Supplement 2

Data for Figure 4

4a)

		Rater responses							
		Solid flames	Irregular flames	BB-monotonous	NB-monotonous	Stripes	Low Power	Artifact	**Total no of responses**
Gold Standard	**Solid flames**	141	15	0	0	1	0	3	**160**
	Irregular flames	20	128	23	7	5	28	9	**220**
	BB-monotonous	0	24	145	24	0	14	2	**210**
	NB-monotonous	2	12	38	169	16	18	4	**259**
	Stripes	4	18	8	22	8	180	9	**249**
	Low Power	0	2	1	18	64	5	10	**100**
	Artifact	0	7	3	3	2	4	31	**50**

Data used to generate agreement matrix (Figure 4a in the main text) is shown. The "gold standard" or correct response for spectrogram patterns was determined by the most common response or responses (if multiple patterns were equally selected) for each spectrogram in the survey. The gold standard is shown in the first column in bold. The table shows the number of times each spectrogram pattern was chosen by the raters for the corresponding gold standard pattern. The final column shows the total number of responses for each gold standard pattern. Note there were 2 missing responses (one for NB-monotnous, and one for Stripes).

BB-monotonous: Broadband-monotonous; NB-monotonous: Narrowband-monotonous

4b)

		Seizure	LPD	GPD	LRDA	GRDA	Foc slow	Gen slow	BS	Gen Supp	Artifact	Other	Total no of responses
		Rater responses											
Gold Standard	**Seizure**	47	10	3	11	0	0	0	1	0	4	4	8(
	LPD	5	146	2	12	0	6	1	0	1	4	3	18(
	GPD	1	4	33	0	0	0	0	0	0	0	2	4(
	LRDA	5	1	0	17	3	2	1	0	0	0	1	3(
	GRDA	0	0	0	1	18	1	0	0	0	0	0	2(
	Foc slow	2	6	0	8	0	63	10	2	0	10	9	11(
	Gen Slow	2	1	1	3	22	16	179	5	27	5	9	27(
	BS	0	3	7	0	0	0	0	101	5	0	4	13(
	Gen supp	0	2	0	0	0	0	16	3	191	7	0	22(
	Artifact	3	1	1	1	1	4	8	7	2	72	10	11(
	Other	3	0	0	1	0	0	0	0	0	3	3	1(

Data used to generate agreement matrix (Figure 4b in the main text) is shown. The "gold standard" or correct response for raw EEG patterns was determined by the most common response or responses (if multiple patterns were equally selected) for each raw EEG image in the survey. The gold standard is shown in the first column in bold. The table shows the number of times each raw EEG pattern was chosen by the raters for the corresponding gold standard pattern. The final column shows the total number of responses for each gold standard pattern.

BS: burst suppression; Foc slow: focal slowing; Gen slow: generalized slowing; Gen supp: generalized suppression; GPD: generalized periodic discharge; GRDA: generalized rhythmic delta activity; LPD: lateralized periodic discharges; LRDA: lateralized rhythmic delta activity

4c)

		Rater responses								
		Sz/IIC	Seizure only	IIC only	Foc/gen slowing	BS	Gen Supp	Artifact	Other	**Total no of responses**
Gold Standard	**Solid Flames**	111	53	58	31	5	1	4	8	**160**
	Irregular Flames	85	1	84	71	6	13	34	11	**220**
	BB-Monotonous	114	5	109	69	0	0	17	10	**210**
	NB-Monotonous	63	0	63	114	14	61	3	5	**260**
	Strips	17	0	17	44	93	86	5	5	**250**
	Low Power	0	0	0	1	0	94	5	0	**100**
	Artifact	1	0	1	2	3	10	33	1	**50**

Data used to generate agreement matrix (Figure 4c in the main text) is shown. The "gold standard" or correct response for spectrogram patterns was determined by the most common response or responses (if multiple patterns were equally selected) for each spectrogram in the survey. The gold standard is shown in the first column in bold. The table shows the number of times each raw EEG pattern was chosen by the raters for the corresponding gold standard spectrogram pattern. The final column shows the total number of responses for each gold standard pattern.

BB: broadband; BS: burst suppression; Foc slow: focal slowing; Gen slow: generalized slowing; Gen supp: generalized suppression; GPD: generalized periodic discharge; GRDA: generalized rhythmic delta activity; IIC: Ictal-interictal; LPD: lateralized periodic discharges; LRDA: lateralized rhythmic delta activity; NB: narrowband; SZ: seizures

Fagan's nomogram
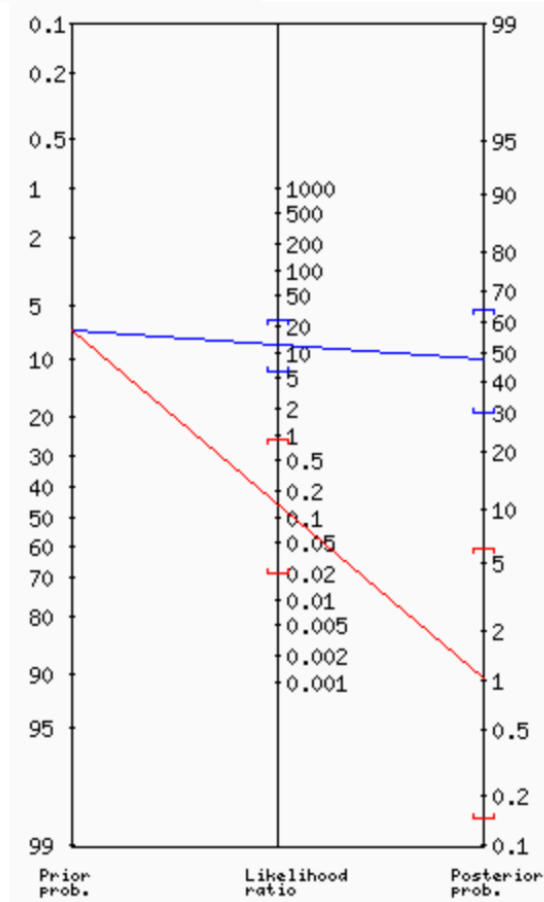
Prior probability (odds): 7% (0.1)

POSITIVE TEST:
    Positive Likelihood ratio: 12
        95% confidence interval: [5.72,24]
Posterior probability (odds): 47% (0.9)
        95% confidence interval: [30%,64%]
    (~ 1 in 2.1 with positive test are sick)

NEGATIVE TEST:
    Negative Likelihood ratio: 0.14
        95% confidence interval: [0.02,0.85]
Posterior probability (odds): 1% (0.0)
        95% confidence interval: [0%,6%]
    (~ 1 in 1.0 with negative test are well)

	Seizure +	Seizure -	
Solid flame +	7	8	15
Solid flame -	1	99	100
	8	107	115

The figure shows the Fagan's nomogram for computation of pre and post test probability. Solid flames had a sensitivity of 87.5 (7/8) and specificity of 92.5% (99/107) for the detection of seizures. The positive likelihood ratio (LR+) was 12 and the overall accuracy of solid flames for detection of seizures was 92.2%. The pre-test probability of seizures was 7% and post-test probability was 47%.