

Supplemental data 1. Comparison of observed frequencies of male and female zebrafish in different treatment groups (5-10 hpf, 5-24 hpf, and 5-48 hpf) with theoretical male and female frequencies if all dead fish are assumed to be male (scenario 1) or all dead fish are assumed to be female (scenario 2).

Family	Treat- ment	Final number	Survival (%)	Theor. final number	Sex	n	n_theor. males	Two sided Pr.<= P scenario 1	n_theor. female	Two sided Pr.<= P scenario 2
1	1	41	46.6	41	0	9	9	n.t.	9	n.t.
1	1	41	46.6	41	1	32	32		32	
1	2	29	34.1	40	0	13	24	0.2321	13	0.2346
1	2	29	34.1	40	1	16	16		27	
1	3	38	30.2	59	0	18	39	0.0911	18	0.1315
1	3	38	30.2	59	1	20	20		41	
1	4	6	9.0	31	0	3	28	0.0418*	3	0.0418*
1	4	6	9.0	31	1	3	3		28	
1	1	12	9.2	12	0	2	2	n.t.	2	n.t.
1	1	12	9.2	12	1	10	10		10	
1	2	7	5.3	12	0	4	9	0.6169	4	0.3765
1	2	7	5.3	12	1	3	3		8	
1	3	8	6.1	12	0	4	8	0.6479	4	0.6479
1	3	8	6.1	12	1	4	4		8	
1	4	2	1.5	12	0	1	11	0.2747	1	0.2747
1	4	2	1.5	12	1	1	1		11	
2	1	44	18.7	44	0	12	12	n.t.	12	n.t.
2	1	44	18.7	44	1	32	32		32	
2	2	34	14.5	44	0	18	28	0.3633	18	0.3616
2	2	34	14.5	44	1	16	16		26	
2	3	26	11.1	44	0	14	32	0.1251	14	0.0822
2	3	26	11.1	44	1	12	12		30	
2	4	16	6.8	44	0	9	37	0.0379*	9	0.0116*
2	4	16	6.8	44	1	7	7		35	
2	1	32	17.3	32	0	9	9	n.t.	9	n.t.
2	1	32	17.3	32	1	23	23		23	
2	2	29	15.7	32	0	13	16	0.7989	13	0.7991
2	2	29	15.7	32	1	16	16		19	
2	3	25	13.5	32	0	11	18	0.4287	11	0.5851
2	3	25	13.5	32	1	14	14		21	
2	4	3	1.6	32	0	2	31	0.1664	2	0.029*
2	4	3	1.6	32	1	1	1		30	
3	1	17	18.7	17	0	2	2	n.t.	2	n.t.
3	1	17	18.7	17	1	15	15		15	
3	2	13	14.3	17	0	6	10	0.7131	6	0.7106
3	2	13	14.3	17	1	7	7		11	
3	3	10	11.0	17	0	5	12	0.4153	5	0.4153

3	3	10	11.0	17	1	5	5		12	
3	4	7	7.7	17	0	3	13	0.167	3	0.3068
3	4	7	7.7	17	1	4	4		14	
3	1	19	22.6	19	0	5	5	n.t.	5	n.t.
3	1	19	22.6	19	1	14	14		14	
3	2	14	16.7	19	0	7	12	0.4969	7	0.4969
3	2	14	16.7	19	1	7	7		12	
3	3	10	11.9	19	0	4	13	0.2359	4	0.3904
3	3	10	11.9	19	1	6	6		15	
3	4	2	2.4	19	0	1	18	0.1857	1	0.1857
3	4	2	2.4	19	1	1	1		18	

(Treatments: 1 = control, 2 = 5-10 hpf, 3 = 5-24 hpf, and 4 = 5-48 hpf; theor. final number = observed frequencies of males and females multiplied with the survival rate in the corresponding full sib control; n = the observed frequencies of males and females; sex: 0 = male, 1 = female; n_theor. males = theoretical final number n females; n_theor. females = theoretical final number - n males; scenario 1 = all dead fish are assumed to be male; scenario 2 = all dead fish were assumed to be female; Pr.<= P = derived from Fisher's exact test; n.t = not tested; * = significantly theoretical frequencies differ significantly from the observed frequencies of males and females at a level of $P < 0.05$ at 1 degree of freedom)