

Table e-1. Premorbid blood pressure in patients with lacunar vs. non-lacunar events stratified by age in patients with at least one blood pressure reading in each time periods.

	<65 years			≥65 years		
	lacunar (n=74)	non-lacunar (n=310)	p	lacunar (n=191)	non-lacunar (n=1226)	p
BP ≤ 15-year prior to the event						
Mean/SD SBP (mmHg)	139.1/15.8	133.7/15.3	0.007	146.6/13.2	146.3/13.6	0.77
Mean/SD DBP (mmHg)	84.3/8.0	81.1/7.9	0.002	81.8/7.2	81.0/6.7	0.14
BP ≤ 5 years prior to the event						
Mean/SD SBP (mmHg)	142.5/17.2	134.9/17.2	0.001	145.8/14.4	144.3/14.5	0.19
Mean/SD DBP (mmHg)	85.1/8.4	80.7/8.7	<0.0001	80.1/8.4	78.7/7.7	0.02
BP > 5 years prior to the event						
Mean/SD SBP (mmHg)	133.9/15.2	131.7/16.2	0.30	146.4/14.7	147.0/15.8	0.63
Mean/SD DBP (mmHg)	82.9/9.3	80.6/9.1	0.06	82.9/8.1	82.8/7.5	0.87

BP=blood pressure, SBP=systolic blood pressure, DBP=diastolic blood pressure.

Table e-2. Premorbid blood pressure in patients with lacunar vs. non-lacunar events stratified by age excluding patient with transient ischaemic attack.

	<65 years			≥65 years		
	lacunar	non-lacunar	p	lacunar	non-lacunar	p
BP≤15-year prior to the event						
No. of patients	63	215		150	822	
Mean/SD SBP (mmHg)	141.0/19.4	135.1/16.0	0.02	146.0/13.6	146.8/14.0	0.52
Mean/SD DBP (mmHg)	85.6/10.0	81.6/8.8	0.002	81.6/7.0	81.1/7.1	0.37
BP ≤ 5 years prior to the event						
No. of patients	57	190		144	810	
Mean/SD SBP (mmHg)	145.7/19.9	136.2/18.1	0.001	145.6/14.5	145.0/14.8	0.64
Mean/SD DBP (mmHg)	86.3/10.5	80.8/9.4	0.0002	80.4/8.3	78.9/8.0	0.05
BP > 5 years prior to the event						
No. of patients	54	188		140	743	
Mean/SD SBP (mmHg)	134.5/16.2	133.9/17.5	0.83	146.0/14.3	148.1/15.9	0.09
Mean/SD DBP (mmHg)	84.0/9.3	81.4/10.0	0.09	82.8/7.7	83.3/7.4	0.53

BP=blood pressure, SBP=systolic blood pressure, DBP=diastolic blood pressure.

Table e-3. Premorbid blood pressure in patients with lacunar vs. non-lacunar events stratified by age in patient with first-ever-in-a-life-time incident events only.

	<65 years			≥65 years		
	lacunar	non-lacunar	p	lacunar	non-lacunar	p
BP≤15-year prior to the event						
No. of patients	85	373		184	1168	
Mean/SD SBP (mmHg)	138.2/18.0	132.9/14.8	0.005	146.2/14.0	145.2/13.7	0.35
Mean/SD DBP (mmHg)	84.0/10.0	81.0/8.5	0.004	81.4/7.2	80.6/7.0	0.12
BP ≤ 5 years prior to the event						
No. of patients	79	336		175	1149	
Mean/SD SBP (mmHg)	142.3/18.9	134.3/16.4	0.0002	145.6/15.0	143.4/14.2	0.07
Mean/SD DBP (mmHg)	85.1/10.1	80.7/9.0	0.0002	80.1/8.4	78.4/7.8	0.01
BP > 5 years prior to the event						
No. of patients	74	326		173	1057	
Mean/SD SBP (mmHg)	132.2/14.9	131.0/16.0	0.56	146.3/14.8	146.3/15.6	1.00
Mean/SD DBP (mmHg)	82.3/9.6	80.6/9.3	0.15	82.5/7.9	82.6/7.5	0.95

BP=blood pressure, SBP=systolic blood pressure, DBP=diastolic blood pressure.

Table e-4. Premorbid blood pressure in patients with lacunar vs. non-lacunar events stratified by age and premorbid use of antihypertensive agents.

	<65 years			≥65 years		
	lacunar	non-lacunar	p	lacunar	non-lacunar	p
Patients on premorbid antihypertensive treatment						
BP≤15-year prior to the event						
No. of patients	32	137		119	932	
Mean/SD SBP (mmHg)	151.8/17.7	141.4/14.9	0.001	149.3/13.4	148.8/13.4	0.67
Mean/SD DBP (mmHg)	91.1/9.6	84.5/8.3	0.0001	82.6/7.2	81.1/7.0	0.04
BP ≤ 5 years prior to the event						
No. of patients	32	134		118	930	
Mean/SD SBP (mmHg)	153.7/18.8	139.7/16.3	<0.0001	148.0/14.7	145.9/14.5	0.13
Mean/SD DBP (mmHg)	90.8/10.3	82.3/9.3	<0.0001	80.8/8.4	78.4/7.7	0.001
BP > 5 years prior to the event						
No. of patients	27	120		112	850	
Mean/SD SBP (mmHg)	140.5/14.2	142.1/16.4	0.65	150.2/14.0	150.9/15.1	0.66
Mean/SD DBP (mmHg)	87.9/8.0	86.2/8.6	0.34	84.3/7.8	83.9/7.5	0.59
Patients not on antihypertensive treatment						
BP≤15-year prior to the event						
No. of patients	63	261		95	446	
Mean/SD SBP (mmHg)	131.7/13.4	129.1/13.2	0.16	141.7/13.0	139.2/12.8	0.09
Mean/SD DBP (mmHg)	80.6/7.5	79.0/7.9	0.14	80.0/6.8	79.7/6.9	0.66
BP ≤ 5 years prior to the event						
No. of patients	55	227		87	427	
Mean/SD SBP (mmHg)	136.1/15.6	131.6/16.1	0.06	141.3/13.7	139.7/14.0	0.34
Mean/SD DBP (mmHg)	81.9/7.8	79.6/8.7	0.07	78.8/8.1	78.9/8.2	0.94
BP > 5 years prior to the event						
No. of patients	54	227		88	397	
Mean/SD SBP (mmHg)	129.1/14.1	126.0/12.8	0.12	141.7/14.3	138.5/14.2	0.59
Mean/SD DBP (mmHg)	79.9/9.0	77.7/8.1	0.08	80.7/7.8	80.3/7.1	0.59

BP=blood pressure, SBP=systolic blood pressure, DBP=diastolic blood pressure.

Table e-5. Premorbid maximum blood pressure, blood pressure variability and frequency of high blood pressure readings according to different target levels in patients with lacunar vs. non-lacunar events stratified by age using all 15 year blood pressure readings.

	Blood pressure taken up to 15 years prior to the index event		
	lacunar	non-lacunar	p
<65 years	(n=70)	(n=311)	
Systolic blood pressure (mmHg)			
Maximum (mean/SD)	166.2/28.4	160.1/25.6	0.08
CV (mean/SD %)	10.1/3.5	10.1/3.8	0.97
≥50% over 140mmHg (n/%)	32 (45.7)	101 (32.5)	0.04
≥50% over 160mmHg (n/%)	9 (12.9)	11 (3.5)	0.002
≥50% over 180mmHg (n/%)	2 (2.9)	3 (1.0)	0.21
Diastolic blood pressure (mmHg)			
Maximum (mean/SD)	100.0/13.4	96.2/12.1	0.02
CV (mean/SD %)	10.5/3.6	10.5/3.6	1.00
≥50% over 90mmHg (n/%)	14 (20.0)	36 (11.6)	0.06
≥50% over 100mmHg (n/%)	4 (5.7)	5 (1.6)	0.04
≥50% over 110mmHg (n/%)	1 (1.4)	0 (0)	0.04
≥65 years	(n=193)	(n=1266)	
Systolic blood pressure (mmHg)			
Maximum (mean/SD)	176.4/24.1	179.3/24.8	0.13
CV (mean/SD %)	10.3/3.3	11.0/3.2	0.002
≥50% over 140mmHg (n/%)	119 (61.7)	745 (58.8)	0.46
≥50% over 160mmHg (n/%)	19 (9.8)	145 (11.5)	0.51
≥50% over 180mmHg (n/%)	0 (0)	11 (0.9)	0.19
Diastolic blood pressure (mmHg)			
Maximum (mean/SD)	97.9/11.7	98.5/11.7	0.53
CV (mean/SD %)	10.7/3.4	11.1/3.3	0.06
≥50% over 90mmHg (n/%)	11 (5.7)	63 (5.0)	0.67
≥50% over 100mmHg (n/%)	1 (0.5)	4 (0.3)	0.65
≥50% over 110mmHg (n/%)	0 (0)	0 (0)	-

CV=coefficient of variation.

Analysis limited to patients with at least 4 BP readings prior to the event.

Table e-6. Premorbid maximum blood pressure, blood pressure variability and frequency of high blood pressure readings according to different target levels measured within 5 years prior to the event in patients with lacunar vs. non-lacunar stratified by age and use of premorbid antihypertensive agents.

	<65 years			≥65 years		
	lacunar	non-lacunar	p	lacunar	non-lacunar	p
On antihypertensive agents	(n=30)	(n=119)		(n=110)	(n=858)	
Systolic blood pressure (mmHg)						
Max (mean/SD)	179.9/27.3	165.8/22.8	0.004	177.8/21.8	175.1/23.2	0.24
CV (mean/SD %)	9.8/3.2	9.9/3.5	0.89	10.4/3.4	10.6/3.6	0.59
≥50% over 140mmHg (n/%)	21 (70.0)	53 (44.5)	0.01	73 (66.4)	500 (58.3)	0.10
≥50% over 160mmHg (n/%)	8 (26.7)	11 (9.2)	0.01	17 (15.5)	121 (14.1)	0.70
≥50% over 180mmHg (n/%)	2 (6.7)	2 (1.7)	0.13	2 (1.8)	14 (1.6)	0.89
Diastolic blood pressure (mmHg)						
Max (mean/SD)	106.2/13.3	97.2/11.2	0.0002	96.8/12.0	93.6/11.0	0.01
CV (mean/SD %)	10.2/2.7	10.2/3.5	0.98	10.5/3.4	10.7/3.4	0.45
≥50% over 90mmHg (n/%)	9 (30.0)	18 (15.1)	0.06	11 (10.0)	34 (4.0)	0.01
≥50% over 100mmHg (n/%)	4 (13.3)	3 (2.5)	0.01	1 (0.9)	2 (0.2)	0.23
≥50% over 110mmHg (n/%)	1 (3.3)	0 (0)	0.046	0 (0)	1 (0.1)	0.72
Not on antihypertensive agents	(n=16)	(n=107)		(n=54)	(n=265)	
Systolic blood pressure (mmHg)						
Max (mean/SD)	162.1/21.7	150.6/21.1	0.03	164.1/18.2	160.6/20.3	0.24
CV (mean/SD %)	9.6/4.2	8.8/5.0	0.54	9.3/3.9	9.2/3.8	0.98
≥50% over 140mmHg (n/%)	9 (56.3)	30 (28.0)	0.02	35 (64.8)	115 (43.4)	0.004
≥50% over 160mmHg (n/%)	2 (12.5)	1 (0.9)	0.005	6 (11.1)	20 (7.5)	0.38
≥50% over 180mmHg (n/%)	0 (0)	0 (0)	-	1 (1.9)	2 (0.8)	0.45
Diastolic blood pressure (mmHg)						
Max (mean/SD)	95.1/8.6	90.8/10.2	0.12	90.4/8.7	89.3/10.4	0.48
CV (mean/SD %)	9.2/4.1	8.6/3.4	0.54	9.7/4.2	9.7/3.9	0.97
≥50% over 90mmHg (n/%)	1 (6.3)	16 (15.0)	0.35	4 (7.4)	15 (5.7)	0.62
≥50% over 100mmHg (n/%)	1 (6.3)	0 (0)	0.009	0 (0)	3 (1.1)	0.43
≥50% over 110mmHg (n/%)	0 (0)	0 (0)	-	0 (0)	0 (0)	-

CV=coefficient of variation.

Analysis limited to patients with at least 4 BP readings during the 5 years prior to the event.

Table e-7. Premorbid maximum blood pressure, blood pressure variability and frequency of high blood pressure readings according to different target levels in patients with lacunar vs. non-lacunar stratified by age excluding patients with transient ischaemic attack.

	<65 years			≥65 years		
	lacunar (n=31)	non-lacunar (n=120)	p	lacunar (n=114)	non-lacunar (n=671)	p
Systolic blood pressure ≤ 5 years prior to the event (mmHg)						
Max (mean/SD)	177.0/30.0	161.8/23.3	0.01	173.4/21.5	173.4/24.1	0.99
CV (mean/SD %)	9.6/3.8	9.7/3.7	0.98	9.9/3.6	10.5/3.8	0.18
≥50% over 140mmHg (n/%)	22 (71.0)	50 (41.7)	0.004	76 (66.7)	395 (58.9)	0.12
≥50% over 160mmHg (n/%)	9 (29.0)	9 (7.5)	0.001	18 (15.8)	103 (15.4)	0.90
≥50% over 180mmHg (n/%)	2 (6.5)	2 (1.7)	0.14	2 (1.8)	11 (1.6)	0.93
Diastolic blood pressure ≤ 5 years prior to the event (mmHg)						
Max (mean/SD)	104.4/14.0	95.2/11.5	0.0002	94.8/10.8	93.3/11.5	0.18
CV (mean/SD %)	10.3/3.3	9.8/3.5	0.54	10.0/3.7	10.6/3.6	0.06
≥50% over 90mmHg (n/%)	8 (25.8)	22 (18.3)	0.35	8 (7.0)	36 (5.4)	0.48
≥50% over 100mmHg (n/%)	5 (16.1)	3 (2.5)	0.003	0 (0)	3 (0.4)	0.47
≥50% over 110mmHg (n/%)	1 (3.2)	0 (0)	0.05	0 (0)	0 (0)	-

CV=coefficient of variation.

Analysis limited to patients with at least 4 BP readings during the 5 years prior to the event.

Table e-8. Premorbid maximum blood pressure, blood pressure variability and frequency of high blood pressure readings according to different target levels in patients with lacunar vs. non-lacunar stratified by age in patients with first-ever-in-a-life-time incident events only.

	<65 years			≥65 years		
	lacunar (n=39)	non-lacunar (n=208)	p	lacunar (n=137)	non-lacunar (n=941)	p
Systolic blood pressure ≤5 years prior to the event (mmHg)						
Max (mean/SD)	172.1/26.5	157.7/22.3	0.0004	173.5/22.1	170.8/23.1	0.19
CV (mean/SD %)	9.5/3.5	9.2/4.3	0.69	10.0/3.6	10.2/3.7	0.55
≥50% over 140mmHg (n/%)	26 (66.7)	75 (36.1)	0.0004	96 (70.1)	502 (53.3)	0.0002
≥50% over 160mmHg (n/%)	8 (20.5)	8 (3.8)	0.0001	19 (13.9)	115 (12.2)	0.59
≥50% over 180mmHg (n/%)	2 (5.1)	1 (0.5)	0.02	3 (2.2)	12 (1.3)	0.39
Diastolic blood pressure ≤5 years prior to the event (mmHg)						
Max (mean/SD)	102.0/13.7	94.4/11.3	0.0002	94.7/11.6	92.2/10.9	0.02
CV (mean/SD %)	9.7/3.5	9.3/3.5	0.53	10.2/3.8	10.4/3.6	0.38
≥50% over 90mmHg (n/%)	10 (25.6)	33 (15.9)	0.14	11 (8.0)	41 (4.4)	0.06
≥50% over 100mmHg (n/%)	5 (12.8)	3 (1.4)	0.0002	0 (0)	5 (0.5)	0.39
≥50% over 110mmHg (n/%)	1 (2.6)	0 (0)	0.02	0 (0)	1 (0.1)	0.70

CV=coefficient of variation.

Analysis limited to patients with at least 4 BP readings during the 5 years prior to the event.