Supplementary Materials

Utility of the JT Peak Interval and the JT Area in Determining the Proarrhythmic Potential of QT-Shortening Agents

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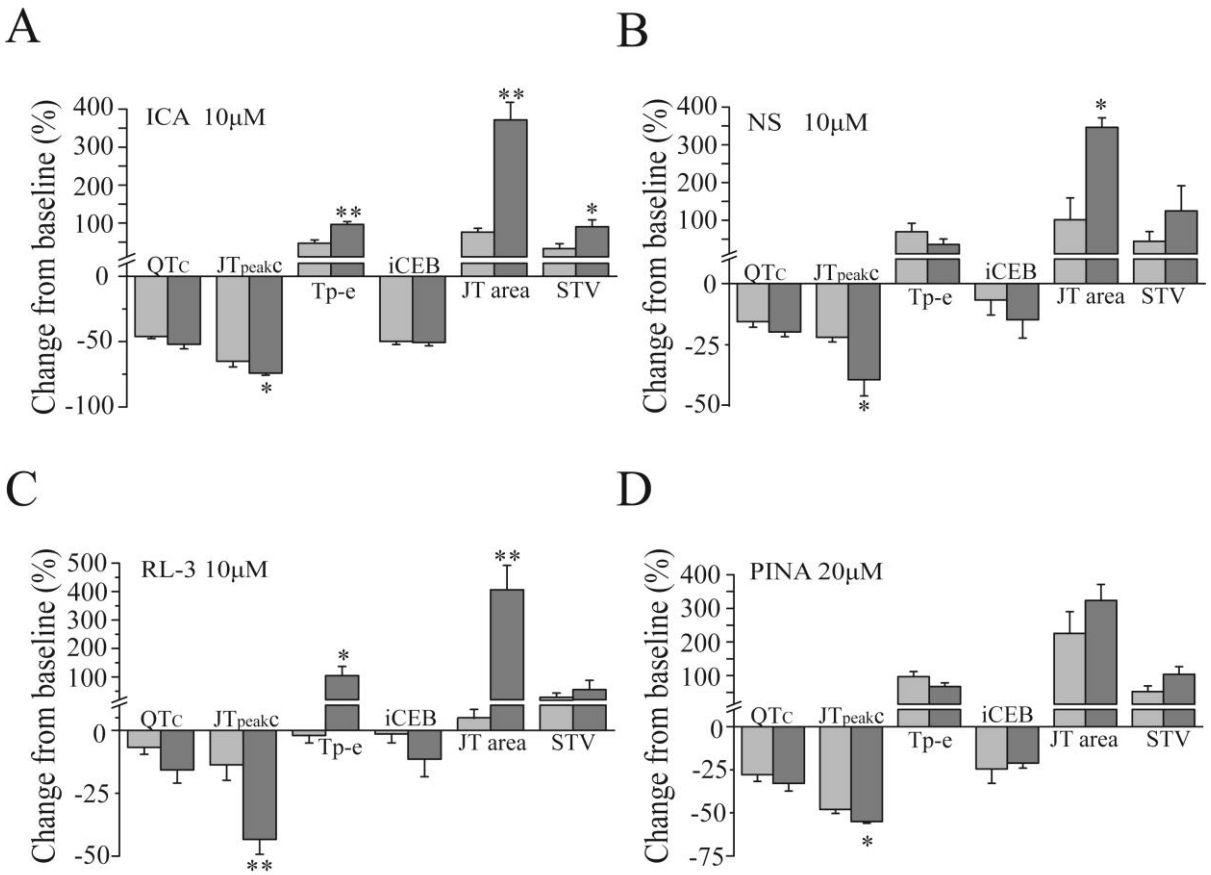
Supplementary Figures and tables

Supplementary Figure.1



Supplementary Figure 1. Effects of potassium channel openers on ECG parameters in isolated rabbit (light-colored) and guinea pig hearts (dark-colored) at high concentrations.

Supplement Table 1. Effects of different potassium channel openers on the ECG parameters in the Langendorff-perfused guinea-pigs hearts.

		QTc (ms)	$JTpeak_c$ (ms)	Tp-e (ms)	iCEB	JTarea (mV•ms)	STV (ms)
n=8	Control	159±2	120±1	25±1	9±0.1	8±0.5	1.59±0.1
	ICA-105574 1μM	138±3**	107±3**	36±1**	7±0.2**	16±1**	2.1±0.2*
	ICA-105574 5μM	106±3**	60±5**	48±1**	6±0.2**	27±2**	1.9±0.2
	ICA-105574 10μM	77±2**	33±1**	47±1**	4±0.1**	38±3**	3.2±0.3**
n=5	Control	159±3	113±5	28±2	5.6±0.6	8±1	1.6±0.4
	NS-1643 1μM	146±3**	96±5**	33±1	5.1±0.4	18±1**	1.9±0.8
	NS-1643 5μM	134±3**	85±6**	33±1	5.3±0.5	29±4**	2.8±0.5
	NS-1643 10μM	127±2**	69±5**	34±1	4.9±0.6	37±3**	3.7±1.1*
n=5	Control	161±2	113±5	22±4	8.2±0.7	9±1	1.7±0.1
	L-3 1μM	154±2*	95±5**	27±3	7.5±0.7	16±2*	2.1±0.3
	L-3 5μM	145±3*	78±4**	42±4	7.6±0.7	33±2*	2.3±0.1
	L-3 10μM	136±4**	66±5**	44±4	7.4±0.8	47±4**	2.5±0.4
n=7	Control	158±2	116±4	22±1	7.6±0.1	8.3±1	1.8±0.1
	Pinacidil 5μM	143±3**	84±4**	35±2*	7.4±0.1	23±3*	2.2±0.2
	Pinacidil 10μM	126±3**	68±3**	37±2**	6.5±0.1**	28±3*	2.9±0.3*
	Pinacidil 20μM	106±4**	50±2**	36±2*	5.9±0.1**	37±4*	3.6±0.5*

Supplement Table 2. Effects of different potassium channel openers on the parameters of PR (in ms), QRS (in ms) and heart rate (HR) in Langendorff-perfused guinea-pig hearts.

	HR	PR	QRS
Control	199±4	65±1	18±1
ICA-105574 1μM	193±5	61±1	18±1
ICA-105574 5μM	197±5	68±3	17±1
ICA-105574 10μM	186±8	70±1	18±1
Control	187±4	68±3	30±3
NS-1643 1μM	183±4	69±2	30±3
NS-1643 5μM	176±4**	69±2	27±3
NS-1643 10μM	175±4**	95±6**	31±3
Control	186±6	63±1	26±3
L-3 1μM	191±7	65±1	28±3
L-3 5μM	174±6*	66±1	27±3
L-3 10μM	168±5**	68±2	27±3
Control	187±3	62±2	23±1
Pinacidil 5μM	175±5	59±2	22±2
Pinacidil 10μM	161±5**	60±1	24±1
Pinacidil 20μM	155±3**	64±2	23±2