Luther Fenton SI 2008-08-08476C.pdf

Supplemntary Information.
Format: PDF

S1.mov

Video showing atrial fibrillation (AF) and successful termination of AF (see Fig. 1c and e).
The color indicates membrane potential (black = resting, red activated; c.f. color bar given in Fig. 1e).
The times of the five AFP pulses are indicated by a red square. The field of view is 4 x 4 cm2.
Note that during AFP, waves originate both from boundaries and form inside the tissue.
Format: quicktime movie

S2.mov

Video showing normal sinus rhythm (see Fig. 1e).
The color indicates membrane potential (black = resting, red activated; c.f. color bar given in Fig. 1e).
The field of view is 4 x 4 cm^2.
Format: quicktime movie

S3.mov

Videos showing representative examples of wave propagation in quiescent tissue induced by
weak electric field pulses with E = 0.22 V/cm, E = 0.39 V/cm and E = 0.5 V/cm, respectively (pulse duration 8 ms).
The color indicated time (early = red, late = blue; see Fig. 2).

S4.mov,...,S7.mov

Videos showing simulations corresponding to Figure S10, panels AD.
The simulations have been done using the Barkley model.
The color indicates the fast activator variable (blue = resting, red = activated).
The text at the beginning of each video indicates pacing sites and relative frequencies.
During the simulations, phase singularity trajectories are tracked where appropriate (indicated by white color).
Format: quicktime movie

S8.mov

Video showing AF and successful termination using direct access to the core (Fig. 4e).
The color indicates membrane potential (black = resting, red activated; c.f. color bar given in Fig. 4d).
The times of the five AFP pulses are indicated by a red square. The field of view is 4 x 4 cm2.
Format: quicktime movie

S9

3D interactive Applet for the right atrial vessel structure shown in Fig. 3b.
http://thevirtualheart.org/vessels/atria/Right_atria_vessels.html
Format: Java applet

S10

3D interactive Applet for the left ventricular vessel structure shown in Fig. 3f.
http://thevirtualheart.org/vessels/ventricle/vessels1a.html
Format: Java applet