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Supplementary Materials for

Smartphone-based blood pressure monitoring via the oscillometric finger-pressing method

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The PDF file includes:

Other Supplementary Material for this manuscript includes the following:
(available at www.sciencetranslationalmedicine.org/cgi/content/full/10/431/eaap8674/DC1)

Movie S1 (.mp4 format). Video demonstration of the smartphone-based BP monitoring device.

Table S1. Anthropomorphic information, number of practice trials, and all BP measurements per subject. Exp, experienced; M, measurement (M1 is measurement 1); TA-MF, try-again message due to measurement failure; TA-CF, try-again message due to computation failure; TA-AF, try-again message due to actuation failure**; --**, no measurement due to early completion of protocol.

User ID	Age (yrs)	Weight (kg)	Height (cm)	Gender	Number of practice trials	Systolic/Diastolic BP (mmHg)						
						Reference cuff device		Smartphone-based device				Finger cuff device
						M1	M2	M1	M2	M3	M4	M1
New1	28	95	179	Male	1	111/82	120/85	112/72	111/73	--	--	108/71
New2	26	87	180	Male	3	Invalid reference measurement						
New3	27	59	160	Female	1	98/70	104/70	104/64	TA-CF	TA-CF	TA-CF	112/66
New4	21	67	176	Male	1	112/74	101/75	104/66	102/62	--	--	109/76
New5	54	90	164	Female	2	133/95	129/114	134/91	TA-MF	131/88	--	124/79
New6	39	79	158	Female	2	109/88	110/91	120/80	123/83	--	--	113/72
New7	39	75	176	Male	1	108/71	107/67	115/75	TA-MF	TA-MF	102/64	115/70
New8	51	104	172	Female	2	121/86	118/87	124/84	122/82	--	--	120/75
New9	41	75	162	Female	2	106/79	108/83	126/86	113/75	TA-CF	107/69	123/77
New10	53	98	165	Female	3	118/84	115/86	103/65	TA-MF	TA-CF	TA-MF	109/63
New11	33	80	181	Male	1	113/84	113/76	110/70	129/86	119/79	--	109/66
New12	31	58	168	Female	1	118/89	115/86	134/91	127/87	--	--	137/76
New13	40	71	175	Male	1	115/69	115/74	112/72	111/71	--	--	123/67
New14	55	77	180	Male	1	108/77	--	TA-CF	TA-MF	TA-CF	TA-CF	105/65
New15	28	113	162	Female	2	120/89	120/89	117/77	TA-CF	TA-CF	TA-CF	122/75
New16	24	83	169	Male	1	129/70	--	TA-MF	TA-MF	TA-MF	TA-MF	113/67
New17	56	70	163	Female	1	110/77	112/76	102/64	115/75	108/68	--	125/74
New18	33	72	176	Male	2	103/67	103/69	129/89	128/88	--	--	99/61
New19	41	53	165	Female	2	100/65	105/69	112/72	101/61	106/68	--	123/78
New20	49	56	150	Female	1	96/69	101/73	109/71	TA-AF	109/69	--	114/67
New21	50	64	165	Female	2	91/72	103/77	104/64	TA-CF	TA-CF	TA-CF	109/67
New22	49	56	155	Female	4	99/65	94/79	111/71	TA-CF	108/70	--	113/68
New23	31	54	164	Female	1	103/73	97/76	101/63	TA-CF	TA-CF	TA-CF	114/69

New24	40	77	168	Female	1	113/78	110/75	116/76	110/72	--	--	106/67
New25	42	86	167	Female	1	99/76	99/78	113/73	TA-AF	121/81	--	124/69
New26	48	113	165	Female	1	122/86	113/87	120/80	123/80	--	--	116/73
New27	52	87	164	Female	2	134/85	133/95	118/78	TA-MF	119/79	--	146/85
New28	38	65	155	Female	1	105/76	102/76	116/76	118/78	--	--	112/72
New29	31	76	178	Male	2	100/73	98/75	112/74	TA-AF	TA-MF	114/74	96/66
New30	33	120	165	Female	1	117/70	108/65	102/64	110/70	--	--	122/68
Exp31	28	69	172	Male	--	132/100	141/104	140/ 97	136/ 93	--	--	143/99
Exp32	34	70	172	Male	--	139/102	132/100	139/ 96	134/ 91	--	--	135/97
Exp33	28	71	171	Male	--	135/110	134/106	130/ 87	128/ 85	--	--	132/94
Exp34	29	81	180	Male	--	131/104	135/105	136/ 96	135/ 92	--	--	138/99
Exp35	46	69	172	Male	--	142/102	148/110	144/ 99	138/ 95	--	--	152/101

Movie S1. Video demonstration of the smartphone-based BP monitoring device. A user obtains a BP measurement with the device by (i) placing her/his index finger on the sensor according to line indicators near the sensor, (ii) viewing the smartphone screen while holding the device at heart level, and (iii) pressing her/his finger against the sensor so that the displayed finger pressure is maintained between target blue lines on the screen.