**Movie 1.** Brightfield video of wild-type (bottom) versus s411 (top) at 72hpf, showing the outflow tract stenosis at physiological speed.

**Movie 2.** Resonant scanner confocal movie of the outflow tract of wild-type Tg(kdrl::eGFP);Tg(gata1::DsRed) at 1/10 speed.

**Movie 3.** Resonant scanner confocal movie of the outflow tract of s411 Tg(kdrl::eGFP);Tg(gata1::DsRed) at 1/10 speed.