

Supporting Information Table S1

| | | Sampling rate (Hz) | Total number of electrodes | Number of electrodes with high-rate HFOs | | Number of electrodes in the resected area* | Resection ratio* (%) | Resected lobes* | Seizure outcome (ILAE) |
|------------|----|--------------------|----------------------------|--|------|--|----------------------|-----------------|------------------------|
| | | | | Ripples | FRs* | | | | |
| ES+ | 1 | 2000 | 116 | 12 | 12 | 90 | 78 | FTP | 5 |
| | 2 | 1000 | 120 | 7 | 4 | 42 | 35 | FTP | 6 |
| | 3 | 2000 | 85 | 28 | 19 | 66 | 78 | FTP | 1 |
| | 4 | 2000 | 110 | 16 | 39 | 94 | 85 | FTP | 1 |
| | 5 | 1000 | 96 | 17 | 6 | 59 | 61 | TPO | 1 |
| | 6 | 2000 | 100 | 4 | 21 | 39 | 39 | FTP | 5 |
| | 7 | 2000 | 109 | 46 | 32 | 74 | 68 | FTP | 1 |
| | 8 | 2000 | 88 | 26 | 27 | 44 | 50 | FTP | 1 |
| | 9 | 2000 | 118 | 28 | 23 | 77 | 65 | FTPO | 1 |
| | 10 | 2000 | 121 | 29 | 29 | 65 | 54 | FTO | 1 |
| | | | | | | | | | |
| ES- | 1 | 2000 | 112 | 13 | 3 | 44 | 39 | TP | 1 |
| | 2 | 2000 | 113 | 40 | 14 | 60 | 53 | TP | 1 |
| | 3 | 1000 | 109 | 7 | 3 | 49 | 45 | TPO | 4 |
| | 4 | 2000 | 101 | 34 | 9 | 57 | 56 | FTP | 1 |
| | 5 | 2000 | 93 | 11 | 9 | 35 | 38 | TPO | 4 |
| | 6 | 1000 | 120 | 13 | 2 | 61 | 51 | FTP | 1 |
| | 7 | 2000 | 102 | 7 | 4 | 38 | 37 | FTP | 4 |
| | 8 | 2000 | 95 | 5 | 3 | 34 | 36 | TPO | 1 |
| | 9 | 2000 | 113 | 30 | 11 | 26 | 23 | FTP | 1 |
| | 10 | 2000 | 72 | 2 | 40 | 58 | 81 | FTP | 1 |
| | 11 | 1000 | 113 | 33 | 24 | 47 | 42 | FT | 1 |
| | 12 | 2000 | 118 | 20 | 10 | 45 | 38 | TPO | 1 |
| | 13 | 2000 | 92 | 9 | 7 | 31 | 34 | FT | 1 |
| | 14 | 1000 | 120 | 3 | 2 | 47 | 39 | TO | 1 |

ES, Epileptic spasms; HFOs, high frequency oscillations; FRs, fast ripples; F, Frontal; T, Temporal; P, Parietal; O, Occipital; ILAE, International league against epilepsy; *p<0.05