

Table e1: Comparison of language localization by high- $\gamma$  modulation (HGM) and electrical cortical stimulation (ECS) in patients with left hemisphere electrodes according to the lobe

Patient ID	Frontal				Temporal			
	ECS+, HGM+	ECS+, HGM-	ECS-, HGM+	ECS-, HGM-	ECS+, HGM+	ECS+, HGM-	ECS-, HGM+	ECS-, HGM-
L1	2	4	5	18	0	0	6	17
L2	4	4	1	14	.	.	.	.
L3	11	10	0	2	7	14	0	11
L4	2	2	3	8	1	5	1	2
L5	.	.	.	.	1	2	2	8
L6	5	2	7	23	0	0	3	10
L7	0	0	3	0	1	0	3	8
L8	.	.	.	.	1	1	5	12
L9	5	1	3	7	1	1	1	4
L10	6	1	0	0	0	0	1	12
N=10	35	24	22	72	12	23	22	84
Summary Statistics (95% confidence limits)								
Sensitivity	0.59 (0.49, 0.69)				0.34 (0.21, 0.49)			
Specificity	0.77 (0.70, 0.83)				0.79 (0.75, 0.84)			
Accuracy	0.70 (0.62, 0.77)				0.68 (0.62, 0.75)			
MH test	p<0.001				p = 0.106			

(Note: Patients L5 and L8 did not have any frontal lobe electrodes, whereas L2 did not have temporal lobe coverage, both naming and oral motor sites regarded as ECS+)