

**Table S3: Biological functions annotated by IPA and changed in 6dpf CONVD compared to GF zebrafish larvae**

Category	Function	Function Annotation	p-value	Molecules <sup>a</sup>		
Lipid Metabolism	oxidation	oxidation of fatty acid	1.63E-12	ACADM, C3, CPT1B, DECR1, ETFDH, FABP1, FABP2, HADHA, HADHB, LPIN1, LPL, MAPK14, PTGS2, TGFB1		
		oxidation of lipid	5.42E-12	ACADM, C3, CPT1B, CYP1A1, DECR1, ETFDH, FABP1, FABP2, HADHA, HADHB, LPIN1, LPL, MAPK14, PTGS2, TGFB1		
	beta-oxidation	beta-oxidation of fatty acid	7.82E-10	ACADM, CPT1B, DECR1, ETFDH, FABP1, FABP2, HADHA, HADHB, TGFB1		
	quantity	quantity of lipid	quantity of lipid	1.73E-09	ABCA1, AGT, ANGPTL4, ARF1, C3, CEBPB, CYP24A1, FABP1, FABP2, GCG, GPX1, GRP, IGF2, INPP5K, INSIG1, LPIN1, LPL, MPO, PLG, PPP1R3C, PTGS2, RBP2, TGFB1	
			quantity of fatty acid	6.91E-08	AGT, ANGPTL4, C3, CEBPB, FABP1, GPX1, IGF2, LPIN1, LPL, PPP1R3C, PTGS2, TGFB1	
		quantity of acylglycerol	3.13E-05	AGT, ANGPTL4, CEBPB, FABP1, GRP, LPIN1, LPL, MPO, PPP1R3C		
		quantity of steroid	3.45E-05	ABCA1, AGT, CYP24A1, FABP1, GCG, IGF2, INSIG1, LPL, MPO, PLG, PTGS2		
		quantity of triacylglycerol	5.15E-05	AGT, ANGPTL4, CEBPB, FABP1, LPIN1, LPL, MPO, PPP1R3C		
		quantity of cholesterol	2.42E-04	ABCA1, AGT, FABP1, GCG, INSIG1, LPL, MPO		
		quantity of prostaglandin E2	3.75E-04	AGT, GPX1, IGF2, PTGS2		
		quantity of eicosanoid	6.71E-04	AGT, GPX1, IGF2, PTGS2, TGFB1		
		modification	modification of lipid	modification of lipid	4.16E-09	ACADM, C3, CPT1B, CYP1A1, DECR1, ETFDH, FABP1, FABP2, GPX1, HADHA, HADHB, HPX, LPIN1, LPL, MAPK14, PTGS2, SULT2B1, TGFB1
				metabolism	metabolism of lipid	1.26E-07
	metabolism	metabolism of fatty acid	metabolism of fatty acid	7.91E-05	ACSS1, AGT, CEBPB, CYP1A1, FABP2, LPL, NCF1, PLA2G15, PTGS2	
			synthesis	synthesis of lipid	1.17E-06	ACSS1, AGT, ARF1, ATP1A1, C3, CEBPB, CYP1A1, CYP24A1, DECR1, FABP1, GCG, IGF2, INSIG1, LPL, PTGS2, SERPINA1
	formation	synthesis of fatty acid	synthesis of fatty acid	4.17E-05	ACSS1, AGT, CEBPB, DECR1, GCG, IGF2, LPL, PTGS2	
			synthesis of prostaglandin E2	4.18E-04	AGT, CEBPB, IGF2, PTGS2	
		formation of fatty acid	1.05E-05	ABCA1, AGT, NFKBIA, PTGS2, TGFB1		
		formation of 12(S)-hydroxyeicosatetraenoic acid	9.12E-05	AGT, NFKBIA		
		formation of eicosanoid	1.03E-04	AGT, NFKBIA, PTGS2, TGFB1		
	mass production	mass of fat	formation of lipid	1.86E-04	ABCA1, AGT, NFKBIA, PTGS2, SOCS3, TGFB1	
			mass of fat	7.40E-05	AGT, IGF2, MC4R, TGFB1	
		production of epoprostenol	production of epoprostenol	1.34E-04	AGT, PTGS2, TGFB1	
			production of lipid	1.63E-04	AGT, C3, CYP1A1, GRP, HBB, IGF2, INSIG1, PLG, PTGS2, TGFB1	
	release	release of lipid	1.97E-04	ABCA1, AGT, C3, CEBPB, GRP, MAPK14, PLG, PTGS2		
	export	export of phosphatidic acid	2.72E-04	ABCA1, FABP1		
	metabolic process	metabolic process of acylglycerol	2.91E-04	FABP1, GPX1, INSIG1, LPL, PTGS2		
	uptake	uptake of lipid	3.37E-04	ABCA1, C3, FABP6, LPL, MC4R, THBS1		
	transport	transport of long chain fatty acid	3.60E-04	CPT1B, FABP1, FABP2		
	accumulation	accumulation of lipid	4.56E-04	ABCA1, CEBPB, CEPBD, FABP1, HADHA, INSIG1, LPIN1, LPL		
concentration regulation biosynthesis	concentration	accumulation of triacylglycerol	6.82E-04	CEBPB, INSIG1, LPIN1, LPL		
		concentration of cholesterol	5.31E-04	ABCA1, AGT, PTGS2		
	regulation	regulation of lipopolysaccharide	5.40E-04	SOCS1, SOCS3		
	biosynthesis	biosynthesis of fatty acid	5.53E-04	ACSS1, AGT, CEBPB, LPL, PTGS2		
		biosynthesis of lipid	6.26E-04	ACSS1, AGT, ATP1A1, CEBPB, CYP1A1, FABP1, INSIG1, LPL, PTGS2		
	conversion	conversion of lipid	6.59E-04	CPT1B, CYP1A1, FABP1, GPX1, HPX, PTGS2		
	Small Molecule Biochemistry	oxidation	oxidation of fatty acid	1.63E-12	ACADM, C3, CPT1B, DECR1, ETFDH, FABP1, FABP2, HADHA, HADHB, LPIN1, LPL, MAPK14, PTGS2, TGFB1	
			oxidation of lipid	5.42E-12	ACADM, C3, CPT1B, CYP1A1, DECR1, ETFDH, FABP1, FABP2, HADHA, HADHB, LPIN1, LPL, MAPK14, PTGS2, TGFB1	
		beta-oxidation	beta-oxidation of fatty acid	7.82E-10	ACADM, CPT1B, DECR1, ETFDH, FABP1, FABP2, HADHA, HADHB, TGFB1	
		quantity	quantity of lipid	quantity of lipid	1.73E-09	ABCA1, AGT, ANGPTL4, ARF1, C3, CEBPB, CYP24A1, FABP1, FABP2, GCG, GPX1, GRP, IGF2, INPP5K, INSIG1, LPIN1, LPL, MPO, PLG, PPP1R3C, PTGS2, RBP2, TGFB1
quantity of fatty acid				6.91E-08	AGT, ANGPTL4, C3, CEBPB, FABP1, GPX1, IGF2, LPIN1, LPL, PPP1R3C, PTGS2, TGFB1	
quantity of D-glucose			1.77E-07	C3, GCG, GPX1, IGF2, IGFBP1, LPL, MAPK14, MPO, PPP1R3C, SOCS1		
quantity of acylglycerol			3.13E-05	AGT, ANGPTL4, CEBPB, FABP1, GRP, LPIN1, LPL, MPO, PPP1R3C		
quantity of steroid			3.45E-05	ABCA1, AGT, CYP24A1, FABP1, GCG, IGF2, INSIG1, LPL, MPO, PLG, PTGS2		
quantity of triacylglycerol			5.15E-05	AGT, ANGPTL4, CEBPB, FABP1, LPIN1, LPL, MPO, PPP1R3C		

	quantity of cholesterol	2.42E-04	ABCA1, AGT, FABP1, GCG, INSIG1, LPL, MPO
	quantity of prostaglandin E2	3.75E-04	AGT, GPX1, IGF2, PTGS2
	quantity of eicosanoid	6.71E-04	AGT, GPX1, IGF2, PTGS2, TGFB1
modification	modification of lipid	4.16E-09	ACADM, C3, CPT1B, CYP1A1, DECR1, ETFDH, FABP1, FABP2, GPX1, HADHA, HADHB, HPX, LPIN1, LPL, MAPK14, PTGS2, SULT2B1, TGFB1
	modification of hydrogen peroxide	5.41E-06	MPO, PRDX1, PTGS2, TXN
metabolism	modification of D-glucose	5.13E-04	C3, GCG, IGF2, LPL
	metabolism of lipid	1.26E-07	ABCA1, ACSS1, AGT, ANGPTL4, ARF1, ATP1A1, CEBPB, CYP1A1, CYP24A1, FABP1, FABP2, FABP6, GCG, GPX1, INSIG1, LPIN1, LPL, NCF1, PLA2G15, PTGS2, RBP2, SULT2B1
	metabolism of fatty acid	7.91E-05	ACSS1, AGT, CEBPB, CYP1A1, FABP2, LPL, NCF1, PLA2G15, PTGS2
synthesis	synthesis of lipid	1.17E-06	ACSS1, AGT, ARF1, ATP1A1, C3, CEBPB, CYP1A1, CYP24A1, DECR1, FABP1, GCG, IGF2, INSIG1, LPL, PTGS2, SERPINA1
	synthesis of D-glucose	1.69E-05	CEBPB, GCG, PPP1R3C
	synthesis of fatty acid	4.17E-05	ACSS1, AGT, CEBPB, DECR1, GCG, IGF2, LPL, PTGS2
production	synthesis of prostaglandin E2	4.18E-04	AGT, CEBPB, IGF2, PTGS2
	production of nitric oxide	7.53E-06	AGT, CEBPB, HBEGF, IGF2, MST1, NCF1, SOCS1, SOCS3, TGFB1
	production of epoprostenol	1.34E-04	AGT, PTGS2, TGFB1
formation	production of lipid	1.63E-04	AGT, C3, CYP1A1, GRP, HBB, IGF2, INSIG1, PLG, PTGS2, TGFB1
	formation of fatty acid	1.05E-05	ABCA1, AGT, NFKBIA, PTGS2, TGFB1
	formation of 12(S)-hydroxyeicosatetraenoic acid	9.12E-05	AGT, NFKBIA
	formation of eicosanoid	1.03E-04	AGT, NFKBIA, PTGS2, TGFB1
	formation of lipid	1.86E-04	ABCA1, AGT, NFKBIA, PTGS2, SOCS3, TGFB1
reduction	reduction of hydrogen peroxide	6.94E-05	PRDX1, PTGS2, TXN
mass	mass of fat	7.40E-05	AGT, IGF2, MC4R, TGFB1
release	release of Ca <sup>2+</sup>	1.25E-04	AGT, FGA, FGB, FGG, GCG, TGFB1
	release of lipid	1.97E-04	ABCA1, AGT, C3, CEBPB, GRP, MAPK14, PLG, PTGS2
incorporation	incorporation of thymidine	1.34E-04	AGT, HBEGF, IGF2, PTGS2, TF, TGFB1
	incorporation of D-glucose	1.78E-04	GCG, IGF2, PPP1R3C
export	export of phosphatidic acid	2.72E-04	ABCA1, FABP1
metabolic process	metabolic process of acylglycerol	2.91E-04	FABP1, GPX1, INSIG1, LPL, PTGS2
uptake	uptake of lipid	3.37E-04	ABCA1, C3, FABP6, LPL, MC4R, THBS1
transport	transport of long chain fatty acid	3.60E-04	CPT1B, FABP1, FABP2
accumulation	accumulation of lipid	4.56E-04	ABCA1, CEBPB, CEPD, FABP1, HADHA, INSIG1, LPIN1, LPL
	accumulation of triacylglycerol	6.82E-04	CEBPB, INSIG1, LPIN1, LPL
concentration	concentration of cholesterol	5.31E-04	ABCA1, AGT, PTGS2
regulation	regulation of lipopolysaccharide	5.40E-04	SOCS1, SOCS3
biosynthesis	biosynthesis of fatty acid	5.53E-04	ACSS1, AGT, CEBPB, LPL, PTGS2
	biosynthesis of lipid	6.26E-04	ACSS1, AGT, ATP1A1, CEBPB, CYP1A1, FABP1, INSIG1, LPL, PTGS2
conversion	conversion of lipid	6.59E-04	CPT1B, CYP1A1, FABP1, GPX1, HPX, PTGS2
cell movement	cell movement of phagocytes	3.49E-11	AGT, C3, C6, C4B, CFB, CORO1A, CRP, MAP3K5, MAPK14, MC4R, NFKBIA, PLG, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1
	cell movement of leukocytes	5.47E-11	AGT, C3, C6, C4B, CFB, CORO1A, CRP, FGB, MAP3K5, MAPK14, MC4R, MMP9, MPO, NFKBIA, PLG, PRDX1, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TXN
	cell movement of eukaryotic cells	2.43E-08	AGT, C3, C6, C4B, CFB, CLDN4, CORO1A, CRP, FGB, LCP1, MAP3K5, MAPK14, MC4R, MMP9, MPO, MST1, NFKBIA, PLG, PRDX1, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TXN
	cell movement of neutrophils	3.66E-08	AGT, C3, C4B, CFB, CORO1A, CRP, MAPK14, NFKBIA, PLG, PTGS2, SERPINA1, SOCS3, TGFB1
	cell movement	1.50E-07	AGT, C3, C6, C4B, CFB, CLDN4, CORO1A, CRP, FGB, HBEGF, LCP1, MAP3K5, MAPK14, MC4R, MMP9, MPO, MST1, NFKBIA, PLG, PRDX1, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TXN
	cell movement of macrophages	7.27E-07	AGT, C3, C6, MAP3K5, MC4R, PTGS2, SAA1, SOCS1, TGFB1
	cell movement of cell lines	1.67E-04	AGT, C3, CLDN4, LCP1, MST1, PLG, PTGS2, SERPINA1, SOCS1, TGFB1, THBS1, TXN
	cell movement of lymphocytes	1.77E-04	AGT, C3, C6, MMP9, SAA1, SOCS1, SOCS3, TGFB1, THBS1
	cell movement of mononuclear leukocytes	1.97E-04	AGT, C3, C6, MMP9, PLG, SAA1, SOCS1, SOCS3, TGFB1, THBS1
invasion	cell movement of T lymphocytes	3.34E-04	AGT, C3, C6, SOCS1, SOCS3, TGFB1, THBS1
	invasion of cell lines	3.63E-08	AGT, CLDN4, GRN, GRP, HBEGF, IGF2, JUNB, LCP1, MMP9, MMP13, MST1, NDRG1, PLG, PTGS2, RHOG, SERPINA1, TGFB1, TIMP2
	invasion of eukaryotic cells	6.45E-08	AGT, CLDN4, CTSL1, GRN, GRP, HBEGF, IGF2, JUNB, LCP1, MMP9, MMP13, MST1, NDRG1, PLG, PTGS2, RHOG, SERPINA1, TGFB1, TIMP2

	invasion of tumor cell lines	1.23E-07	AGT, CLDN4, GRN, GRP, HBEGF, IGF2, JUNB, LCP1, MMP9, MST1, NDRG1, PLG, PTGS2, SERPINA1, TGFB1, TIMP2
	invasion of colon cancer cell lines	4.28E-05	AGT, GRP, IGF2, PLG, PTGS2
	invasion of pancreatic cancer cell lines	7.40E-05	CLDN4, MMP9, TGFB1, TIMP2
	invasion of melanoma cells	9.85E-05	CTSL1, MMP9, TGFB1
	invasion of carcinoma cell lines	4.18E-04	GRN, GRP, JUNB, TGFB1
migration	invasion of epithelial cell lines	6.33E-04	MMP9, PTGS2, TGFB1
	migration of endothelial cells	9.56E-08	AGT, ANGPTL4, CRP, GRN, IGF2, MAPK14, MMP13, PLG, PTGS2, TGFB1, THBS1, TIMP2
	migration of eukaryotic cells	1.93E-07	AGT, ANGPTL4, C3, C6, CLDN4, CORO1A, CRP, DMBT1, FGA, GRN, GRP, HBEGF, IGF2, IGFBP1, MAPK14, MMP9, MMP13, MST1, NCF1, NFKBIA, PLG, PTGS2, RHO, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TIMP2, TXN
	migration of cell lines	2.01E-07	AGT, C3, CLDN4, FGA, GRN, GRP, HBEGF, IGF2, IGFBP1, MAPK14, MMP9, MST1, PLG, PTGS2, RHO, SAA1, SOCS3, TGFB1, THBS1, TIMP2
	migration of cells	2.91E-07	AGT, ANGPTL4, C3, C6, CLDN4, CORO1A, CRP, DMBT1, FGA, GRN, GRP, HBEGF, IGF2, IGFBP1, MAPK14, MMP9, MMP13, MST1, MUC2, NCF1, NFKBIA, PLG, PTGS2, RHO, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TIMP2, TXN
	migration of tumor cell lines	3.16E-07	AGT, CLDN4, FGA, GRN, GRP, IGF2, IGFBP1, MAPK14, MMP9, MST1, PTGS2, RHO, SOCS3, TGFB1, THBS1, TIMP2
	migration of normal cells	4.53E-07	AGT, ANGPTL4, C3, C6, CORO1A, CRP, DMBT1, GRN, HBEGF, IGF2, MAPK14, MMP9, MMP13, MST1, NCF1, NFKBIA, PLG, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TIMP2, TXN
	migration of leukocytes	1.37E-06	AGT, C3, C6, CORO1A, DMBT1, MAPK14, MMP9, MST1, NFKBIA, PLG, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TIMP2, TXN
	migration of dermal fibroblasts	2.93E-05	AGT, HBEGF, TGFB1
	migration of connective tissue cells	3.50E-05	AGT, HBEGF, MAPK14, NCF1, TGFB1, THBS1, TIMP2
	migration of monocytes	4.68E-05	AGT, MAPK14, MMP9, PLG, TGFB1, TIMP2
	migration of phagocytes	8.44E-05	DMBT1, MMP9, MST1, PLG, SAA1, TGFB1, TXN
	migration of mononuclear leukocytes	1.00E-04	AGT, C3, C6, MAPK14, MMP9, PLG, SOCS1, SOCS3, TGFB1, THBS1, TIMP2
	migration of epithelial cell lines	1.13E-04	C3, FGA, PTGS2, SAA1, TGFB1
	migration of smooth muscle cells	1.34E-04	AGT, HBEGF, MMP9, PLG, PTGS2, THBS1
	migration of fibroblasts	1.64E-04	AGT, HBEGF, MAPK14, TGFB1, THBS1, TIMP2
	T cell migration	3.16E-04	AGT, C3, C6, SOCS1, SOCS3, TGFB1, THBS1, TIMP2
	migration of lymphatic system cells	3.49E-04	C3, IGF2, MMP9, PLG, SAA1, TGFB1, TXN
	migration of breast cancer cell lines	4.65E-04	IGF2, IGFBP1, MAPK14, MMP9, TGFB1, TIMP2
	migration of epithelial cells	5.53E-04	AGT, HBEGF, MMP9, PLG, TGFB1
infiltration	migration of colon cancer cell lines	6.82E-04	GRP, IGF2, MST1, TGFB1
	infiltration by macrophages	1.45E-07	AGT, C3, C6, MAP3K5, MC4R, PTGS2, SOCS1, TGFB1
	infiltration by neutrophils	6.70E-07	AGT, C3, C4B, CFB, MAPK14, NFKBIA, PLG, PTGS2, SOCS3
	infiltration of cells	2.88E-06	AGT, C3, C6, FGB, MAPK14, MMP9, MPO, PLG, SOCS1, SOCS3, TGFB1
	infiltration of leukocytes	1.02E-04	AGT, C3, C6, FGB, MMP9, MPO, SOCS1, TGFB1
	infiltration by T lymphocytes	2.11E-04	AGT, C3, C6, SOCS1, TGFB1
chemotaxis	chemotaxis of cells	1.56E-05	AGT, C3, CORO1A, HBEGF, MAPK14, MMP9, PLG, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TXN
	chemotaxis of eukaryotic cells	3.02E-05	AGT, C3, CORO1A, MAPK14, MMP9, PLG, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TXN
	chemotaxis of leukocytes	4.42E-05	C3, CORO1A, MAPK14, MMP9, PLG, SAA1, SERPINA1, SOCS3, TGFB1, THBS1, TXN
	chemotaxis of normal cells	6.29E-05	AGT, C3, CORO1A, MAPK14, MMP9, PLG, SAA1, SERPINA1, SOCS3, TGFB1, THBS1, TXN
	chemotaxis of cell lines	3.67E-04	AGT, C3, PLG, PTGS2, SOCS1, TGFB1, THBS1, TXN
movement	movement of liver cells	1.78E-04	AGT, NCF1, TGFB1
	influx	4.18E-04	MARCO, MMP9, MPO, SERPINA1
cell movement	influx of leukocytes	3.49E-11	AGT, C3, C6, C4B, CFB, CORO1A, CRP, MAP3K5, MAPK14, MC4R, NFKBIA, PLG, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1
	cell movement of phagocytes	3.49E-11	AGT, C3, C6, C4B, CFB, CORO1A, CRP, MAP3K5, MAPK14, MC4R, MMP9, MPO, NFKBIA, PLG, PRDX1, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TXN
	cell movement of leukocytes	5.47E-11	AGT, C3, C6, C4B, CFB, CORO1A, CRP, FGB, MAP3K5, MAPK14, MC4R, MMP9, MPO, NFKBIA, PLG, PRDX1, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TXN
	cell movement of neutrophils	3.66E-08	AGT, C3, C4B, CFB, CORO1A, CRP, MAPK14, NFKBIA, PLG, PTGS2, SERPINA1, SOCS3, TGFB1
	cell movement of macrophages	7.27E-07	AGT, C3, C6, MAP3K5, MC4R, PTGS2, SAA1, SOCS1, TGFB1
	cell movement of lymphocytes	1.77E-04	AGT, C3, C6, MMP9, SAA1, SOCS1, SOCS3, TGFB1, THBS1
	cell movement of mononuclear leukocytes	1.97E-04	AGT, C3, C6, MMP9, PLG, SAA1, SOCS1, SOCS3, TGFB1, THBS1
	cell movement of T lymphocytes	3.34E-04	AGT, C3, C6, SOCS1, SOCS3, TGFB1, THBS1

Hematological System  
Development and Function

Immune Cell Trafficking	quantity	quantity of phagocytes	6.52E-10	ABCA1, AGT, C6, CFH, FABP1, HBEGF, MMP9, MMP13, NFKBIA, PLG, SOCS1, SOCS3, TF, TGFB1
		quantity of blood cells	1.58E-08	ABCA1, AGT, C3, C6, CEBPB, CFH, FABP1, HBB, HBEGF, IGF2, IGFBP1, MAPK14, MMP9, MMP13, NFKBIA, PLG, PPP1R15A, SERPINA1, SOCS1, SOCS3, TF, TGFB1, THBS1
		quantity of macrophages	1.08E-06	ABCA1, AGT, FABP1, HBEGF, MMP9, NFKBIA, PLG, SOCS1, TGFB1
		quantity of leukocytes	5.23E-06	ABCA1, AGT, C3, C6, CEBPB, CFH, FABP1, HBEGF, IGF2, MMP9, MMP13, NFKBIA, PLG, SERPINA1, SOCS1, SOCS3, TF, TGFB1
	infiltration	quantity of neutrophils	1.43E-04	C6, CFH, MMP9, MMP13, SOCS3, TF
		quantity of granulocytes	2.91E-04	C6, CFH, MMP9, MMP13, SERPINA1, SOCS3, TF
		infiltration by macrophages	1.45E-07	AGT, C3, C6, MAP3K5, MC4R, PTGS2, SOCS1, TGFB1
		infiltration by neutrophils	6.70E-07	AGT, C3, C4B, CFB, MAPK14, NFKBIA, PLG, PTGS2, SOCS3
	accumulation	infiltration of leukocytes	1.02E-04	AGT, C3, C6, FGB, MMP9, MPO, SOCS1, TGFB1
		infiltration by T lymphocytes	2.11E-04	AGT, C3, C6, SOCS1, TGFB1
		accumulation of neutrophils	2.50E-07	AGT, C6, C7, C9, GRN, MMP9, TIMP2
		accumulation of granulocytes	3.73E-07	AGT, C6, C7, C9, GRN, MMP9, PLG, TIMP2
		accumulation of phagocytes	5.73E-07	AGT, C6, C7, C9, GRN, MMP9, PLG, TIMP2
		accumulation of blood cells	7.55E-07	AGT, C6, C7, C9, C4B, GRN, KRT18, MMP9, PLG, TGFB1, TIMP2
	adhesion	accumulation of leukocytes	3.97E-06	AGT, C6, C7, C9, C4B, GRN, MMP9, PLG, TGFB1, TIMP2
		adhesion of leukocytes	2.47E-06	AGT, C3, CORO1A, CRP, FGA, FGG, LCP1, MARCO, NFKBIA, TGFB1, THBS1, TXN
	activation	activation of macrophages	1.12E-05	C6, CRP, MPO, PLG, PTGS2, SPON2, TGFB1, THBS1
	activation	activation of phagocytes	1.91E-05	C3, C6, CRP, MPO, PLG, PTGS2, SPON2, TGFB1, THBS1
		activation of leukocytes	4.80E-04	C3, C6, C4B, CORO1A, CRP, F5, MPO, NDRG1, PLG, PTGS2, SOCS1, SPON2, TGFB1, THBS1
	chemotaxis	chemotaxis of leukocytes	4.42E-05	C3, CORO1A, MAPK14, MMP9, PLG, SAA1, SERPINA1, SOCS3, TGFB1, THBS1, TXN
	coagulation influx release hematological process	coagulation of blood	9.47E-05	C3, C9, CRP, F5, FGA, PLG, THBS1
		influx of leukocytes	4.18E-04	MARCO, MMP9, MPO, SERPINA1
		release of dense granules	5.40E-04	FGA, FGG
		hematological process	5.69E-04	C3, C9, CEBPB, CEBPD, CRP, F5, FGA, HBB, IGF2, JUNB, KLF11, MAPK14, MCL1, NFKBIA, PLG, PTGS2, SOCS1, SOCS3, TGFB1, THBS1
	colony formation	colony formation of erythroid progenitor cells	7.46E-04	MAPK14, SOCS1, TGFB1
	cell movement	cell movement of phagocytes	3.49E-11	AGT, C3, C6, C4B, CFB, CORO1A, CRP, MAP3K5, MAPK14, MC4R, NFKBIA, PLG, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1
		cell movement of leukocytes	5.47E-11	AGT, C3, C6, C4B, CFB, CORO1A, CRP, FGB, MAP3K5, MAPK14, MC4R, MMP9, MPO, NFKBIA, PLG, PRDX1, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TXN
cell movement of neutrophils		3.66E-08	AGT, C3, C4B, CFB, CORO1A, CRP, MAPK14, NFKBIA, PLG, PTGS2, SERPINA1, SOCS3, TGFB1	
cell movement of macrophages		7.27E-07	AGT, C3, C6, MAP3K5, MC4R, PTGS2, SAA1, SOCS1, TGFB1	
cell movement of lymphocytes		1.77E-04	AGT, C3, C6, MMP9, SAA1, SOCS1, SOCS3, TGFB1, THBS1	
cell movement of mononuclear leukocytes		1.97E-04	AGT, C3, C6, MMP9, PLG, SAA1, SOCS1, SOCS3, TGFB1, THBS1	
infiltration		cell movement of T lymphocytes	3.34E-04	AGT, C3, C6, SOCS1, SOCS3, TGFB1, THBS1
		infiltration by macrophages	1.45E-07	AGT, C3, C6, MAP3K5, MC4R, PTGS2, SOCS1, TGFB1
		infiltration by neutrophils	6.70E-07	AGT, C3, C4B, CFB, MAPK14, NFKBIA, PLG, PTGS2, SOCS3
accumulation		infiltration of leukocytes	1.02E-04	AGT, C3, C6, FGB, MMP9, MPO, SOCS1, TGFB1
		infiltration by T lymphocytes	2.11E-04	AGT, C3, C6, SOCS1, TGFB1
		accumulation of neutrophils	2.50E-07	AGT, C6, C7, C9, GRN, MMP9, TIMP2
		accumulation of granulocytes	3.73E-07	AGT, C6, C7, C9, GRN, MMP9, PLG, TIMP2
	accumulation of phagocytes	5.73E-07	AGT, C6, C7, C9, GRN, MMP9, PLG, TIMP2	
migration	accumulation of leukocytes	3.97E-06	AGT, C6, C7, C9, C4B, GRN, MMP9, PLG, TGFB1, TIMP2	
	migration of leukocytes	1.37E-06	AGT, C3, C6, CORO1A, DMBT1, MAPK14, MMP9, MST1, NFKBIA, PLG, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1, THBS1, TIMP2, TXN	
migration	migration of monocytes	4.68E-05	AGT, MAPK14, MMP9, PLG, TGFB1, TIMP2	
	migration of phagocytes	8.44E-05	DMBT1, MMP9, MST1, PLG, SAA1, TGFB1, TXN	
	migration of mononuclear leukocytes	1.00E-04	AGT, C3, C6, MAPK14, MMP9, PLG, SOCS1, SOCS3, TGFB1, THBS1, TIMP2	
adhesion	T cell migration	3.16E-04	AGT, C3, C6, SOCS1, SOCS3, TGFB1, THBS1, TIMP2	
	adhesion of leukocytes	2.47E-06	AGT, C3, CORO1A, CRP, FGA, FGG, LCP1, MARCO, NFKBIA, TGFB1, THBS1, TXN	
activation	activation of macrophages	1.12E-05	C6, CRP, MPO, PLG, PTGS2, SPON2, TGFB1, THBS1	
	activation of phagocytes	1.91E-05	C3, C6, CRP, MPO, PLG, PTGS2, SPON2, TGFB1, THBS1	
	activation of leukocytes	4.80E-04	C3, C6, C4B, CORO1A, CRP, F5, MPO, NDRG1, PLG, PTGS2, SOCS1, SPON2, TGFB1, THBS1	
chemotaxis	chemotaxis of leukocytes	4.42E-05	C3, CORO1A, MAPK14, MMP9, PLG, SAA1, SERPINA1, SOCS3, TGFB1, THBS1, TXN	

Inflammatory Response	influx cell movement	influx of leukocytes	4.18E-04	MARCO, MMP9, MPO, SERPINA1
		cell movement of phagocytes	3.49E-11	AGT, C3, C6, C4B, CFB, CORO1A, CRP, MAP3K5, MAPK14, MC4R, NFKBIA, PLG, PTGS2, SAA1, SERPINA1, SOCS1, SOCS3, TGFB1
		cell movement of neutrophils	3.66E-08	AGT, C3, C4B, CFB, CORO1A, CRP, MAPK14, NFKBIA, PLG, PTGS2, SERPINA1, SOCS3, TGFB1
		cell movement of macrophages	7.27E-07	AGT, C3, C6, MAP3K5, MC4R, PTGS2, SAA1, SOCS1, TGFB1
	quantity	quantity of phagocytes	6.52E-10	ABCA1, AGT, C6, CFH, FABP1, HBEGF, MMP9, MMP13, NFKBIA, PLG, SOCS1, SOCS3, TF, TGFB1
		quantity of macrophages	1.08E-06	ABCA1, AGT, FABP1, HBEGF, MMP9, NFKBIA, PLG, SOCS1, TGFB1
	complement activation inflammatory response	quantity of neutrophils	1.43E-04	C6, CFH, MMP9, MMP13, SOCS3, TF
		complement activation inflammatory response	1.93E-09 6.92E-08	C3, C6, C9, C4B, CFB, CFHR1, CRP AGT, C3, C6, CEBPB, CORO1A, CRP, FGG, GPX1, MAPK14, MMP9, MPO, NCF1, PLG, PTGS2, SAA1, SERPINA1, SOCS3, SPON2, TGFB1, THBS1, TXN
	infiltration	infiltration by macrophages	1.45E-07	AGT, C3, C6, MAP3K5, MC4R, PTGS2, SOCS1, TGFB1
		infiltration by neutrophils	6.70E-07	AGT, C3, C4B, CFB, MAPK14, NFKBIA, PLG, PTGS2, SOCS3
	inflammation	inflammation	1.45E-07	AGT, C3, CEBPB, CEBPD, CFB, CRP, HPX, JUNB, MAPK14, MMP9, NFKBIA, PTGS2, SOCS1, TGFB1, THBS1, UOX
		inflammation of organism inflammation of organ	9.47E-05 3.41E-04	CEBPB, CEBPD, CRP, NFKBIA, PTGS2, SOCS1, TGFB1 AGT, HPX, JUNB, PTGS2, SOCS1, TGFB1, THBS1, UOX
	accumulation	accumulation of neutrophils	2.50E-07	AGT, C6, C7, C9, GRN, MMP9, TIMP2
		accumulation of granulocytes	3.73E-07	AGT, C6, C7, C9, GRN, MMP9, PLG, TIMP2
		accumulation of phagocytes	5.73E-07	AGT, C6, C7, C9, GRN, MMP9, PLG, TIMP2
	phagocytosis	accumulation of leukocytes	3.97E-06	AGT, C6, C7, C9, C4B, GRN, MMP9, PLG, TGFB1, TIMP2
		phagocytosis of cells	8.46E-06	ABCA1, C3, CORO1A, CRP, MAPK14, MARCO, MPO, TGFB1, THBS1
		phagocytosis of eukaryotic cells	7.51E-05	ABCA1, CORO1A, CRP, MAPK14, MARCO, TGFB1, THBS1
	activation	activation of macrophages	1.12E-05	C6, CRP, MPO, PLG, PTGS2, SPON2, TGFB1, THBS1
		activation of phagocytes activation of leukocytes	1.91E-05 4.80E-04	C3, C6, CRP, MPO, PLG, PTGS2, SPON2, TGFB1, THBS1 C3, C6, C4B, CORO1A, CRP, F5, MPO, NDRG1, PLG, PTGS2, SOCS1, SPON2, TGFB1, THBS1
	immune response	immune response	1.85E-05	AGT, ATP6V0A2, C3, C6, C4B, CEBPB, CORO1A, CRP, CTS1, DMBT1, F5, GPX1, MAPK14, MPO, NCF1, NDRG1, PLG, PTGS2, SOCS1, SPON2, TGFB1, THBS1, TPSAB1
		immune response of organism	1.11E-04	C3, C4B, CRP, CTS1, DMBT1, GPX1, MPO, NCF1, PTGS2, SOCS1, TGFB1, TPSAB1
	chemotaxis	chemotaxis of leukocytes	4.42E-05	C3, CORO1A, MAPK14, MMP9, PLG, SAA1, SERPINA1, SOCS3, TGFB1, THBS1, TXN
migration endotoxin tolerance chronic renal allograft rejection	migration of phagocytes	8.44E-05	DMBT1, MMP9, MST1, PLG, SAA1, TGFB1, TXN	
	endotoxin tolerance chronic renal allograft rejection	9.12E-05 1.78E-04	SOCS1, TGFB1 MMP9, TGFB1, TIMP2	
Tissue Morphology	respiratory burst quantity	respiratory burst	4.21E-04	C3, DMBT1, MPO, NCF1, TGFB1
		quantity of phagocytes	6.52E-10	ABCA1, AGT, C6, CFH, FABP1, HBEGF, MMP9, MMP13, NFKBIA, PLG, SOCS1, SOCS3, TF, TGFB1
		quantity of blood cells	1.58E-08	ABCA1, AGT, C3, C6, CEBPB, CFH, FABP1, HBB, HBEGF, IGF2, IGFBP1, MAPK14, MMP9, MMP13, NFKBIA, PLG, PPP1R15A, SERPINA1, SOCS1, SOCS3, TF, TGFB1, THBS1
		quantity of cells	1.93E-07	ABCA1, AGT, C3, C6, C4B, CEBPB, CFH, FABP1, GCG, GPX1, HBB, HBEGF, IGF2, IGFBP1, JUNB, MAPK14, MMP9, MMP13, MST1, NFKBIA, PLG, PPP1R15A, PTGS2, RHO, SERPINA1, SOCS1, SOCS3, SRGN, TF, TGFB1, THBS1
		quantity of macrophages	1.08E-06	ABCA1, AGT, FABP1, HBEGF, MMP9, NFKBIA, PLG, SOCS1, TGFB1
		quantity of leukocytes	5.23E-06	ABCA1, AGT, C3, C6, CEBPB, CFH, FABP1, HBEGF, IGF2, MMP9, MMP13, NFKBIA, PLG, SERPINA1, SOCS1, SOCS3, TF, TGFB1
	relaxation	quantity of neutrophils	1.43E-04	C6, CFH, MMP9, MMP13, SOCS3, TF
		quantity of hepatoma cell lines	2.72E-04	FABP1, TGFB1
		quantity of bone marrow cells	2.82E-04	C6, CFH, MMP9, MMP13, SERPINA1, SOCS3, TF, THBS1
		quantity of granulocytes	2.91E-04	C6, CFH, MMP9, MMP13, SERPINA1, SOCS3, TF
		quantity of fibroblasts	5.31E-04	GPX1, JUNB, TGFB1
	size	relaxation of artery	1.10E-07	AGT, CRP, GCG, GRP, MAP3K5, PLG, TGFB1
		relaxation of coronary artery	2.93E-05	AGT, CRP, PLG
degradation mass	size of lesion	5.22E-07	C3, CRP, FGB, FGG, GPX1, IGF2, MMP9, MPO, TXN	
	size of atherosclerotic lesion	3.78E-05	CRP, GPX1, IGF2, MMP9, MPO	
	size of infarct	8.36E-05	C3, CRP, FGB, FGG, TXN	
	size of myocardium	2.72E-04	MAPK14, PTGS2	
	degradation of extracellular matrix	5.41E-06	CTSL1, MMP9, MMP13, PLG	
	mass of tissue	6.30E-06	AGT, C3, CEBPB, CEBPD, IGFBP1, JUNB, LPL, MC4R, USF2	
	mass of adipose tissue	5.08E-05	AGT, C3, CEBPB, CEBPD, LPL, MC4R	

		mass of connective tissue	8.44E-05	AGT, C3, CEBPB, CEBPD, JUNB, LPL, MC4R
	dilation	dilation of blood vessel	8.80E-06	AGT, GCG, MMP9, PLG, TGFB1, THBS1
		dilation of artery	2.24E-05	AGT, GCG, MMP9, TGFB1, THBS1
	cleavage	cleavage of extracellular matrix	2.93E-05	CTSL1, MMP13, PLG
		cleavage of cartilage tissue	5.40E-04	CTSL1, MMP13
	closure	closure of wound	6.21E-05	FGA, FGB, MMP9, TGFB1
	morphology	morphology of lung tissue	9.12E-05	TGFB1, THBS1
		morphology of pancreatic tissue	9.12E-05	TGFB1, THBS1
		morphology of stomach tissue	9.12E-05	TGFB1, THBS1
		morphology of testicular tissue	9.12E-05	TGFB1, THBS1
		morphology of vertebrae	9.12E-05	TGFB1, THBS1
		morphology of heart tissue	2.72E-04	TGFB1, THBS1
		morphology of liver tissue	2.72E-04	TGFB1, THBS1
		morphology of skin tissue	2.72E-04	TGFB1, THBS1
	remodeling	remodeling of extracellular matrix	9.12E-05	MMP9, MMP13
	length	length of tissue	1.03E-04	IGF2, MMP9, MMP13, TGFB1
	diameter	diameter of arteriole	2.72E-04	AGT, NCF1
	oxidative stress response	oxidative stress response of myocardium	2.72E-04	AGT, TXN
Molecular Transport	vasodilation	vasodilation of blood vessel	5.65E-04	AGT, GCG, MMP9, PLG
	quantity	quantity of lipid	1.73E-09	ABCA1, AGT, ANGPTL4, ARF1, C3, CEBPB, CYP24A1, FABP1, FABP2, GCG, GPX1, GRP, IGF2, INPP5K, INSIG1, LPIN1, LPL, MPO, PLG, PPP1R3C, PTGS2, RBP2, TGFB1
		quantity of fatty acid	6.91E-08	AGT, ANGPTL4, C3, CEBPB, FABP1, GPX1, IGF2, LPIN1, LPL, PPP1R3C, PTGS2, TGFB1
		quantity of D-glucose	1.77E-07	C3, GCG, GPX1, IGF2, IGFBP1, LPL, MAPK14, MPO, PPP1R3C, SOCS1
		quantity of acylglycerol	3.13E-05	AGT, ANGPTL4, CEBPB, FABP1, GRP, LPIN1, LPL, MPO, PPP1R3C
		quantity of steroid	3.45E-05	ABCA1, AGT, CYP24A1, FABP1, GCG, IGF2, INSIG1, LPL, MPO, PLG, PTGS2
		quantity of triacylglycerol	5.15E-05	AGT, ANGPTL4, CEBPB, FABP1, LPIN1, LPL, MPO, PPP1R3C
		quantity of DNA	1.83E-04	GCG, GRP, IGF2, TGFB1
		quantity of cholesterol	2.42E-04	ABCA1, AGT, FABP1, GCG, INSIG1, LPL, MPO
		quantity of prostaglandin E2	3.75E-04	AGT, GPX1, IGF2, PTGS2
		quantity of eicosanoid	6.71E-04	AGT, GPX1, IGF2, PTGS2, TGFB1
	excretion	excretion of protein	9.85E-05	AGT, CFB, FABP1
		excretion of sodium	6.33E-04	AGT, PTGS2, TGFB1
	release	release of Ca2+	1.25E-04	AGT, FGA, FGB, FGG, GCG, TGFB1
		release of lipid	1.97E-04	ABCA1, AGT, C3, CEBPB, GRP, MAPK14, PLG, PTGS2
	export	export of phosphatidic acid	2.72E-04	ABCA1, FABP1
	uptake	uptake of lipid	3.37E-04	ABCA1, C3, FABP6, LPL, MC4R, THBS1
	transport	transport of long chain fatty acid	3.60E-04	CPT1B, FABP1, FABP2
	accumulation	accumulation of lipid	4.56E-04	ABCA1, CEBPB, CEBPD, FABP1, HADHA, INSIG1, LPIN1, LPL
	Antigen Presentation		accumulation of triacylglycerol	6.82E-04
concentration		concentration of cholesterol	5.31E-04	ABCA1, AGT, PTGS2
complement activation		complement activation	1.93E-09	C3, C6, C9, C4B, CFB, CFHR1, CRP
infiltration		infiltration by macrophages	1.45E-07	AGT, C3, C6, MAP3K5, MC4R, PTGS2, SOCS1, TGFB1
cell movement		cell movement of macrophages	7.27E-07	AGT, C3, C6, MAP3K5, MC4R, PTGS2, SAA1, SOCS1, TGFB1
quantity		quantity of macrophages	1.08E-06	ABCA1, AGT, FABP1, HBEGF, MMP9, NFKBIA, PLG, SOCS1, TGFB1
activation		activation of macrophages	1.12E-05	C6, CRP, MPO, PLG, PTGS2, SPON2, TGFB1, THBS1
Humoral Immune Response		activation of phagocytes	1.91E-05	C3, C6, CRP, MPO, PLG, PTGS2, SPON2, TGFB1, THBS1
	complement activation	complement activation	1.93E-09	C3, C6, C9, C4B, CFB, CFHR1, CRP
Carbohydrate Metabolism	quantity	quantity of carbohydrate	2.65E-09	ABCA1, AGT, ARF1, C3, GCG, GPX1, GRP, IGF2, IGFBP1, INPP5K, LPL, MAPK14, MPO, PPP1R3C, SOCS1, TGFB1, USF2
		quantity of D-glucose	1.77E-07	C3, GCG, GPX1, IGF2, IGFBP1, LPL, MAPK14, MPO, PPP1R3C, SOCS1
	synthesis	synthesis of carbohydrate	8.00E-06	ARF1, CEBPB, GCG, IGF2, IGFBP1, PPP1R3C, PTGS2, SOCS1, SOCS3, SRGN, TGFB1
		synthesis of D-glucose	1.69E-05	CEBPB, GCG, PPP1R3C
		synthesis of polysaccharide	8.44E-05	IGF2, IGFBP1, PPP1R3C, SOCS1, SOCS3, SRGN, TGFB1
		synthesis of glycogen	1.36E-04	IGF2, IGFBP1, PPP1R3C, SOCS1, SOCS3
	glycogenolysis	glycogenolysis of glycogen	8.50E-06	CEBPB, GCG, PPP1R3C
	regulation	regulation of carbohydrate	6.94E-05	GCG, SOCS1, SOCS3
		regulation of lipopolysaccharide	5.40E-04	SOCS1, SOCS3
	modification	modification of carbohydrate	1.39E-04	C3, FABP1, GCG, IGFBP1, LPL, TGFB1, THBS1
		modification of D-glucose	5.13E-04	C3, GCG, IGFBP1, LPL
	incorporation	incorporation of D-glucose	1.78E-04	GCG, IGF2, PPP1R3C
	export	export of phosphatidic acid	2.72E-04	ABCA1, FABP1
efflux	efflux of carbohydrate	2.90E-04	ABCA1, FABP1, PTGS2	
metabolic process	metabolic process of glycogen	4.18E-04	CEBPB, GCG, IGF2, PPP1R3C	
secretion	secretion of carbohydrate	6.33E-04	ABCA1, GRP, TGFB1	

<sup>a</sup> Human transcripts that are homologous to zebrafish transcripts that are differentially expressed in 6dpf CONVD compared to GF zebrafish larvae.