



Figure 4 – *in silico* predictions of population risk profile in response to hydroxychloroquine and hypokalaemia. A) Populations of action potentials simulation from individuals with variability in rhythmome genes for baseline (i), 1000 ng/ml hydroxychloroquine (ii) and 1000 ng/ml hydroxychloroquine plus hypokalaemia (4.5 mM K⁺) (iii). B-D) Frequency histograms for APD_{90} in normokalaemia and hypokalaemia for baseline (B), 1000 ng/ml hydroxychloroquine (C), and 3000 ng/ml hydroxychloroquine (D). Normokalaemic baseline data is reproduced on panels C and D for comparison (grey). E) Summary of APD_{90} prolongation for increasing doses of hydroxychloroquine for normo- and hypo-kalaemia. Shaded range indicates $\pm 1SD$ from mean.