Supplementary Online Content

Ebinger M, Winter B, Wendt M, et al. Effect of the use of ambulance-based thrombolysis on time to thrombolysis in acute ischemic stroke: a randomized clinical trial. JAMA. doi:10.1001/jama.2014.2850.

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

eTable 1: Primary end-point analyses stratified according to age and National Institutes of Health Stroke Scale (NIHSS)

	Patients with Stroke Emergency Mobile (STEMO)deployment	difference in means compared to control weeks (95%CI)	p-value (tested against control weeks)	Patients during Stroke Emergency Mobile (STEMO)weeks	difference in means compared to control weeks (95%CI)	p-value (tested against control weeks)	Patients during Control weeks
Minutes alarm-to-treatment, mean (mean, median, IQR)	51.8 (48, 39-56) n=192	24.5 (20.3-28.6)	<0.001	61.4 (55, 44-75) n=299	14.9 (10.9-18.9)	<0.001	76.3 (72, 62-85) n=218
		mean difference (98.73%CI)			mean difference (98.73%CI)		
For age < 72 years and NIHSS<10 (mean, median, IQR)	47.6 (43, 38-54) n=38	28.3 (18.7-37.9)	<0.001	58.0 (54, 40-71) n=59	17.9 (7.7-28.1)	<0.001	75.9 (73, 65-81) n=54
For age < 72 years and NIHSS≥10 (mean, median, IQR)	58.6 (49, 41-54) n=24	6.3 (-11.9-24.6)	0.011	66.3 (54, 47-82) n=37	-1.4 (-16.0-13.3)	0.593	65.0 (61, 52-77) n=21
For age ≥ 72 years and NIHSS<10 (mean, median, IQR)	51.6 (48, 41-55) n=62	25.7 (16.7-34.7)	<0.001	62.1 (56, 47-77) n=108	15.2 (6.9-23.5)	<0.001	77.3 (72, 64-87) n=77
For age ≥ 72 years and NIHSS ≥10 (mean, median, IQR)	51.9 (48, 39-59) n=68	25.8 (16.3-35.2)	<0.001	59.9 (56, 43-73) n=94	17.8 (8.4-27.2)	<0.001	77.7 (72, 62-89) n=61

The primary endpoint is given for all patients (first row) and in stratified analyses. The cut-off values for dichotomization were prespecified as 72 years for age and 10 points for the National Institutes of Health Stroke Scale (NIHSS).[13] Patients initially presenting after complete symptom remission or without disabling symptoms but thrombolysed after symptom recurrence or progression were not included in calculations of alarm-to-treatment times (n=12). There were 1 missing time of tPA treatment start and 7 missing NIHSS values. The level of significance was set at 0.0127 for each of the four tests. For each test, 114 patients were required to yield a 90% power to detect a 20 minute difference. P-values refer to nonparametric Mann-Whitney-U-Tests.

eTable 2: Demographics of patients who received tissue Plasminogen Activator with and without modified Rankin Scale (mRS) assessment after 3 months

Ischemic stroke patients treated with thrombolysis	Entire cohort			Patients during STEMO weeks			Patients during control weeks		
	Patients without 3-month mRS available (n=305)	Patients with 3-month mRS available (n=225)	p-value	Patients without 3-month mRS available (n=94)	Patients with 3-month mRS available (n=216)	p-value	Patients without 3-month mRS available (n=131)	Patients with 3-month mRS available (n=89)	p-value
Demographics									
Age,mean (SD)	73.2 (13.3)	77.2 (12.2)	<0.01	74.3 (12.8)	76.6 (12.6)	0.17	72.4 (13.7)	78.6 (11.3)	<0.03
Gender, male, n(%)	115 (51.1)	146 (47.9)	0.46	51 (54.3)	102 (47.2)	0.26	64 (48.9)	44 (49.4)	0.93
Comorbidities									
Atrial Fibrillation,n (%)	71 (31.6)	115 (37.7)	0.14	32 (34.0)	81 (37.5)	0.56	39 (29.8)	34 (38.2)	0.19
Diabetes mellitus,n(%)	57 (25.3)	80 (26.2)	0.82	28 (29.8)	55 (25.5)	0.43	29 (22.1)	25 (28.1)	0.31)
Stroke Severity									
National Institutes of Health Stroke Scale score at treatment mean (median, IQR); 7 missing	8.6 (7, 4-13)	10.4 (8, 5-16)	0.02	8.4 (4-12)	10.6 (9, 5-17)	<0.01	8.7 (7, 4-12)	9.9 (7, 4-15)	0.33

eTable 3: Demographics of patients who received tissue Plasminogen Activator and with 3-months modified Rankin Scale available

Ischemic stroke patients treated with thrombolysis	Patients during STEMO weeks N=216 (70.0%)[a]	Patients during control weeks N=89 (40.5%)[a]	p-value
Demographics			
Age,mean (SD)	76.6 (12.6)	78.6 (11.3)	0.40
Gender, male, n(%)	102 (47.2)	44 (49.4)	0.73
Comorbidities			
Atrial Fibrillation, n (%)	81 (37.5)	34 (38.2)	0.91
Diabetes mellitus, n (%)	55 (25.5)	25 (28.1)	0.64
Stroke Severity			
National Institutes of Health Stroke Scale score at treatment mean (median, IQR); 1 missing	10.6 (9, 5-17)	9.9 (7, 4-15)	0.22

[a]Proportion (%) of all patients treated with thrombolysis in each group.

eTable 4: Functional outcome in patients who received tissue Plasminogen Activator after 3 months

Ischemic stroke patients treated with thrombolysis	Patients during STEMO weeks N=216 (70.0%)[a]	Patients during control weeks N=89 (40.5%)[a]	p-value
Modified Rankin Scale at 3 months			
0, n (%)	45 (20.8)	22 (24.7)	[b]
1, n (%)	28 (13.0)	16 (18.0)	[b]
2, n (%)	15 (6.9)	7 (7.9)	[b]
3, n (%)	39 (18.1)	9 (10.1)	[b]
4, n (%)	29 (13.4)	5 (5.6)	[b]
5, n (%)	12 (5.6)	3 (3.4)	[b]
6, n (%)	48 (22.2)	27 (30.3)	[b]

[a]Proportion (%) of all patients treated with thrombolysis in each group.
[b]P-values were not calculated because of the high number of missing modified Rankin Scale scores.