

eTable 1: EEG recordings of all ab+ patients

EEG findings	Type of AE			Statistical Analysis (p-value)			
	NMDAR	LGI1	GAD	NMDAR/LGI1/GAD*	NMDAR/LGI1 [#]	NMDAR/GAD [#]	LGI1/GAD [#]
EEG available	164/190 (86%)	81/89 (91 %)	32/41 (78%)	0.1	-	-	-
EEG abnormal	120 (73%)	55 (68%)	24 (75%)	0.62	0.45	1.0	0.504
- Focal slowing	68 (42%)	38 (47%)	19 (59%)	0.17	0.49	0.08	0.297
- Generalized slowing	79 (48%)	17 (21 %)	5 (16%)	< 0.001	< 0.001 (OR 3.1)	< 0.001 (OR 5.1)	0.61
- Epileptiform discharges	37 (23%)	16 (20%)	12 (38%)	0.134	0.742	0.116	0.057
- Ictal patterns	17 (10%)	15 (19%)	6 (19%)	0.132	0.105	0.225	1.0

AE: autoimmune encephalitis, OR: odds ratios; *Freeman Halton Test, [#]Fisher Exact Test

eTable 2: EEG recordings for ab+ patient subgroups with and without seizures.

EEG findings	NMDAR (n=190)			Lgl1 (n=89)			GAD (n=41)		
	SZ+ (113/190)	SZ- (77/190)	Significances [#]	SZ+ (69/89)	SZ- (20/89)	Significances [#]	SZ+ (26/41)	SZ- (15/41)	Significances [#]
EEG available	104/113 (92%)	60/77 (78%)	-	63/69 (91%)	18/20 (90)	-	25/26 (96%)	7/15 (47%)	-
EEG abnormal	85/104 (82%)	35/60 (58%)	0.002	42/63 (67%)	13/18 (72%)	0.779	21/25 (84%)	3/7 (43%)	0.047
- Focal slowing	47/104 (45%)	21/60 (35%)	0.250	28/63 (44%)	10/18 (56%)	0.434	17/25 (68%)	2/7 (29%)	0.091
- Generalized slowing	54/104 (52%)	25/60 (42%)	0.256	11/63 (18%)	6/18 (33%)	0.190	5/25 (20%)	0/7 (0%)	0.560
- Epileptiform discharges	28/104 (27%)	9/60 (15%)	0.085	12/63 (19%)	4/18 (22%)	0.746	12/25 (48%)	0/7 (0%)	0.029
- Ictal patterns	13/104 (13%)	4/60 (7%)	0.295	15/63 (24%)	0/18 (0%)	0.018	6/25 (24%)	0/7 (0%)	0.296

SZ+: patients with seizures, SZ-: patients without seizures, OR: odds ratios; *Freeman Halton Test, [#]Fisher Exact Test