

Supplementary Table 1: Lipid Mediator Pathway Genes

Human Gene	Gene Symbol	Blood Cells with Major Expression	References
Lipoxygenases (LOX)			
5-LOX	ALOX5	PMN, monocytes, lymphocytes	(1, 2)
5-LOX activating protein	ALOX5AP	PMN, monocytes, lymphocytes	(3, 4)
12-LOX	ALOX12	platelets, mononuclear cells	(5, 6)
15-LOX-1	ALOX15	mononuclear cells, activated PMN	(7, 8)
Leukotriene pathway enzymes			
leukotriene A ₄ hydrolase	LTA4H	Ubiquitous	(9-11)
Prostanoid pathway enzymes			
COX-1/prostaglandin-endoperoxide synthase 1	PTGS1	ubiquitous	(12)
COX-2/prostaglandin-endoperoxide synthase 2	PTGS2	activated endothelium, PMN, monocytes	(12-14)
prostaglandin D ₂ synthase	PTGDS	leukocytes	(15)
prostaglandin E ₂ synthase	PTGES	leukocytes	(16)
Lipid mediator receptors			
ALX/formyl peptide receptor 2	FPR2	PMN, monocytes, activated T cells	(17-19)
GPR32 receptor	GPR32	monocytes, PMN	(18, 20, 21)
ChemR23 receptor	CMKLR1	PMN, macrophages, T cells, tissues	(22)
BLT1/leukotriene B ₄ receptor	LTB4R	leukocytes, endothelium	(23-25)
EP2 receptor	PTGER2	ubiquitous, leukocytes, platelets	(26, 27)
DP1 receptor	PTGDR	platelets, PMN	(28-30)
Lipid mediator inactivation enzymes			
15-hydroxyprostaglandin dehydrogenase (15-PGDH)	HPGD	monocytes, immune cells	(31-34)
prostaglandin reductase (PGR)/leukotriene B ₄ hydrogenase (LTB ₄ DH)	PTGR1	monocytes	(35)
CYP4F3	CYP4F3	PMN	(36, 37)

PMN, polymorphonuclear leukocytes

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Supplementary Table 2: Expression values for 18 lipid mediator pathway genes (mean ± SD)

	HC		day 0	day 1	day 4	day 7	day 14	day 21	day 28
<i>ALOX12*</i>	138.3 ± 44.6	UC	108.3 ± 7.2	131.0 ± 7.8	156.8 ± 11.8	278.4 ± 29.8	192.2 ± 21.2	156.8 ± 20.8	163.6 ± 14.1
		C	111.3 ± 13.0	148.4 ± 12.6	179.6 ± 19.9	229.0 ± 26.5	262.7 ± 32.0	216.4 ± 29.9	156.2 ± 13.4
<i>ALOX5</i>	110.7 ± 17.1	UC	126.7 ± 4.6	116.1 ± 4.2	113.8 ± 4.1	107.5 ± 4.1	109.2 ± 6.4	102.3 ± 4.8	106.4 ± 4.1
		C	121.0 ± 2.8	114.7 ± 3.0	112.1 ± 3.1	106.5 ± 3.3	106.3 ± 3.4	101.8 ± 3.4	101.2 ± 3.2
<i>ALOX15</i>	78.9 ± 49.2	UC	47.1 ± 0.9	54.9 ± 2.4	65.5 ± 3.8	69.0 ± 3.6	79.9 ± 8.8	77.1 ± 7.6	77.4 ± 8.2
		C	49.0 ± 1.1	51.3 ± 1.7	65.7 ± 2.3	63.1 ± 2.5	63.4 ± 3.7	71.6 ± 4.1	79.2 ± 6.5
<i>PTGS1</i>	57.4 ± 14.8	UC	71.7 ± 2.6	81.0 ± 4.2	96.5 ± 6.6	111.5 ± 12.0	118.0 ± 15.1	98.9 ± 10.8	90.4 ± 5.0
		C	73.9 ± 2.6	80.0 ± 3.1	104.8 ± 6.2	135.8 ± 10.5	122.4 ± 16.5	94.6 ± 12.9	98.5 ± 11.1
<i>PTGS2*</i>	651.8 ± 411.6	UC	421.5 ± 39.3	225.6 ± 24.4	296.2 ± 38.1	334.6 ± 60.9	175.6 ± 36.2	675.5 ± 213.9	622.2 ± 235.6
		C	420.3 ± 41.9	151.5 ± 19.4	159.3 ± 23.1	145.4 ± 28.4	277.7 ± 51.8	358.3 ± 58.9	507.3 ± 132.3
<i>PTGES*</i>	58.7 ± 8.2	UC	115.2 ± 4.4	86.5 ± 4.3	77.3 ± 3.4	81.0 ± 2.7	75.0 ± 2.4	74.8 ± 4.8	59.2 ± 6.6
		C	132.5 ± 5.4	99.1 ± 4.4	79.8 ± 2.5	81.4 ± 2.7	85.0 ± 2.3	76.5 ± 2.7	71.7 ± 2.7
<i>PTGDS*</i>	131.1 ± 49.1	UC	85.0 ± 2.3	88.7 ± 2.1	101.7 ± 4.5	119.8 ± 5.7	119.8 ± 14.5	104.7 ± 11.7	87.5 ± 5.8
		C	90.8 ± 4.6	92.0 ± 4.6	107.3 ± 8.1	106.2 ± 6.3	112.3 ± 9.3	113.9 ± 9.0	125.4 ± 13.8
<i>ALOX5AP*</i>	2235.6 ± 1153.2	UC	8223.5 ± 282.5	6802.7 ± 319.9	5291.9 ± 258.5	4964.2 ± 249.3	4891.4 ± 356.6	5053.6 ± 361.0	3360.1 ± 1390.2
		C	8739.9 ± 261.6	7729.1 ± 259.5	6566.3 ± 241.3	7008.2 ± 271.7	6355.8 ± 268.5	5297.0 ± 320.9	5412.1 ± 356.2
<i>LTA4H*</i>	2813.7 ± 530.4	UC	3734.2 ± 199.3	5024.1 ± 156.3	5913.4 ± 221.1	5930.2 ± 211.5	5535.0 ± 304.2	4818.8 ± 544.6	3774.0 ± 277.3
		C	3208.0 ± 141.9	4796.4 ± 195.0	6466.3 ± 254.0	6471.5 ± 238.6	5546.4 ± 206.2	4959.3 ± 243.2	4201.8 ± 247.0
<i>GPR32</i>	59.7 ± 11.4	UC	64.9 ± 1.0	64.9 ± 1.0	66.7 ± 1.3	67.7 ± 1.3	63.2 ± 2.3	62.1 ± 1.7	58.1 ± 3.6
		C	65.8 ± 1.2	65.9 ± 1.0	68.0 ± 1.6	67.5 ± 1.2	68.2 ± 1.2	66.1 ± 1.7	66.7 ± 2.0
<i>FPR2*</i>	270.2 ± 251.1	UC	1774.4 ± 122.1	1383.3 ± 96.9	1200.6 ± 90.9	970.0 ± 98.1	919.6 ± 150.7	1004.0 ± 142.4	599.4 ± 373.9
		C	1972.5 ± 136.1	1403.4 ± 89.8	1136.4 ± 82.1	1166.8 ± 80.8	1067.8 ± 75.5	1038.3 ± 79.1	1060.1 ± 111.6
<i>CMKLR1</i>	45.3 ± 5.9	UC	48.1 ± 0.7	46.6 ± 0.7	45.6 ± 0.8	46.1 ± 0.7	43.5 ± 1.4	45.7 ± 1.9	41.5 ± 3.9
		C	48.2 ± 0.9	47.2 ± 0.9	47.2 ± 0.9	45.8 ± 1.0	45.2 ± 1.1	46.1 ± 1.2	44.3 ± 1.1
<i>PTGER2*</i>	470.3 ± 105.3	UC	351.0 ± 18.9	441.3 ± 17.6	428.5 ± 20.6	424.8 ± 16.5	433.9 ± 31.2	472.9 ± 27.6	572.6 ± 36.5
		C	373.4 ± 25.3	521.4 ± 26.8	509.6 ± 28.0	472.0 ± 22.6	449.7 ± 22.5	440.7 ± 28.8	396.0 ± 30.2
<i>PTGDR</i>	251.9 ± 120.2	UC	60.0 ± 3.7	60.8 ± 3.5	53.7 ± 2.8	58.4 ± 3.8	67.2 ± 7.1	80.5 ± 80.4	131.0 ± 46.6
		C	61.8 ± 4.1	51.9 ± 2.9	47.4 ± 2.5	51.1 ± 2.6	62.9 ± 4.6	69.4 ± 6.0	77.9 ± 6.5
<i>LTBAR*</i>	311.1 ± 114.9	UC	996.9 ± 37.9	1010.1 ± 35.4	782.5 ± 41.8	603.0 ± 35.6	585.4 ± 63.0	636.3 ± 50.5	462.9 ± 153.7
		C	1019.0 ± 39.4	1132.6 ± 33.4	897.0 ± 31.1	835.6 ± 31.1	805.7 ± 43.0	661.4 ± 44.8	652.0 ± 46.7
<i>HPGD*</i>	59.3 ± 19.3	UC	278.6 ± 36.9	300.5 ± 28.3	133.5 ± 21.2	49.9 ± 10.8	62.7 ± 13.9	55.2 ± 14.1	92.6 ± 7.9
		C	343.2 ± 59.3	516.2 ± 60.8	235.6 ± 33.1	160.6 ± 37.6	82.9 ± 24.7	68.1 ± 22.3	72.0 ± 52.7
<i>PTGRI*</i>	103.4 ± 44.9	UC	89.5 ± 2.9	90.3 ± 3.0	99.2 ± 4.0	99.8 ± 4.1	92.7 ± 6.1	89.5 ± 3.3	59.7 ± 13.1
		C	95.3 ± 3.9	104.4 ± 4.4	111.2 ± 5.3	105.6 ± 4.5	109.9 ± 6.0	106.0 ± 7.1	108.5 ± 7.0
<i>CYP4F3*</i>	123.3 ± 40.7	UC	296.3 ± 14.6	194.9 ± 9.7	212.2 ± 13.1	272.0 ± 15.7	306.0 ± 36.1	283.0 ± 25.5	160.1 ± 88.7
		C	284.6 ± 18.8	165.4 ± 6.9	220.0 ± 13.8	304.4 ± 17.1	272.4 ± 13.4	255.6 ± 17.7	281.2 ± 25.3

HC: healthy controls; UC: uncomplicated group; C: complicated group. *indicates significant overall F-test between uncomplicated and complicated groups. Bolded values indicate significant differences between complicated and uncomplicated groups on a specific day.