

## SUPPLEMENTAL TABLES

**Supplemental Table 1: Panel of inflammatory mediator proteins investigated in this study.**

Abbrev.	Full Protein Name	UniProt #	Abbrev.	Full Protein Name	UniProt #
EGF	Epidermal Growth Factor	P01133	IL-5	Interleukin-5	P05113
6Ckine	Chemokine with 6 cysteines	O00585	IL-6	Interleukin-6	P05231
BCA-1	B cell-attracting chemokine 1	O43927	IL-7	Interleukin-7	P13232
b-NGF	Beta-nerve growth factor	P01138	IL-8	Interleukin-8	P10145
CTACK	Cutaneous T-cell-attracting chemokine	Q9Y4X3	IL-9	Interleukin-9	P15248
CXCL6	C-X-C motif chemokine ligand 6	P80162	IP-10	10 kDa interferon gamma-induced protein	P02778
ENA-78	Epithelial-derived neutrophil-activating protein 78	P42830	I-TAC	Interferon-inducible T-cell alpha chemoattractant	O14625
Eotaxin	Eosinophil chemotactic protein	P51671	LIF	Leukemia inhibitory factor	P15018
Eotaxin-2	Eosinophil chemotactic protein 2	O00175	Lymphotactin	Lymphotactin	P47992
Eotaxin-3	Eosinophil chemotactic protein 2	Q9Y258	MCP-1	Monocyte chemotactic protein 1	P13500
FGF-basic	Basic fibroblast growth factor 2	P09038	MCP-2	Monocyte chemotactic protein 2	P80075
Flt-3L	Fms-related tyrosine kinase 3 ligand	P49771	MCP-3	Monocyte chemotactic protein 3	P80098
Fractalkine	Fractalkine	P78423	MCP-4	Monocyte chemotactic protein 4	Q99616
G-CSF	Granulocyte colony-stimulating factor	P09919	M-CSF	Macrophage colony-stimulating factor 1	P09603
GM-CSF	Granulocyte-macrophage colony-stimulating factor	P04141	MDC	Macrophage-derived chemokine	O00626
GRO	Growth-regulated protein beta	P19875	MIF	Macrophage migration inhibitory factor	P14174
GRO-a	Growth-regulated protein alpha	P09341	MIG	Monokine induced by interferon-gamma	Q07325
HCC-1	C-C motif chemokine 14	Q16627	MIP-1a	Macrophage inflammatory protein 1-alpha	P10147
HGF	Hepatocyte growth factor	P14210	MIP-1b	Macrophage inflammatory protein 1-beta	P13236
I-309	T lymphocyte-secreted protein I-309	P22362	MIP-1d	Macrophage inflammatory protein delta	Q16663
ICAM-1	Intercellular adhesion molecule 1	P05362	MIP-3a	Macrophage inflammatory protein 3-alpha	P78556
IFN-a2	Interferon alpha-2protein	Q6DJX8	MIP-3b	Macrophage inflammatory protein 3-beta	Q99731
IFN-g	Interferon gamma	P01579	NAP-2	Nucleosome assembly protein 2	Q99733
IL-10	Interleukin-10	P22301	PDGF-AA	Platelet-derived growth factor subunit A	P04085
IL-11	Interleukin-11	P28089	PDGF-AB/BB	Platelet-derived growth factor subunit A and B	P04085
IL-12p40	Interleukin-12 subunit	Q8NOX8	PDGF-BB	Platelet-derived growth factor subunit B	P01127
IL-12p70	Interleukin-12 subunit	Q8NOX8	Rantes	Rantes	P13501
IL-13	Interleukin-13	P35225	sCD40L	Cluster of Differentiation-40 ligand	P29965
IL-15	Interleukin-15	P40933	SCF	Stem cell factor	P21583
IL-16	Interleukin-16	Q14005	SCGF-b	Stem cell growth factor-beta	Q9Y240
IL-17	Interleukin-17	Q5QEX9	SDF-1a	Stromal cell-derived factor 1 isoform A	P48061
IL-18	Interleukin-18	Q14116	SDF-1a+b	Stromal cell-derived factor 1 isoform A and B	P48061
IL-1a	Interleukin-1 alpha	Q53QF9	sIL-2Ra	Soluble Interleukin-2 receptor subunit alpha	P01589
IL-1b	Interleukin-1 beta	P01584	TARC	Thymus and activation-regulated chemokine	Q92583
IL-1ra	Interleukin-1 receptor antagonist protein	P18510	TGF-a	Transforming growth factor alpha	P01135
IL-2	Interleukin-2	P60568	TGF-b1	Transforming growth factor beta-1	P01137
IL-20	Interleukin-20	Q9NYY1	TGF-b2	Transforming growth factor beta-2	P61812
IL-21	Interleukin-21	Q9HBE4	TGF-b3	Transforming growth factor beta-3	P10600
IL-23	Interleukin-23	Q9NPF7	TNF-a	Tumor necrosis factor-alpha	P01375
IL-28A	Interleukin-28 subunit alpha	Q8IZI0	TNF-b	Tumor necrosis factor-beta	P01374
IL-29	Interleukin-29	Q8IU54	TPO	Thyroid peroxidase	P07202
IL-3	Interleukin-3	P08700	TRAIL	TNF-related apoptosis-inducing ligand	P50591
IL-33	Interleukin-33	O95760	TSLP	Thymic stromal lymphopietin	Q969D9
IL-4	Interleukin-4	P05112	VCAM-1	Vascular cell adhesion protein 1	P19320
			VEGF	Vascular endothelial growth factor A	P15692

**Supplemental Table 2: Statistical analysis of inflammatory mediator proteins detected in fluid from both types of cysts.**

Cytokine	BD-IPMN							Inflammatory cyst							p-value
	Concentration, pg/ml							Concentration, pg/ml							
	Samples					Median	IQR	Samples					Median	IQR	
	BD1	BD2	BD3	BD4	BD5			IC1	IC2	IC3	IC4	PPC5			
BCA-1	N.D.	N.D.	0.69	N.D.	N.D.	0.69	0.00	N.D.	N.D.	45.74	N.D.	0.71	23.23	22.52	0.603
CXCL6	N.D.	N.D.	32.25	7.41	N.D.	19.83	12.42	N.D.	N.D.	9.70	N.D.	9.87	9.79	0.08	1.000
EGF	5.94	363.71	1305.50	N.D.	N.D.	363.71	649.78	N.D.	N.D.	12.92	10.34	1116.05	12.92	552.86	1.000
Eotaxin	2.79	18.59	18.16	8.63	N.D.	13.40	11.10	26.73	N.D.	38.31	20.99	268.77	32.52	70.63	0.067
Eotaxin-2	13.74	36.00	1741.83	8.00	117.89	36.00	104.15	N.D.	N.D.	72.26	86.17	265.74	86.17	96.74	0.570
FGF-basic	N.D.	54.46	39.77	N.D.	N.D.	47.12	7.35	N.D.	N.D.	33.52	N.D.	171.65	102.59	69.07	1.000
FIt-3L	N.D.	3.44	N.D.	N.D.	N.D.	3.44	0.00	32.31	81.68	32.05	N.D.	4.42	32.18	19.51	0.349
Fractalkine	26.03	46.22	168.24	26.03	214.02	46.22	142.21	62.80	26.03	90.99	26.03	137.73	62.80	64.96	0.834
G-CSF	N.D.	2.11	6.56	2.49	N.D.	2.49	2.23	5.59	2.85	399.95	2.11	27.22	5.59	24.37	0.478
GRO	N.D.	50.16	658.12	15.91	15.91	33.04	186.24	42.90	13.13	340.65	15.91	672.65	42.90	324.74	1.000
GRO-a	N.D.	24.60	312.44	7.79	7.77	16.20	88.78	22.41	6.78	169.83	7.92	329.97	22.41	161.91	0.906
HCC-1	N.D.	171.80	818.71	N.D.	39.24	171.80	389.74	N.D.	587.15	2563.74	N.D.	1649.27	1649.27	988.30	0.247
HGF	27.81	144.11	474.27	20.32	12.61	27.81	123.79	14657.23	5189.26	8639.81	1918.98	1613.07	5189.26	6720.83	0.034
ICAM-1	276.58	4492.48	5375.65	276.58	259.02	276.58	4215.90	162.27	20130.18	18894.42	1591.32	31651.21	18894.42	18538.86	0.322
IFN-a2	N.D.	N.D.	12.93	N.D.	N.D.	12.93	0.00	N.D.	N.D.	16.28	11.10	11.35	11.35	2.59	1.000
IFN-g	N.D.	2.33	1.11	1.42	N.D.	1.42	0.61	1.44	3.75	61.26	2.77	4.51	3.75	1.74	0.117
IL-10	0.15	1.88	2.92	N.D.	N.D.	1.88	1.39	1.88	21.48	11.38	1.45	6.28	6.28	9.50	0.329
IL-12p40	N.D.	17.45	7.04	N.D.	N.D.	12.25	5.21	19.84	38.74	26.71	50.50	24.91	26.71	13.83	0.132
IL-12p70	N.D.	N.D.	2.01	N.D.	N.D.	2.01	0.00	0.88	N.D.	1.59	N.D.	0.74	0.88	0.43	0.437
IL-13	N.D.	12.18	5.50	N.D.	N.D.	8.84	3.34	7.47	11.28	5.85	4.40	6.52	6.52	1.62	0.853
IL-15	N.D.	7.36	N.D.	N.D.	N.D.	7.36	0.00	5.29	5.63	16.17	6.40	13.69	6.40	8.06	1.000
IL-16	7.28	11.79	28.12	20.19	2.38	11.79	12.91	7.28	11.79	7.28	N.D.	16.07	9.54	5.58	0.809
IL-18	N.D.	18.39	91.96	N.D.	N.D.	55.18	36.79	N.D.	26.61	26.89	N.D.	7.20	26.61	9.85	0.787
IL-1a	N.D.	7.36	12.47	N.D.	N.D.	9.92	2.56	10.05	23.09	57.10	10.31	28.61	23.09	18.30	0.370
IL-1b	N.D.	0.97	N.D.	N.D.	N.D.	0.97	0.00	1.85	7.96	17.60	2.86	1.85	2.86	6.11	0.288
IL-1ra	N.D.	13.27	379.73	N.D.	N.D.	196.50	183.23	20.05	985.00	116.00	3.26	31.76	31.76	95.95	1.000
IL-2	N.D.	1.17	2.12	N.D.	N.D.	1.65	0.48	0.93	N.D.	4.98	0.68	2.07	1.50	1.93	0.826
IL-21	N.D.	4.14	N.D.	N.D.	N.D.	4.14	0.00	N.D.	N.D.	3.12	N.D.	N.D.	3.12	0.00	N.A.
IL-23	N.D.	18.29	30.16	N.D.	N.D.	24.23	5.94	177.12	24.23	18.29	24.23	36.08	24.23	11.85	0.707
IL-3	N.D.	8.45	N.D.	2.60	N.D.	5.53	2.93	8.81	N.D.	14.56	28.39	26.40	20.48	13.78	0.166
IL-33	N.D.	N.D.	16.29	N.D.	N.D.	16.29	0.00	N.D.	3.94	N.D.	N.D.	N.D.	3.94	0.00	N.A.
IL-4	N.D.	2.20	0.71	16.52	N.D.	2.20	7.91	70.30	4.60	248.12	21.78	43.55	43.55	48.52	0.117
IL-6	N.D.	5.38	21.87	N.D.	N.D.	13.63	8.25	3.51	302.98	58962.61	N.D.	326.87	314.93	14757.69	0.518
IL-7	N.D.	3.50	26.95	N.D.	2.67	3.50	12.14	1.90	10.52	12.79	2.67	8.04	8.04	7.85	0.885
IL-8	9.29	7.69	617.69	N.D.	N.D.	9.29	305.00	N.D.	295.63	5599.38	43.49	7502.93	2947.51	5842.67	0.262
IP-10	6.13	24.16	106.03	4.39	N.D.	15.15	38.93	59.80	22.34	71.54	21.96	26.24	26.24	37.46	0.557
I-TAC	N.D.	0.89	373.70	N.D.	N.D.	187.30	186.41	N.D.	N.D.	N.D.	N.D.	7.36	7.36	0.00	1.000
LIF	N.D.	15.03	N.D.	N.D.	N.D.	15.03	0.00	N.D.	N.D.	432.27	N.D.	58.42	245.35	186.93	0.603
MCP-1	65.03	2591.20	631.63	2.34	1.02	65.03	629.29	5.80	10729.88	9040.82	10.93	10892.19	9040.82	10718.95	0.242
MCP-2	N.D.	N.D.	5.83	N.D.	N.D.	5.83	0.00	9.64	N.D.	34.28	N.D.	N.D.	21.96	12.32	0.603
MCP-3	4.33	5.73	11.36	2.03	2.03	4.33	3.70	4.33	11.36	182.09	2.03	23.18	11.36	18.85	0.549
MCP-4	N.D.	N.D.	31.84	N.D.	N.D.	31.84	0.00	N.D.	N.D.	13.41	N.D.	34.36	23.89	10.48	1.000
M-CSF	15.39	N.D.	N.D.	14.17	N.D.	14.78	0.61	39.78	14.17	N.D.	79.40	N.D.	39.78	32.62	0.586

MDC	N.D.	6.11	29.47	N.D.	N.D.	17.79	11.68	9.91	N.D.	52.32	N.D.	64.44	52.32	27.27	0.435
MIF	162.84	598.59	12261.99	65.45	293.70	293.70	435.75	6.27	345.36	3852.41	84.86	272.65	272.65	260.50	0.686
MIG	N.D.	42.00	194.82	N.D.	16.23	42.00	89.30	N.D.	N.D.	N.D.	N.D.	500.54	500.54	0.00	0.437
MIP-1a	N.D.	7.67	13.15	N.D.	N.D.	10.41	2.74	17.72	19.11	19.35	12.80	16.51	17.72	2.60	0.224
MIP-1b	N.D.	32.86	31.39	N.D.	N.D.	32.13	0.73	49.16	N.D.	39.65	31.76	42.16	40.91	6.23	0.299
MIP-1d	N.D.	N.D.	N.D.	N.D.	96.18	96.18	0.00	N.D.	N.D.	12.34	N.D.	13.49	12.92	0.58	0.603
NAP-2	N.D.	2236.62	5415.79	N.D.	N.D.	3826.21	1589.59	N.D.	N.D.	981.84	N.D.	2004.65	1493.25	511.41	0.329
PDGF-AA	152.59	9544.06	9784.42	35.44	130.30	152.59	9413.76	1071.03	2017.84	9920.30	1073.82	6454.17	2017.84	5380.35	0.425
PDGF-AB/BB	16.23	279.65	589.22	31.23	9.67	31.23	263.42	264.54	24.31	156.95	14.56	433.50	156.95	240.23	1.000
PDGF-BB	15.26	90.40	396.93	29.22	8.50	29.22	75.14	15.22	15.06	97.40	13.99	119.05	15.22	82.34	0.839
Rantes	3.44	218.39	1621.09	N.D.	N.D.	218.39	808.83	1.86	3.21	84.57	1.74	167.46	3.21	82.71	0.180
sCD40L	N.D.	86.21	243.42	1.88	N.D.	86.21	120.77	8.64	63.65	66.85	19.31	61.72	61.72	44.34	0.570
SCGF-b	69.54	990.90	481.66	613.48	N.D.	547.57	329.21	12715.80	13388.12	50145.29	425.13	2189.04	12715.80	11199.08	0.150
SDF-1a	54.27	59.10	338.07	76.21	38.54	59.10	21.94	4.83	68.20	38.25	59.10	76.72	59.10	29.95	0.613
SDF-1a+b	N.D.	452.51	427.25	78.12	N.D.	427.25	187.20	N.D.	70.33	N.D.	90.55	90.55	90.55	10.11	0.416
siL-2Ra	N.D.	7.63	N.D.	N.D.	N.D.	7.63	0.00	8.96	23.98	301.29	6.10	10.29	10.29	15.02	0.584
TARC	N.D.	0.42	2.76	N.D.	N.D.	1.59	1.17	N.D.	N.D.	1.36	N.D.	9.19	5.28	3.92	0.724
TGF-a	N.D.	N.D.	7.25	N.D.	1.30	4.28	2.98	N.D.	N.D.	0.64	N.D.	0.64	0.64	0.00	0.308
TNF-a	N.D.	N.D.	1.39	N.D.	N.D.	1.39	0.00	0.54	0.79	4.14	1.73	3.31	1.73	2.52	0.317
TRAIL	N.D.	1.97	49.33	N.D.	51.57	49.33	24.80	N.D.	2.63	26.33	N.D.	3.52	3.52	11.85	0.681
VCAM-1	N.D.	18.71	555.21	18.12	18.23	18.47	134.63	N.D.	5057.99	223.68	N.D.	37.80	223.68	2510.10	0.262
VEGF	N.D.	37.32	650.44	N.D.	13.98	37.32	318.23	53.39	N.D.	455.99	13.98	71.60	62.50	124.16	1.000

\*: Statistically significant difference in the median concentration of a particular cytokine in BD-IPMN vs. inflammatory cyst (Wilcoxon rank-sum test,  $p < 0.05$ ).  
 \*\*: Statistically significant difference in the median concentration of a particular cytokine in BD-IPMN vs. inflammatory cyst (Wilcoxon rank-sum test,  $p < 0.1$ ).  
 N.D., not detected. N.A., not applicable.