

**Table S1 Clinical information for patients with seizures captured during RES**

Pt	Total # of szs	Sz type (# of szs)	MRI	PET Hypometabolism	Ictal SPECT Hyperperfusion	Scalp EEG onset <sup>a</sup>	Intracranial EEG Onset <sup>a</sup>	Overall Localization
1	5	Aura (2) Partial (2) GTC (1)	Normal	L T	L T	Bi T	R > L mesial T	Bi T
2	4	Partial (4)	LT atrophy and polymicrogyria	Normal	L F	L > R H	Mostly R inf F-T, but some Bi or L T	Unlocalized
3	4	Aura (2), Partial (2)	R HCA & L T gray matter abnormal	L T	LT & RO	L T & R T	N/A	RO and LT
4	2	Partial (1), GTC (1)	Encephalomalacia, R T-P-O	R P-O-T	N/A	R H	R lat F, cingulate, medial O	R H <sup>b</sup>
5	2	Partial (2)	Previous L T resection	R lat T	R T	R > L T	R mes T, and R T-O	R T, O
6	1	Partial(1)	Previous L T resection	Normal	N/A	L T	L HC, L fusiform gyrus	L HC, L fusiform gyrus
7	1	GTC (1)	Normal	N/A	N/A	L F	N/A	LF
8	1	Partial (1)	Normal	N/A	N/A	L T	N/A	L T
9	1	Partial (1)	Increased T2 signal in bilateral HC and R P cortex	N/A	N/A	Bi T	N/A	R P-T
10	1	GTC (1)	Normal	L T	N/A	L H	L F	LF <sup>c</sup>
11	2	Partial (2)	R HC atrophy, R F, P infarct	RT, and in area of R F, P infarct	N/A	R T	N/A	RT <sup>d</sup>
12	1	GTC (1)	Normal	N/A	N/A	R T	N/A	R T
13	12	Subclinical (2), Aura (4) Partial (6)	R sup F gyrus thickening consistent with cortical dysplasia	R F	N/A	R F	R med F	R F <sup>e</sup>
14	2	Partial (2)	L HC enlarged and increased T2 signal	L T	N/A	L T	N/A	L T
15	6	Partial (6)	R precentral gyrus increased T2	Normal	N/A	No EEG changes	R F (primary motor cortex)	R F (primary motor cortex)
16	2	Aura (2)	LF encephalomalacia and increased T2 signal consistent with previous oligodendrogioma resection	L F signal loss and mild R F hypermetabolism	N/A	No EEG changes	N/A	Unlocalized
17	7	Aura (1) , Partial (6)	L T heterotopia	N/A	N/A	Bi F	N/A	Unlocalized
18	5	Partial (5)	Normal	mild R T	N/A	L H	N/A	L H

<sup>a</sup>Based on overall EEG of all seizures, not just seizure occurring during RES. Abbreviations:

HCA=hippocampal atrophy, R=right, L=left, O=occipital, T=temporal, P=parietal, F=frontal, Sup=superior, Lat=lateral, Inf=inferior, Ant=anterior, Post=posterior, Bi=bilateral, H=hemisphere, sGTC=secondarily generalized tonic clonic sz=seizure, Pt=patient. <sup>b</sup> Had excision of right posterior temporo-parietal-occipital lobe; no seizures or auras at 6 month follow-up. <sup>c</sup>Had left frontal pole resection; breakthrough sz's at 7 month follow-up. <sup>d</sup> Had right antero-medial temporal lobe resection, no follow-up available. <sup>e</sup> Had right medial frontal lobe resection; no seizures or auras at 2 month follow-up.