# Supporting Information 6: Validations to the updated *Colman et al.* model with a new formulation of *I*Kur

Figure A shows the simulated rate-dependence of AP and APD using the updated Colman et al. model. A comparison of APD90 between the model and multiple experimental datasets is illustrated in Table A.



**Figure A** Rate dependence of simulated APs of the human right atrium. (A) APs produced with multiple stimulus rates. (B) APD restitution for the model, compared to a number of experimental data sets ([1–3]).

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| **Study** | **APD90 (ms) (1 Hz)** |
| Model | 248  |
| Pau *et al.* 2007 [4] | 239 ± 11 |
| Redpath *et al.* 2006 [5] | 210 ± 17 |
| Katoh *et al.* 2005 [6] | 255 ± 39 |
| Dawodu *et al.* 1996 [7] | 361 ± 71 |
| Bosch *et al.* 1999 [2] | 255 ± 45 |
| Dobrev *et al.* 2002 [8] | 203 ± 10 |
| Kim *et al.* 2002 [9] | 258 ± 25 |
| Sanchez *et al.* 2014 [10] | 318 ± 42 |

**Table A** Validation of APD90 of the updated Colman *et al.* model of human atrial electrophysiology against experimental data.

**References**

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