Table S2. Changes in vascular gene expression associated with altered blood flow or genetic manipulations in zebrafish embryos*

	Phenotype/genotype†	*tnnt2a*$^{+/-}$ incross or *tnnt2a* MO	Tricaine exposure, wild type‡	*gata1*$^{+/-}$ incross	*alk1*$^{+/-}$ incross	*edn1*$^{+/-}$ incross	*cxcr4*$^{+/-}$ incross	*klf2a* MO
alk1	W/W	100	44	13	70	85	44	23
	W/M	1	0	15	0	26	18	53
	M/M	54	50	0	21	0	0	0
	M/W	8	2	2	0	0	0	0
	Result§	↓	↓	No Δ	↓	No Δ	No Δ	No Δ
edn1	W/W	45	34	71	81	65	71	10
	W/M	0	0	72	0	15	18	40
	M/M	45	36	0	45	0	0	0
	M/W	0	1	0	8	0	0	0
	Result	↓	↓	No Δ	↓	No Δ	No Δ	No Δ
cxcr4a	W/W	59	48	110	101	44	34	23
	W/M	0	5	114	0	15	13	56
	M/M	58	45	0	45	0	0	0
	M/W	0	0	0	1	0	0	0
	Result	↓	↓	No Δ	↓	No Δ	No Δ	No Δ
klf2a	W/W	70	44	118	165	33	56	20
	W/M	2	5	60	45	13	21	3
	M/M	57	35	0	0	0	0	59
	M/W	2	0	1	0	0	0	3
	Result	↓	↓	No Δ	No Δ	No Δ	No Δ	↑
vecad	W/W	91	43	57	74	70		
	W/M	114	43	57	13	10		
	M/M	0	0	0	0	0		
	M/W	0	0	0	0	0		
	Result	No Δ	No Δ	No Δ	No Δ	No Δ		

*In situ hybridization patterns in 32-40 hours post-fertilization (hpf) embryos were qualitatively evaluated and categorized by at least two independent observers. Embryos from heterozygous mutant incrosses were genotyped following phenotyping. Results reflect data combined from two to eight independent experiments.

†First letter indicates phenotype: W, wild type; M, mutant (either increased expression or decreased expression, as indicated by an arrow in Result row). Second letter indicates genotype: W, wild type or heterozygous; M, homozygous mutant. W/M indicates genotypic mutants that could not be phenotypically distinguished from wild types. M/W indicates genotypic wild types or heterozygotes that exhibited gene expression either similar to mutants or a perceived change in gene expression compared with remainder of wild types.

‡Embryos were exposed to 800 μg/ml tricaine to stop heartbeat between 32-40 hpf and expression patterns compared with sibling controls at 40 hpf.

§Results were analyzed by two-tailed Fisher exact test, and all changes indicated in Result rows were statistically significant at $P<0.001$.