

## Supplementary Online Content

Ovbiagele B, Diener H-C, Yusuf S; for the PROFESS Investigators. Level of systolic blood pressure within the normal range and risk of recurrent stroke. *JAMA*. 2011;306(19):2137-2144.

**eFigure 1.** Percentage of recurrent stroke by mean in-trial systolic blood pressure group among patients with a recent ischemic stroke

**eFigure 2.** Percentage of myocardial infarctions (MIs) by mean in-trial systolic blood pressure group among patients with a recent ischemic stroke

**eTable 1.** Adjusted hazard ratios of covariates and factors included in the adjusted risk models of clinical outcomes by mean in-trial systolic blood pressure category

**eTable 2.** Adjusted risk of clinical outcomes by mean in-trial systolic blood pressure category in various stepwise models that include baseline SBP, follow-up SBP, and SBP change

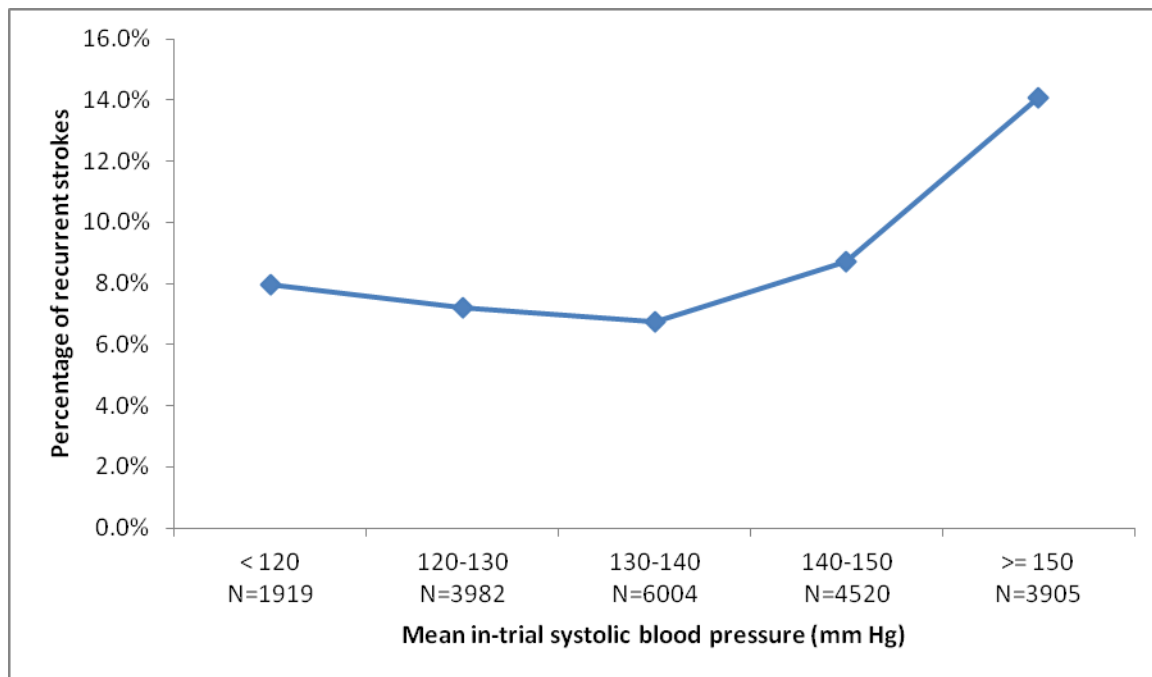
**eTable 3.** Unadjusted clinical outcomes by mean in-trial systolic blood pressure category in patients with known diabetes at baseline (n=5743)

**eTable 4.** Adjusted risk of clinical outcomes by mean in-trial systolic blood pressure category in patients with known diabetes at baseline (n=5743)

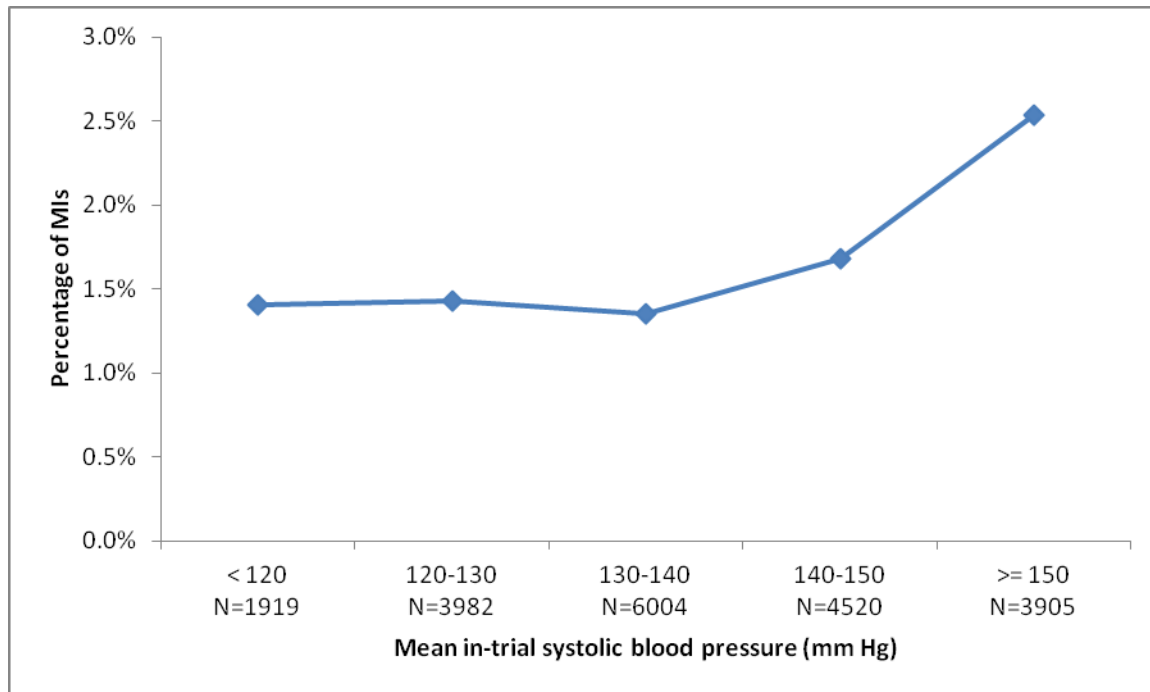
**eTable 5.** Incidence of vascular events by time and mean in-trial systolic blood pressure category among recent ischemic stroke patients

This supplementary material has been provided by the authors to give readers additional information about their work.

**eFigure 1.** Percentage of recurrent stroke by mean in-trial systolic blood pressure group among patients with a recent ischemic stroke



**eFigure 2.** Percentage of myocardial infarctions (MIs) by mean in-trial systolic blood pressure group among patients with a recent ischemic stroke



**eTable 1.** Adjusted hazard ratios of covariates and factors included in the adjusted risk models of clinical outcomes by mean in-trial systolic blood pressure category

<b>Outcome(s)</b>	<b>Covariate/Factor</b>	<b>Hazard ratio (95% CI)</b>	<b>p-value</b>
<i>Stroke</i>			
	Age	1.020 (1.014–1.025)	<.0001
	Female Sex	0.871 (0.787–0.964)	0.0076
	Previous stroke	1.836 (1.655–2.037)	<.0001
	Congestive heart failure	10100 (0.848–1.428)	0.4730
	Diabetes	1.360 (1.231–1.503)	<.0001
	Myocardial infarction	1.277 (1.085–1.503)	0.0033
	Hypertension	1.200 (1.063–1.355)	0.0032
	Current smoking status	1.263 (1.125–1.419)	<.0001
	Baseline NIHSS	1.017 (1.001–1.032)	0.0374
	Qualifying stroke due to Small vessel disease	0.815 (0.742–0.896)	<.0001
	Previous TIA	1.296 (1.120–1.501)	0.0005
	Asian ethnicity	1.132 (1.014–1.264)	0.0272
<i>Stroke, MI, or vascular death</i>			
	Age	1.029 (1.024–1.034)	<.0001
	Female Sex	0.875 (0.804–0.951)	0.0017
	Previous stroke	1.631 (1.495–1.780)	<.0001
	Congestive heart failure	1.140 (0.927–1.402)	0.2145
	Diabetes	1.548 (1.426–1.682)	<.0001
	Myocardial infarction	1.403 (1.216–1.617)	<.0001
	Hyperlipidemia	0.916 (0.846–0.991)	0.0296
	Coronary artery disease	1.183 (1.059–1.321)	0.0028
	Current smoking status	1.290 (1.171–1.422)	<.0001
	Antihypertensive drug at baseline	1.111 (1.016–1.215)	0.0208
	Baseline NIHSS	1.038 (1.026–1.051)	<.0001
	Qualifying stroke due to Small vessel disease	0.840 (0.777–0.908)	<.0001
	Body mass index	0.991 (0.983–1.000)	0.0491
	Black race	0.802 (0.648–0.992)	0.0420
	White race	0.780 (0.696–0.875)	0.0104
	Previous TIA	1.179 (1.039–1.336)	<.0001
	Asian ethnicity	0.766 (0.674–0.870)	0.0005

**eTable 2.** Adjusted risk of clinical outcomes by mean in-trial systolic blood pressure category in various stepwise models that include baseline SBP, follow-up SBP, and SBP change

Variable included in Stepwise Model	Variable(s)	Mean In-trial Systolic Blood Pressure (mmHg)				
		130 to < 140	< 120	120 to < 130	140 to < 150	≥ 150
	Number of Subjects	1919	3982	6004	4520	3905
Mean Baseline SBP (mmHg)						
	Stroke, HR (95% CI) <sup>[1]</sup>	Reference	1.288 (1.064–1.560)	1.099 (0.944–1.280)	1.233 (1.071–1.418)	2.086 (1.822–2.387)
	Stroke, MI, or Vascular Death HR (95% CI) <sup>[2]</sup>	Reference	1.302 (1.115–1.519)	1.155 (1.021–1.307)	1.242 (1.107–1.393)	1.951 (1.744–2.184)
Mean Follow-up SBP (mmHg)						
	Stroke, HR (95% CI) <sup>[1]</sup>	Reference	1.599 (1.300–1.968)	1.212 (1.036–1.417)	1.117 (0.966–1.291)	1.605 (1.351–1.906)
	Stroke, MI, or Vascular Death HR (95% CI) <sup>[2]</sup>	Reference	1.588 (1.329–1.899)	1.265 (1.111–1.440)	1.135 (1.005–1.282)	1.540 (1.313–1.806)
Mean Change in SBP (mmHg)						
	Stroke, HR (95% CI) <sup>[1]</sup>	Reference	1.440 (1.184–1.752)	1.145 (0.976–1.344)	1.184 (1.020–1.374)	1.806 (1.559–2.093)
	Stroke, MI, or Vascular Death HR (95% CI) <sup>[2]</sup>	Reference	1.403 (1.198–1.644)	1.192 (1.048–1.355)	1.210 (1.073–1.366)	1.721 (1.525–1.942)

SBP=systolic blood pressure; HR=hazard ratio; CI=confidence interval; MI=myocardial infarction

[1] Also adjusted for Age, Sex, Previous stroke, Congestive heart failure, Diabetes, Myocardial infarction, Hypertension, Current smoking status, Baseline NIHSS, Qualifying stroke due to small vessel disease, Previous TIA, Asian ethnicity

[2] Also adjusted for Age, Sex, Previous stroke, Congestive heart failure, Diabetes, Myocardial infarction, Hyperlipidemia, Coronary artery disease, Current smoking status, Antihypertensive med at baseline, Baseline NIHSS, Qualifying stroke due to small vessel disease, BMI, Black race, White race, Previous TIA, Asian ethnicity

**eTable 3.** Unadjusted clinical outcomes by mean in-trial systolic blood pressure category in patients with known diabetes at baseline (n=5743)

Event(s)	Mean In-trial Systolic Blood Pressure (mmHg)				
	< 120	120 to < 130	130 to < 140	140 to < 150	≥ 150
Number of Subjects	429	977	1548	1418	1371
Stroke, n (Percent rate; 95% CI)	34 (7.9; 5.4-10.5)	94 (9.6; 7.8-11.5)	123 (7.9; 6.6-9.3)	154 (10.9; 9.2- 12.5)	227 (16.6; 14.6- 18.5)
Fatal Stroke, n (Percent rate; 95% CI)	0 (0; 0.0-0.0)	7 (0.7; 0.2-1.2)	10 (0.6; 0.2-1.0)	16 (1.1; 0.6-1.7)	15 (1.1; 0.5-1.6)
Stroke, MI, or vascular death, n (Percent rate; 95% CI)	59 (13.8; 10.5- 17.0)	164 (16.8; 14.4- 19.1)	192 (12.4; 10.8- 14.0)	245 (17.3; 15.3- 19.2)	333 (24.3; 22.0- 26.6)

\* First occurrence of non-fatal event. MI=myocardial infarction. Fatal stroke is defined as death of vascular cause occurring within 28 days of stroke.

**eTable 4.** Adjusted risk of clinical outcomes by mean in-trial systolic blood pressure category in patients with known diabetes at baseline (n=5743)

Event(s)	Mean In-trial Systolic Blood Pressure (mmHg)				
	130 to < 140	< 120	120 to < 130	140 to < 150	≥ 150
Number of Subjects	1548	429	977	1418	1371
Stroke, HR (95% CI) <sup>[1]</sup>	Reference	1.065 (0.727–1.560)	1.223 (0.934–1.601)	1.369 (1.079–1.736)	2.262 (1.812–2.825)
Stroke, MI, or Vascular Death HR (95% CI) <sup>[2]</sup>	Reference	1.142 (0.850–1.534)	1.365 (1.106–1.684)	1.400 (1.157–1.693)	2.104 (1.758–2.519)
Fatal Stroke HR (95% CI) <sup>[3]</sup>	Reference	0.000 (0.000–0.000)	1.019 (0.425–2.944)	1.838 (0.832–4.063)	1.859 (0.833–4.149)

[1] Adjusted for Age, Sex, Previous stroke, Congestive heart failure, Diabetes, Myocardial infarction, Hypertension, Current smoking status, Baseline NIHSS, Qualifying stroke due to small vessel disease, Previous TIA, Asian ethnicity

[2] Adjusted for Age, Sex, Previous stroke, Congestive heart failure, Diabetes, Myocardial infarction, Hyperlipidemia, Coronary artery disease, Current smoking status, Antihypertensive med at baseline, Baseline NIHSS, Qualifying stroke due to small vessel disease, BMI, Black race, White race, Previous TIA, Asian ethnicity

[3] Adjusted for Age, Sex, Previous stroke, Congestive heart failure, Diabetes, Myocardial infarction, ARB Treatment, Antiplatelet at baseline, Baseline NIHSS, BMI, Previous TIA [1] Adjusted for Age, Sex, Previous stroke, Congestive heart failure, Myocardial infarction, Hyperlipidemia, Current smoking status, Baseline NIHSS, Qualifying stroke due to small vessel disease

**eTable 5.** Incidence of vascular events by time and mean in-trial systolic blood pressure category among recent ischemic stroke patients

Event(s)	Time to Event(s)	Mean In-trial Systolic Blood Pressure (mmHg)				
		< 120 (n=1919)	120 to < 130 (n=3982)	130 to < 140 (n=6004)	140 to < 150 (n=4520)	≥ 150 (n=3905)
		N (%)	N (%)	N (%)	N (%)	N (%)
<i>Stroke</i>						
	0 to 30 days	5 (0.26)	23 (0.58)	39 (0.65)	43 (0.95)	93 (2.38)
	>30 to 90 days	33 (1.72)	37 (0.93)	44 (0.73)	47 (1.04)	78 (2.00)
	>90 to 180 days	26 (1.35)	39 (0.98)	53 (0.88)	46 (1.02)	60 (1.54)
	0 to 180 days	64 (3.33)	99 (2.49)	136 (2.26)	136 (3.01)	231 (5.92)
	>180 days	89 (4.64)	188 (4.72)	270 (4.50)	258 (5.71)	319 (8.17)
<i>No stroke</i>	---	1766 (92.0)	3695 (92.8)	5598 (93.2)	4126 (91.3)	3355 (85.9)
<i>Stroke, MI or VD</i>						
	0 to 30 days	8 (0.42)	31 (0.78)	49 (0.82)	50 (1.11)	119 (3.05)
	>30 to 90 days	42 (2.19)	48 (1.21)	50 (0.83)	56 (1.24)	90 (2.30)
	>90 to 180 days	35 (1.82)	59 (1.48)	77 (1.28)	61 (1.35)	78 (2.00)
	0 to 180 days	85 (4.43)	138 (3.47)	176 (2.93)	167 (3.7)	287 (7.35)
	>180 days	154 (8.03)	314 (7.89)	436 (7.26)	424 (9.38)	485 (12.4)
<i>No stroke, MI, or VD</i>	---	1680 (87.6)	3530 (88.7)	5392 (89.8)	3929 (86.9)	3133 (80.2)

MI=myocardial infarction; VD=vascular death