Video 1 (Movie1\_Control GD13,2h). Video capture of beating heart in a GD13 embryo, 2 hours after dosing the mother with water (control). The rapid contraction/relaxation of the chambers is apparent. The atria and ventricles were manually identified and the atrial and ventricular contraction rates were determined using custom-written software (University of Uppsala) that identified the light-dark intensity difference between systole and diastole. In comparison with Video 2, it is evident that the control embryo heart is beating much more rapidly, with no arrhythmias present.

Video 2 (Movie2\_Dof GD13,2h). Video capture of beating heart in a GD13 embryo 2 hours after administration of Dof. The method for determining heart rate and rhythm was the same as for Video 1. Comparing with Video 2 shows that the Dof embryo heart shown here is beating much more slowly with many arrhythmias.