Supplementary data for:

## SGLT2 inhibitors activate pantothenate kinase in the human heart

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## Supplementary Table

## Human Patient Characteristics

Sample	Etiology	Sex	Age	LV	BMI	LVEF	Experiment
				Mass			
				Index			
1	NICM	М	49	125.74	23.03	17.5	Figure 1
2	НСМ	М	31	116.82	30.46	15	Figure 1
3	ICM	F	44	207.32	31.96	30	Figure 1
4	NICM	М	52	150.38	32.82	15	Figure 1
5	NICM	F	46	97.98	22.03	10	Figure 1
6	NICM	F	26	77.66	22.58	15	Figure 1
7	Sarcoid	М	61	125	29.06	20	Figure 1,
							Figure 2b
8	NICM	F	68	122.23	24.44	27.5	Figure 1
9	HFpEF	М	62	106.48	25.14	57.5	Figure 1
10	ARCV	F	61	127.99	24.09	70	Figure 1
11	NICM	М	59	147.97	32.77	10	Figure 1,
							Figure 2b
12	HFpEF	М	61	133.18	34.34	55	Figure 2b
13	HFpEF	М	58	117.79	22.40	55	Figure 2b
14	Sarcoid	М	59	139.33	37.22	30	Figure 2b
15	Congenital	F	7		19.13		Figure 2b
16	NF	F	56	111.38	25.22	55	Figure 2c
17	NF	F	56	98.39	20.70	70	Figure 2c
18	NF	F	69	139.48	33.50	52.5	Figure 2c
19	NF	F	61	116.12	30.43	57	Figure 2c
20	NF	F	54	114.71	36.11	55	Figure 2c
21	NF	М	62	1411.62	23.66	65	Figure 2c
22	NF	М	58	77.33	23.66	65	Figure 2c
23	NF	М	20	141.62	23.66	65	Figure 2c
24	NICM	F	46	97.98	24.03	10	Figure 2c
25	NICM	М	28	169	30.52	12	Figure 2c
26	Sarcoid	М	61	125	29.06	20	Figure 2c
27	NICM	М	49	125.74	23.03	17.5	Figure 2c
28	НСМ	М	59	116.82	30.48	15	Figure 2c
29	NICM	F	26	77.66	22.58	15	Figure 2c
30	NICM	М	59	147.92	32.77	10	Figure 2c
31	NICM	F	68	12.23	24.44	27.5	Figure 2c
32	NICM	М	52	150.35	32.82	15	Figure 2c
33	ICM	F	53	106.59	28.52	59	Figure 2c
34	Sarcoid	М	59	139.33	37.22	30	Figure 2c

## **Supplementary Figures**



**Supplementary figure 1**. **A,** CETSA of PANK1 from HepG2 cells treated with 10uM Empagliflozin. **B**, CETSA of PANK1 from HEK293 cells treated with vehicle (0.01% DMSO), 10uM Empagliflozin, or 10uM PZ-2891.



**Supplementary Figure 2**. Single-point enzyme activity assays of PANK1 utilizing 2 different kinase activity assays with 1uM of EMPA *in vitro*. Left: Transcreener ADP Assay (Bellbrook labs) Kit single point kinase activity assay.<sup>1</sup> Right: Malachite green-coupled ADP detection single point kinase activity assay.



Supplementary Figure 3. Additional contractility parameters, accompanying Figure 4.