

## Supplementary material

---

*Bariş VÖ, Dinçsoy B, Gedikli E, Erdem A. Empagliflozin significantly attenuates sotalol-induced QTc prolongation in rats. Kardiol Pol. 2021; 79: 53-57. doi:10.33963/KP.15666*

Please note that the journal is not responsible for the scientific accuracy or functionality of any supplementary material submitted by the authors. Any queries (except missing content) should be directed to the corresponding author of the article.

**Table S1.** PR, QT, QTc, T durations and heart rate (HR) for all groups at baseline, 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> hours

	Control	EMPA	SOT	EMPA+SOT	<i>P</i>
<b>Baseline</b>					
PR duration (ms) Mean (SD)	44.4 (3.9)	46.2 (4.6)	44.9 (6.5)	44.4 (4.1)	0.948
QT duration (ms) Mean (SD)	80.4 (8.5)	74.5 (7.2)	82.2 (6.6)	75.3 (8.5)	0.268
HR (bpm) Median (IQR)	237 (44)	224 (16)	212 (29)	216 (9)	0.103
QTc Median (IQR)	158.3 (10.6)	143.8 ( 24.8 )	161.2 ( 33.2)	138.8 ( 28.3)	0.303
T duration	40.4 (8.7)	42.9 (6.2)	42.9 (4.9)	41.9 (2.5)	0.879

(ms)					
Mean (SD)					
<b>First Hour</b>					
PR duration	52.7 (6.7)	56.5 (8.4)	57.2 (4.6)	57.8 (6.5)	0.567
(ms)					
Mean (SD)					
QT	76.8 (2.9)	76.2 (6.4)	108.4 (8.6) <sup>a</sup>	83.7 (4.5) <sup>b</sup>	< 0.001
duration					
(ms)					
Mean (SD)					
HR (bpm)	314.6 (62.9)	255.9 (72.9)	215.7 (31.5) <sup>c</sup>	257.8 (29.3)	0.033
Mean (SD)					
QTc	180.3 (18.1)	155.7 (44.8)	204.9 (30.5) <sup>d</sup>	171.23 (9.1)	0.008
Median					
(IQR)					
T duration	41.2 (6.6)	50.0 (7.6)	62.5 (5.6) <sup>a</sup>	52.2 (4.6) <sup>c</sup>	< 0.001
(ms)					
Mean (SD)					
<b>Second Hour</b>					
PR duration	54.8 (4.7)	56.1 (5.5)	59.6 (4.5)	57.7 (3.2)	0.36
(ms)					
Mean (SD)					

QT duration (ms) Mean (SD)	81.6 (5.9)	73.9 (8.1)	123.5 (7.7) <sup>a</sup>	83.7 (6.8) <sup>b</sup>	< 0.001
HR (bpm) Mean (SD)	332.0 (18.3)	296.4 (29.0)	211.3 (24.3) <sup>a</sup>	266.3 (13.7) <sup>b</sup>	< 0.001
QTc Mean (SD)	191.54 (10.5)	163.9 (18.5)	231.6 (22.1) <sup>a</sup>	176.1 (11.6) <sup>b</sup>	< 0.001
T duration (ms) Mean (SD)	42.3 (4.7)	49.5 (6.2)	65.2 (7.0) <sup>a</sup>	50.6 (4.9) <sup>f</sup>	< 0.001
<b>Third Hour</b>					
PR duration (ms) Mean (SD)	56.0 (5.7)	55.0 (6.5)	59.4 (8.0)	57.3 (4.9)	0.69
QT duration (ms) Mean (SD)	72.3 (2.9)	77.5 (7.0)	100.2 (8.8) <sup>a</sup>	89.4 (6.5)	< 0.001
HR (bpm) Mean (SD)	340.5 (25.1)	307.4 (24.6)	209.6 (30.7) <sup>a</sup>	242.2 (26.7) <sup>g</sup>	< 0.001
QTc Mean (SD)	172.3 (10.5)	175.1 (14.6)	186.9 (20.4)	179.5 (17.6)	0.44
T duration (ms)	41.8 (5.5)	47.8 (5.3)	66.3 (10.9) <sup>a</sup>	48.7 (7.8) <sup>h</sup>	< 0.001

Mean (SD)					
-----------	--	--	--	--	--

<sup>a</sup>: Control vs SOT;  $P < 0.001$ ,

<sup>b</sup>: EMPA+SOT vs SOT;  $P < 0.001$ ,

<sup>c</sup>: Control vs SOT ;  $P = 0.019$ ,

<sup>d</sup> : EMPA vs SOT ;  $P = 0.009$

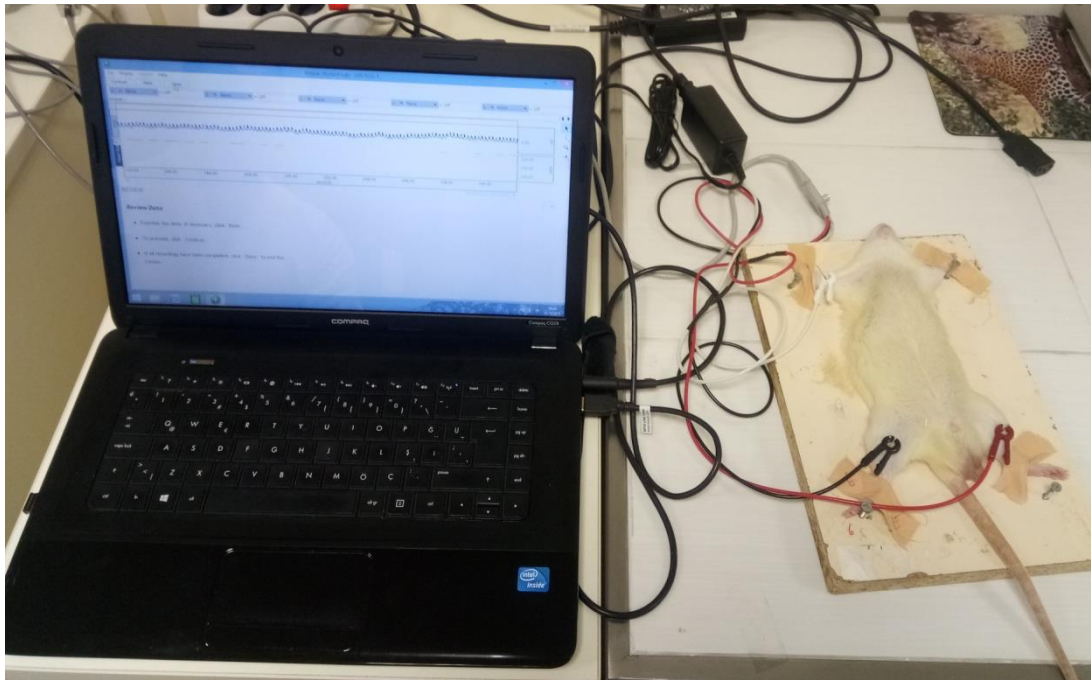
<sup>e</sup>: Control vs EMPA+SOT ;  $P = 0.028$

<sup>f</sup>: EMPA+SOT vs SOT ;  $P = 0.002$

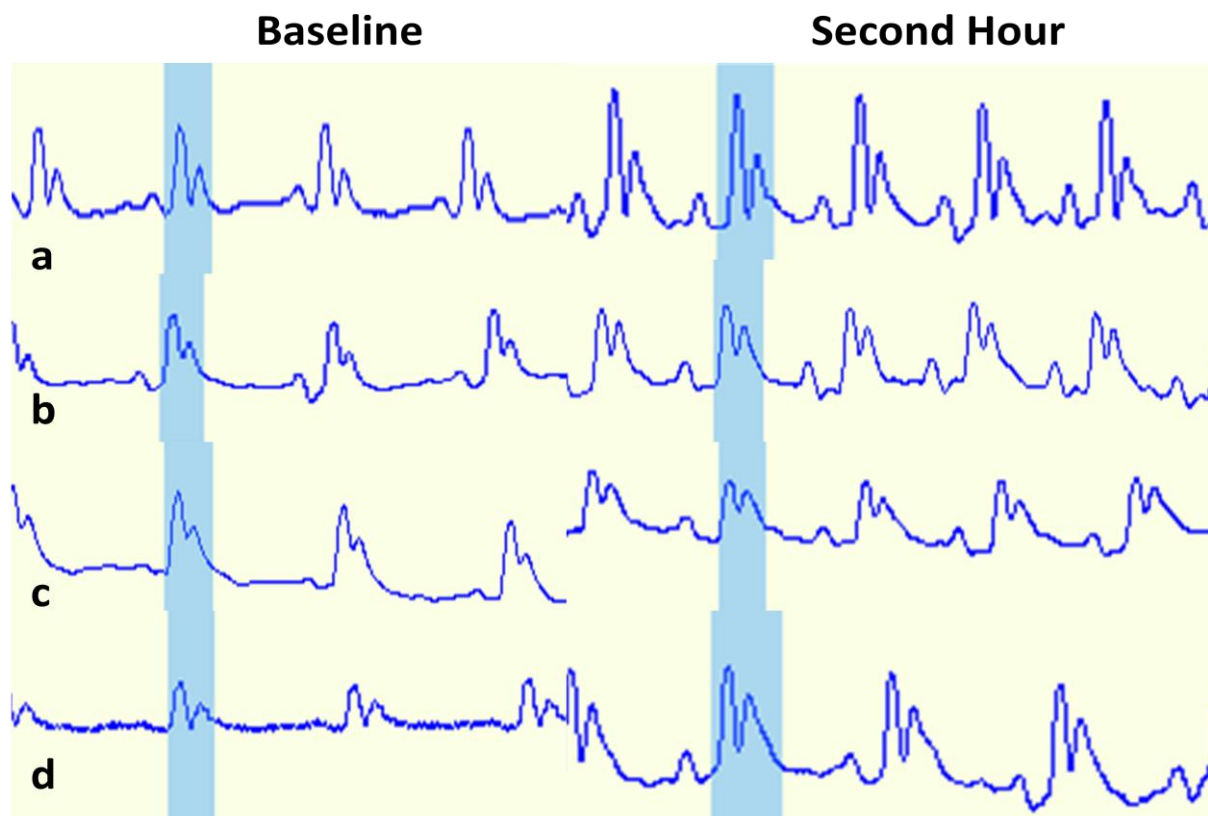
<sup>g</sup> : Control vs EMPA+SOT ;  $P < 0.001$

<sup>h</sup>: EMPA+SOT vs SOT ;  $P = 0.004$

QTc and heart rate on basal and QTc at first hour were compared using the Kruskal–Wallis test followed by Nemeyni’s post-hoc test, all of other parameters were compared using ANOVA followed by Tukey’s post-hoc test.



**Figure S1.** ECG recording of the anesthetized rats for the D2 lead at supine position



**Figure S2.** Electrocardiographic comparisons of all groups during one second duration in baseline and second hour a) Control b) Empagliflozin c) Sotalol + Empagliflozin d) Sotalol