

## Supplementary Material

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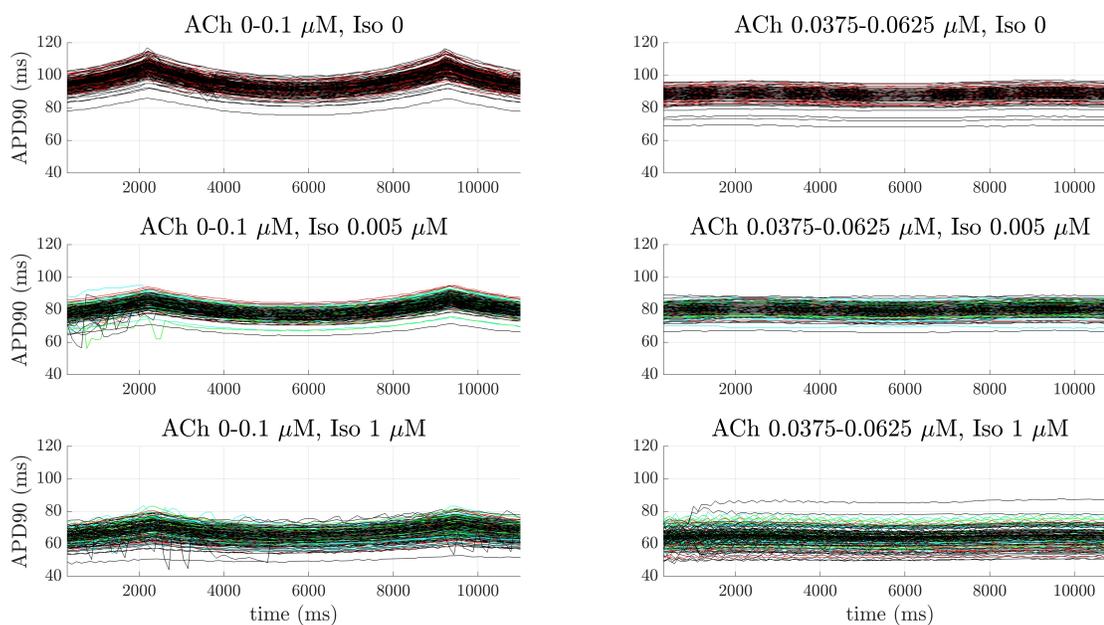


Figure 1S: APD<sub>90</sub> over time measured at different tissue locations in 3D simulations. Black indicates regions without ACh or Iso; red corresponds to regions with ACh only; green to regions with Iso only; and cyan to regions with both ACh and Iso.

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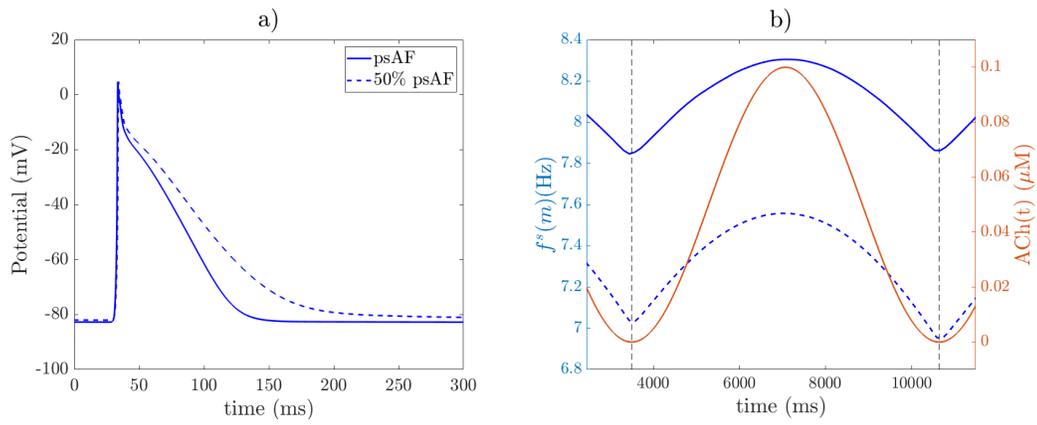


Figure 2S: Panel a) Representative action potentials at a tissue point without ACh in the psAF case (solid line) and with 50% reduced electrical remodeling (dashed line). Panel b)  $f^s(m)$  (blue) and  $ACh(t)$  (red). Solid lines represent the standard psAF case, while dashed lines correspond to the case with 50% reduced electrical remodeling..