

Table S2 – Clinical information for patients with seizures captured during RES and RES-II.

Pt #	# and types of seizures	MRI	PET Hypo-metabolism	Ictal SPECT hyper-perfusion	Scalp EEG onset ^a	Intracranial EEG onset ^a	Overall localization
1	4 Partial 1 GTC	Normal	LT	LT	Bi T	R>L Mesial T	Bi T
2	4 partial	LT atrophy and polymicrogyria	Normal	LF	L>R H	Mostly R inf F-T, but some Bi or L T	Unlocalized
3	4 Partial	R HC atrophy & LT gray matter abnormal	LT	LT & RO	LT and RT	N/A	RO and LT
4	1 Partial 1 GTC	Encephalomalacia, R T-P-O	R P-O-T	N/A	RH	R lat F, cingulate, medial O	RH
5	2 Partial	Previous LT resection	R lat T	R T	R>L T	R mesial T, and R T-O	RT, O
6	1 Partial	Previous LT resection	Normal	N/A	LT and RT	L HC, L fusiform gyrus	L HC, L fusiform gyrus
7	1 GTC	Normal	N/A	N/A	LF	N/A	LF
8	1 Partial	Normal	N/A	N/A	LT	N/A	LT
9	1 Partial	Increased T2 signal in bilateral HC and R P cortex	N/A	N/A	BiT	N/A	R P-T
10	1 GTC	Normal	LT	N/A	LH	LF	LF
11	2 Partial	R HC atrophy, RF, P infarct	RT, and in area of R F, P infarct	N/A	RT	N/A	RT
12	1 GTC	Normal	N/A	N/A	RT	N/A	RT
13	12 Partial	R sup F gyrus thickening consistent with cortical dysplasia	RF	N/A	RF	R med F	RF
14	2 Partial	L HC enlarged and increased T2 signal	LT	N/A	LT	N/A	LT
15	6 partial	R precentral gyrus increased T2	Normal	N/A	No EEG changes	RF (primary motor cortex)	RF (primary motor cortex)
16	2 Partial	LF encephalomalacia and increased T2 signal consistent with previous oligodendroglioma resection	LF signal loss and mild RF hypermetabolism	N/A	No EEG changes	N/A	Unlocalized
17	7 Partial	LT heterotopia	N/A	N/A	Bi F	N/A	Unlocalized
18	5 partial	Normal	mild RT	N/A	LH	N/A	LH
19	2 Partial	Previous R F resection	Normal	N/A	Multifocal	N/A	Unlocalized
20	1 partial 2 GTC	Bi R>L HC atrophy	Normal	N/A	R T-P	N/A	RH
21	4 partial	Normal	Bi T	N/A	L H	Multifocal	Unlocalized
22	1 Partial	Bi cingulate and L insular cortex increased T2	N/A	N/A	BiF	N/A	Unlocalized
23	5 Partial	R HC atrophy, R O indistinct sulci	R T	N/A	RT	R H diffuse onset	RH
24	1 Partial	L MCA encephalomalacia (s/p peri-natal MCA stroke)	L basal ganglia, LT	LF precentral gyrus	No EEG changes	N/A	LH

25	1 Partial	R HC atrophy and increased T2	Normal	N/A	R C, T	N/A	RH
26	2 Partial	R insula increased FLAIR signal	RT	BiF	BiF, non-lateralized	N/A	Unlocalized
27	1 Partial	Normal	N/A	LT	RT	N/A	Unlocalized
28	1 Partial	Normal	LF	N/A	L F, T	L precentral gyrus	L precentral gyrus
29	1 Partial	Normal	Normal	R T, O	Bi F (R>L)	N/A	Unlocalized
30	1 Partial	Bi T increased T2	N/A	N/A	Bi T (independently)	N/A	Bi T
31	1 Partial	Normal	Bi T	N/A	Bi T	N/A	Bi T
32	2 Partial	R HC atrophy	RT	N/A	RT	N/A	RT
33	4 Partial 1 GTC	Normal	RT	Bilateral multiple regions	R F, T	N/A	RH
34	12 Partial	L HC atrophy	LT	N/A	LT	N/A	LT
35	7 Partial	R MCA and PCA encephalomalacia	N/A	N/A	Bi F	N/A	Unlocalized

Patients #1-24 tested with RES, patients #25-35 tested with RES-II. ^aBased on overall EEG of all seizures, not just seizure occurring during RES. Abbreviations: HC=hippocampus, R=right, L=left, O=occipital, T=temporal, P=parietal, F=frontal, Sup=superior, Lat=lateral, Inf=inferior, Bi=bilateral, H=hemisphere, GTC=secondarily generalized tonic-clonic, sz=seizure, Pt=patient.