# Supporting Information 10: 3D anatomical model of the human atria

The anatomical atrial model is derived from the visible human dataset [1] and segmented into the major differentiated anatomical regions [1,2]. A reconstruction of the SAN [3] was previously incorporated into the model (Figure A, Ai-ii). It successfully reproduces normal atrial activation patterns observed in the human atria (Figure A, Bi-ii), with conduction velocities of 1.3 m/s in CT and 0.7 m/s in RA, in accordance with experimental values [2]. These velocities are reduced to 0.8 and 0.46 m/s in the most severe remodelling case (40 % ***D***). In the 3D simulations, the atria were paced from the SAN region (shown in red in Figure A, Ai).



**Figure A.** Segmented anatomical reconstruction of the human atria (A) and the activation pattern under sinus rhythm (B) from two different views (i,ii). RA = right atrium, LA = left atrium, PV = pulmonary vein (Right/Left and Inferior/Superior), IPR = inter pulmonary region, LAA/RAA = left/right atrial appendage, SVC/IVC = superior/inferior vena cava, AVR = atrio-ventricular ring, CT = crista terminalis, SAN = sino-atrial node, AS = atrial septum.

**Reference**

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