

Table e-1. Analysis of the dose response of Aphasia on outcomes

	Odds Ratio	95%Confidence Interval	p-value
Unadjusted Aphasia- Inpatient complications			
0	ref	ref	ref
1	1.918	1.42-2.59	<0.0001
2	3.528	2.57-4.84	<0.0001
3	6.074	4.11-8.99	<0.0001
Unadjusted Right Hemiparesis (Arm) - Inpatient complications			
0	ref	ref	ref
1	1.03	0.63-1.68	0.9146
2	3.71	2.16-6.38	<.0001
3	11.0	6.32-19.15	<.0001
4	3.51	2.09-5.90	<.0001
Unadjusted Right Hemiparesis (Leg) - Inpatient complications			
0	ref	ref	ref
1	1.41	0.86-2.34	0.1753
2	5.85	3.65-9.40	<.0001
3	7.13	4.62-11.01	<.0001
4	5.75	3.10-10.67	<.0001
Unadjusted Aphasia- mRS 3-6			
0	ref	ref	ref

1	2.49	1.96-3.16	<0.0001
2	6.98	4.95-9.83	<0.0001
3	51.9	19.12-141.3	<0.0001
Unadjusted Right Hemiparesis (Arm) – mRS 3-6			
0	ref	ref	ref
1	1.701	1.25-2.31	0.0007
2	5.673	3.27-9.84	<.0001
3	34.780	12.68-95.4	<.0001
4	14.931	7.44-29.9	<.0001
Unadjusted Right Hemiparesis (Leg) – mRS 3-6			
0	ref	ref	ref
1	1.69	1.23-2.34	0.0012
2	6.10	3.86-9.65	<.0001
3	13.62	7.99-23.21	<.0001
4	12.15	5.75-25.70	<.0001
Adjusted Aphasia- Inpatient complications*			
0	ref	ref	ref
1	1.458	1.06-1.99	0.0189
2	1.364	0.89-2.08	0.1483
3	1.252	0.69-2.26	0.4547
Adjusted Right Hemiparesis (Arm) - Inpatient complications			

0	ref	ref	ref
1	0.82	0.49-1.35	0.4321
2	1.44	0.78-2.66	0.2441
3	2.71	1.40-5.22	0.0030
4	0.49	0.23-1.02	0.0573
Adjusted Right Hemiparesis (Leg) - Inpatient complications			
0	ref	ref	ref
1	1.11	0.67-1.87	0.6681
2	2.73	1.60-4.67	0.0002
3	2.12	1.19-3.80	0.0108
4	0.97	0.42-2.28	0.9552
Adjusted Aphasia- mRS 3-6**			
0	ref	ref	ref
1	1.563	1.13-2.15	0.0065
2	0.854	0.51-1.44	0.5521
3	6.917	0.83-57.9	0.0745
Adjusted Right Hemiparesis (Arm) – mRS 3-6			
0	ref	ref	ref
1	1.07	0.71-1.61	0.7443
2	0.91	0.42-1.96	0.8101
3	1.44	0.45-4.58	0.5358
4	1.08	0.36-3.20	0.8926

Adjusted Right Hemiparesis (Leg) – mRS 3-6			
0	ref	ref	ref
1	0.88	0.58-1.35	0.5734
2	1.10	0.57-2.14	0.7634
3	1.21	0.52-2.79	0.6530
4	0.48	0.14-1.74	0.2689
Linear Regression for Length of Stay			
	Beta	Standard Error	p-value
Unadjusted Aphasia- Length of Stay			
0	ref	ref	ref
1	2.28	0.58	<0.0001
2	5.29	0.67	<0.0001
3	7.59	0.84	<0.0001
Unadjusted Right Hemiparesis (Arm)			
0	ref	ref	ref
1	0.02	0.76	0.9720
2	5.58	1.14	<.0001
3	9.72	1.05	<.0001
4	6.72	1.05	<.0001
Unadjusted Right Hemiparesis (Leg)			
0	ref	ref	ref
1	1.00	0.79	0.2059
2	6.89	0.94	<.0001
3	7.74	0.85	<.0001

4	6.75	1.24	<.0001
Adjusted Aphasia- Length of Stay**			
0	ref	ref	ref
1	1.09	0.63	0.0856
2	0.63	0.86	0.4665
3	0.10	1.22	0.9325
Adjusted Right Hemiparesis (Arm)			
0	ref	ref	ref
1	-1.04	0.88	0.2365
2	-0.32	1.34	0.8089
3	1.01	1.42	0.4757
4	-2.38	1.50	0.1133
Adjusted Right Hemiparesis (Leg)			
0	ref	ref	ref
1	-0.80	0.92	0.3850
2	-0.12	1.17	0.9140
3	-0.61	1.23	0.6163
4	-3.46	1.79	0.0532

*Adjusting for NIHSS on admission

**Adjusting for NIHSS on admission and inpatient complications