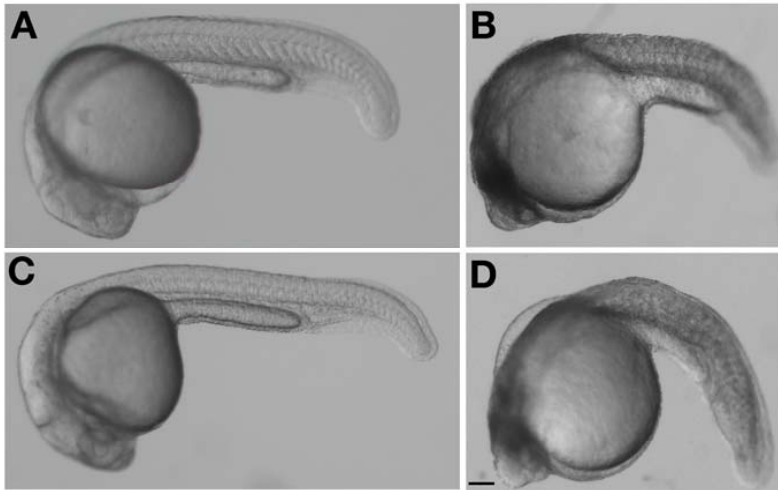


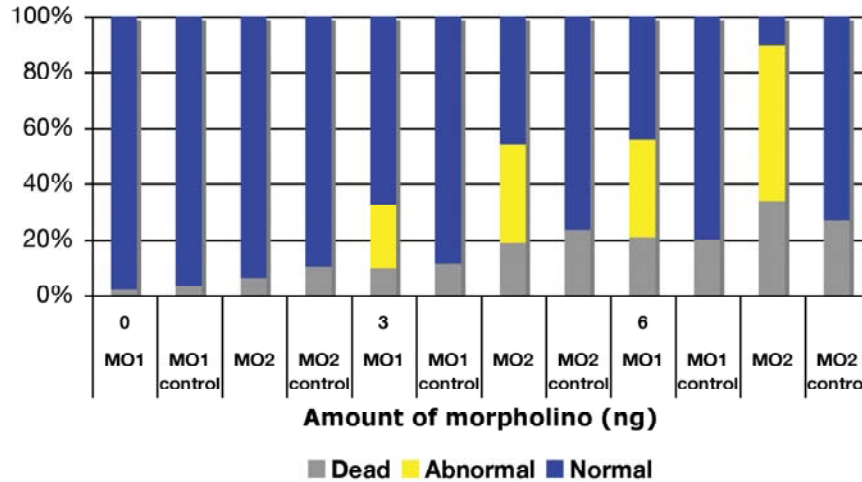
## Supplemental Data 1



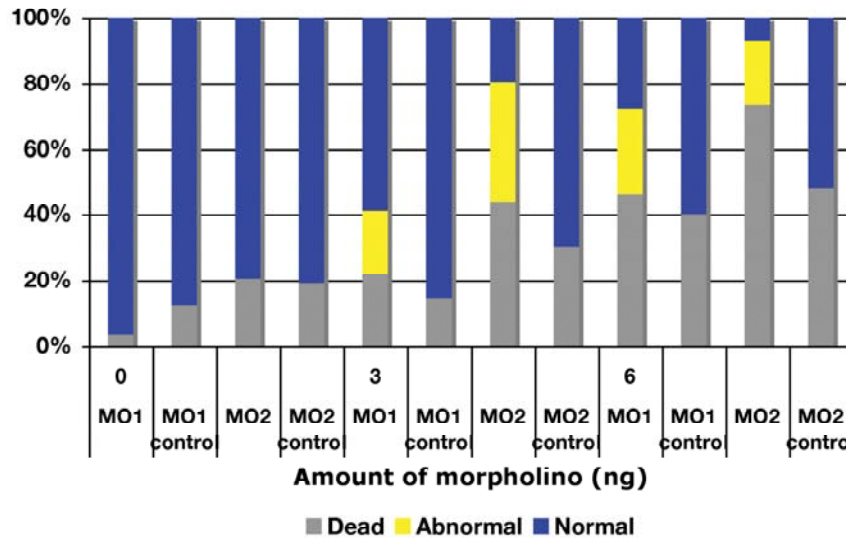
Supplemental data 1. FKRP morphants at 1 dpf. (A): Control MO1 injected fish. (B) FKRP MO1 injected fish. (C): Control MO2 injected fish. (D) FKRP MO2 injected fish. Bar: 100  $\mu\text{m}$ . At 1 dpf, following injection of FKRP MOs, both FKRP morphant 1 and 2 embryos have abnormal formation of head and eyes. The organization of muscle is abnormal in both FKRP morphants compared to controls. FKRP morphants display alterations in somite morphology observed as curved somite boundaries.

## Supplemental Data 2

### MO1 & 2 injected fish (1 day)



### MO1& 2 injected fish (4 days)



Supplemental data 2. Histogram of the percentage of dead affected fish of morphants and affected fish with injection of MO1 and MO2 and control MO1 and MO2 (3 ng and 6 ng). Blue bar shows normal %, yellow shows affected % and gray shows dead fish %.

### Supplemental Data 3

Fish FKRP sequence primers	
F1	CCATAATGCGTATCAGTTTTTGCCAGG
R1	TCTTCAAATTCCTGAACCAG
F2	GATGGGTAACCTCGTTGGTG
R2	CCGAATGAGACGCTCAACTT
F3	CGAGTTCAACGTGCAGACAG
R3	CCAGGAGTTTGACCTTCCAG
F4	TTCTTATTCGCACCGAGGAC
R4	CTCTCTGAGGGCACGTAAGC
F5	ATGTTTCGGGACAGTTCGAG
R5	TCCATTACGGGGTAAAATG
F6	CCGTGTTTCAGTACAGCGAAA
R6	TTCCCAAACAATGCACACAC
Human FKRP sequence primers	
F1	CCAGCTAGCCCCAGACTTC
R1	ACTCTCGCAGGCTGACGTT
F2	CCGAGTTTGTGGCCCTAGTA
R2	AGCACGCCACCACATAG
F3	ACGCCCGCCTACCTCTAC
R3	CTTGGTCAGTTTCCCCCTTC

Supplemental data 3. Primers for sequence analysis of human and zebrafish FKRP gene