenocarcinoma
CA21	NA	NA	NA	NA
CA22	NA	NA	NA	NA
CA23	no malignancy	NA	NA	NA
CA24	no malignancy	US	pancreas	adenocarcinoma
CA25	NA	US	tumor	adenocarcinoma
CA26	inflammation	NA	NA	NA
CA27	inflammation	NA	NA	NA
CP01	NA	NA	NA	NA
CP02	benign	EUS	pancreas	inflammation
CP03	benign	NA	NA	NA
CP04	benign	NA	NA	NA
CP05	NA	EUS	pancreas	benign
CP06	NA	NA	NA	NA
CP07	NA	NA	NA	NA
CP08	NA	EUS	pancreascyste	inflammatory cells
CP09	NA	NA	NA	NA
CP10	NA	NA	NA	NA

PSC=primary sclerosing cholangitis
CA=pancreatobiliary malignancy
CP=chronic pancreatitis
EUS=endoscopic ultrasound guided
US=ultrasound guided
NA=not available/applicable

HISTOPATHOLOGY 2					
Histology 1					
ID	Type	Organ	IgG4+ cells/hpf	Malignancy type	Description
PSC01	biopsy	liver	NA	NA	NA
PSC02	biopsy	liver	NA	NA	mild chronic inflammation, mild fibrosis
PSC03	biopsy	liver	NA	NA	chronic active hepatitis, severe fibrosis
PSC04	NA	NA	NA	NA	no
PSC05	NA	NA	NA	NA	NA
PSC06	NA	NA	NA	NA	NA
PSC07	NA	NA	NA	NA	NA
PSC08	NA	NA	NA	NA	NA
PSC09	biopsy	colon	NA	NA	quiescent chronic inflammation
PSC10	biopsy	liver	NA	NA	NA
PSC11	biopsy	liver	NA	NA	NA
PSC12	NA	NA	NA	NA	NA
PSC13	biopsy	liver	>30	NA	chronic hepatitis/cholangitis, biliary fibrosis
PSC14	biopsy	liver	2	NA	inflammation suspect for PSC
PSC15	biopsy	colon	NA	NA	chronic active colitis
PSC16	biopsy	liver	NA	NA	small duct PSC
PSC17	biopsy	liver	NA	NA	hepatitis, concentric fibrosis bile ducts
PSC21	biopsy	duodenum	1	NA	benign
PSC22	biopsy	liver	NA	NA	septal fibrosis
PSC23	biopsy	liver	NA	NA	minimal portal infiltrate, ductular metaplasia and loss of ducts: (small duct) PSC
PSC24	NA	NA	NA	NA	NA
PSC25	biopsy	liver	NA	NA	cholangiolitis, septal fibrosis
PSC26	biopsy	liver	NA	NA	ductular reaction with minimal portal-tract fibrosis
PSC27	biopsy	liver	3	NA	portal fibrosis, periductal sclerosis, granulomas, chronic inflamm and lymphocytes,
PSC28	biopsy	liver	0	NA	periductal sclerosis, mild fibrosis, minimal inflamm
PSC29	NA	NA	NA	NA	NA
PSC30	biopsy	liver	1	NA	chronic inflam and portal fibrosis
PSC31	biopsy	liver	NA	NA	fibrosis of portal tracts and cholestasis
PSC32	biopsy	liver	NA	NA	PSC
PSC33	biopsy	colon	NA	NA	mildly active ulcerative colitis
PSC34	NA	NA	NA	NA	NA
PSC35	NA	NA	NA	NA	NA
PSC36	biopsy	liver	NA	NA	cirrhosis, portal fibrosis
PSC37	biopsy	colon	NA	NA	chronic granulomas, colitis
PSC38	biopsy	liver	0	NA	cirrhosis, portal fibrosis
PSC39	biopsy	colon	NA	NA	normal
PSC40	biopsy	gallbladder	2	NA	cholecystitis chronic
PSC41	biopsy	liver	3	NA	fibrosis of portal tracts and mild chronic inflamm suggests PSC
PSC42	biopsy	liver	0	NA	periportal fibrosis
PSC43	biopsy	liver	0	NA	portal tract fibrosis
PSC44	NA	NA	NA	NA	NA
PSC45	NA	NA	NA	NA	NA
PSC46	biopsy	liver	0	NA	mild steatohepatitis, mild lobulitis, focal with lymphocytes
PSC47	biopsy	liver	5	NA	Chronic inflammatory cells, biliary portal fibrosis 4/6 (total 8/16)
PSC48	biopsy	liver	NA	NA	lymphocytes and plasma cells, portal tract fibrosis, mild fibrosis, suggestive of PSC
CA01	resection	tumor	NA	adenocarcinoma	NA
CA02	biopsy	duodenum	NA	adenocarcinoma	NA
CA03	diagnostic laparotomy	tumor	NA	adenocarcinoma	NA
CA04	resection	tumor	NA	IPMN with carcinoma	NA
CA05	resection	papil of Vater	NA	adenocarcinoma	NA
CA06	NA	NA	NA	NA	NA
CA07	obduction	tumor	NA	adenocarcinoma	NA
CA08	diagnostic laparotomy (cryosection)	tumor	NA	adenocarcinoma	NA
CA09	diagnostic laparotomy	tumor	NA	squamous carcinoma	NA
CA10	diagnostic laparotomy (cryosection)	lymph node	NA	adenocarcinoma	NA
CA11	diagnostic laparotomy	tumor	NA	adenocarcinoma	NA
CA12	resection	tumor	NA	adenocarcinoma	NA
CA13	diagnostic laparotomy	tumor	NA	adenocarcinoma papil of Vater	NA
CA14	diagnostic laparotomy	tumor	NA	adenocarcinoma	NA
CA15	biopsy	duodenum	NA	adenocarcinoma	NA
CA16	NA	NA	NA	NA	NA
CA17	biopsy	duodenum	NA	no malignancy	NA
CA21	diagnostic laparoscopy	duodenum	NA	adenocarcinoma (gall bladder)	NA
CA22	resection	lymph node	NA	adenocarcinoma	NA
CA23	diagnostic laparotomy	lymph node	NA	adenocarcinoma	NA
CA24	biopsy	liver	NA	adenocarcinoma	NA
CA25	NA	NA	NA	adenocarcinoma	NA
CA26	diagnostic laparotomy	tumor	NA	adenocarcinoma	NA
CA27	diagnostic laparotomy	tumor	NA	adenocarcinoma	NA
CP01	NA	NA	NA	NA	NA
CP02	biopsy	duodenum	NA	NA	inflammation
CP03	biopsy	duodenum	NA	NA	reactive changes
CP04	biopsy	duodenum	NA	NA	NA
CP05	tissue from stent removal	bile duct	NA	NA	chronic, fibrosing inflammation with focal metaplasia
CP06	resection	pancreas	NA	NA	chronic, fibrosing inflammation with low-grade dysplasia
CP07	NA	NA	NA	NA	NA
CP08	resection	pancreas	NA	NA	chronic, fibrosing inflammation, no dysplasia
CP09	NA	NA	NA	NA	NA
CP10	NA	NA	NA	NA	NA

PSC=primary sclerosing cholangitis
CA=pancreatobiliary malignancy
CP=chronic pancreatitis
IPMN=intraductal papillary mucinous neoplasm
NA=not available/applicable

HISTOPATHOLOGY 3 Histology 2				
ID	Type	Organ	IgG4+ cells/hpf	Description
PSC01	NA	NA	NA	NA
PSC02	biopsy	colon	NA	no inflammation
PSC03	biopsy	coecum/colon	NA	chronic inflammation in quiescent phase
PSC04	NA	NA	NA	NA
PSC05	NA	NA	NA	NA
PSC06	NA	NA	NA	NA
PSC07	NA	NA	NA	NA
PSC08	NA	NA	NA	NA
PSC09	NA	NA	NA	NA
PSC10	NA	NA	NA	NA
PSC11	NA	NA	NA	NA
PSC12	NA	NA	NA	NA
PSC13	biopsy	colon/coecum	NA	active inflammation, eosinophilia
PSC14	NA	NA	NA	NA
PSC15	NA	NA	NA	NA
PSC16	biopsy	colon	NA	no inflammation
PSC17	biopsy	colon	NA	chronic inflammation
PSC21	NA	NA	NA	NA
PSC22	NA	NA	NA	NA
PSC23	NA	NA	NA	NA
PSC24	NA	NA	NA	NA
PSC25	NA	NA	NA	NA
PSC26	NA	NA	NA	NA
PSC27	biopsy	colon	2	crohns disease
PSC28	biopsy	colon	20	mod active pancolitis
PSC29	NA	NA	NA	NA
PSC30	biopsy	colon	NA	mildly active ulcerative colitis
PSC31	biopsy	colon	0	mild active pancolitis
PSC32	biopsy	colon	NA	colitis
PSC33	NA	NA	NA	NA
PSC34	NA	NA	NA	NA
PSC35	NA	NA	NA	NA
PSC36	biopsy	colon	NA	mild active pancolitis
PSC37	NA	NA	NA	NA
PSC38	biopsy	colon	0	normal
PSC39	NA	NA	NA	NA
PSC40	biopsy	colon	NA	collagenous colitis indefinite colitis, segmental inflammation
PSC41	biopsy	colon	8	normal
PSC42	biopsy	colon	NA	normal
PSC43	biopsy	colon	1	pancolitis
PSC44	NA	NA	NA	NA
PSC45	NA	NA	NA	NA
PSC46	biopsy	colon	3	chronic proctitis
PSC47	biopsy	colon	5	mild active chronic proctitis
PSC48	biopsy	colon	1	no inflammation
CA01	NA	NA	NA	NA
CA02	NA	NA	NA	NA
CA03	NA	NA	NA	NA
CA04	NA	NA	NA	NA
CA05	NA	NA	NA	NA
CA06	NA	NA	NA	NA
CA07	NA	NA	NA	NA
CA08	NA	NA	NA	NA
CA09	NA	NA	NA	NA
CA10	NA	NA	NA	NA
CA11	NA	NA	NA	NA
CA12	NA	NA	NA	NA
CA13	NA	NA	NA	NA
CA14	NA	NA	NA	NA
CA15	NA	NA	NA	NA
CA16	NA	NA	NA	NA
CA17	NA	NA	NA	NA
CA21	NA	NA	NA	NA
CA22	NA	NA	NA	NA
CA23	NA	NA	NA	NA
CA24	NA	NA	NA	NA
CA25	NA	NA	NA	NA
CA26	NA	NA	NA	NA
CA27	NA	NA	NA	NA
CP01	NA	NA	NA	NA
CP02	NA	NA	NA	NA
CP03	gall bladder	NA	NA	chronic active inflammation
CP04	NA	NA	NA	NA
CP05	NA	NA	NA	NA
CP06	NA	NA	NA	NA
CP07	NA	NA	NA	NA
CP08	NA	NA	NA	NA
CP09	NA	NA	NA	NA
CP10	NA	NA	NA	NA

PSC=primary sclerosing cholangitis
CA=pancreatobiliary malignancy
CP=chronic pancreatitis
NA=not available/applicable

ID	TREATMENT 1		
	Biliary stents?	Resection/palliation?	Resection type
PSC01	yes	NA	NA
PSC02	NA	NA	NA
PSC03	NA	NA	NA
PSC04	NA	NA	NA
PSC05	no	NA	NA
PSC06	no	NA	NA
PSC07	no	NA	NA
PSC08	no	NA	NA
PSC09	NA	NA	NA
PSC10	no	NA	NA
PSC11	yes	NA	NA
PSC12	no	NA	NA
PSC13	NA	NA	NA
PSC14	no	NA	NA
PSC15	NA	NA	NA
PSC16	NA	NA	NA
PSC17	NA	NA	NA
PSC21	yes	NA	NA
PSC22	no	NA	NA
PSC23	no	NA	NA
PSC24	yes	NA	NA
PSC25	no	NA	NA
PSC26	no	NA	NA
PSC27	yes	NA	NA
PSC28	no	NA	NA
PSC29	no	NA	NA
PSC30	no	NA	NA
PSC31	yes	NA	NA
PSC32	no	NA	NA
PSC33	no	NA	NA
PSC34	NA	NA	NA
PSC35	no	NA	NA
PSC36	no	NA	NA
PSC37	no	NA	NA
PSC38	no	NA	NA
PSC39	no	NA	NA
PSC40	yes	NA	NA
PSC41	no	NA	NA
PSC42	no	NA	NA
PSC43	no	NA	NA
PSC44	NA	NA	NA
PSC45	NA	NA	NA
PSC46	yes	NA	NA
PSC47	no	NA	NA
PSC48	no	NA	NA
CA01	no	resection	hilar resection + extended hemihepatectomy
CA02	no	palliation	7777
CA03	no	palliation	7777
CA04	yes	resection	hilar resection + extended hemihepatectomy
CA05	no	resection	PPPD
CA06	yes	palliation	7777
CA07	yes	resection	hilar resection + extended hemihepatectomy
CA08	yes	palliation	7777
CA09	yes	palliation	7777
CA10	yes	palliation	7777
CA11	no	palliation	7777
CA12	no	resection	PPPD
CA13	no	palliation	7777
CA14	yes	palliation	7777
CA15	no	palliation	7777
CA16	no	palliation	7777
CA17	no	palliation	7777
CA21	yes	palliation	7777
CA22	yes	resection	hilar resection + extended hemihepatectomy
CA23	yes	palliation	7777
CA24	yes	palliation	7777
CA25	yes	palliation	7777
CA26	yes	palliation	NA
CA27	no	palliation	NA
CP01	no	NA	NA
CP02	yes	NA	NA
CP03	no	NA	pancreaticojejunostomy + choledochoduodenostomy + cholecystectomy
CP04	no	NA	7777
CP05	yes	NA	NA
CP06	no	NA	pancreatosplenectomy
CP07	no	NA	NA
CP08	no	NA	frey procedure + choledochoduodenostomy
CP09	no	NA	NA
CP10	no	NA	NA

PSC=primary sclerosing cholangitis
CA=pancreatobiliary malignancy
CP=chronic pancreatitis
PPPD=pylorus sparing
pancreaticoduodenectomy
NA=not available/applicable