

- Supplementary Table1. **Clinical details of RE, FCD and control patient's cohort**

| specimen | Gender | Age at onset (years) | Age at surgery (years) | Onset to surgery (years) | Number of AEDs before surgery | Histological diagnosis | MRI stage/MRI localization | Epilepsy Risk Factors   | Time at Follow-up |
|----------|--------|----------------------|------------------------|--------------------------|-------------------------------|------------------------|----------------------------|-------------------------|-------------------|
| 1        | F      | 3.8                  | 4.0                    | 0.2                      | 4                             | RE                     | 1/ Left hemisphere         | Head trauma             | 0.5               |
| 2        | M      | 6.3                  | 8.7                    | 2.4                      | 3                             | RE                     | 3 /Left hemisphere         | Jaundice after birth    | 2.0               |
| 3        | M      | 5.5                  | 7.7                    | 2.2                      | 3                             | RE                     | 3/Left hemisphere          | hand-foot-mouth disease | 2.0               |
| 4        | M      | 6.0                  | 7.4                    | 1.4                      | 6                             | RE                     | 2/Left hemisphere          | None                    | Loss              |
| 5        | M      | 6.0                  | 11.1                   | 5.1                      | 3                             | RE                     | 4/Left hemisphere          | None                    | Loss              |
| 6        | M      | 3.0                  | 5.7                    | 2.7                      | 6                             | RE                     | 3/Left hemisphere          | premature birth         | 0.5               |
| 7        | F      | 2.7                  | 3.9                    | 1.2                      | 3                             | RE                     | 2/Right hemisphere         | None                    | 2.0               |
| 8        | F      | 10.6                 | 13.6                   | 3.0                      | 3                             | RE                     | 3/Left hemisphere          | None                    | 2.0               |
| 9        | F      | 4.3                  | 5.1                    | 0.8                      | 1                             | RE                     | 1/Right hemisphere         | None                    | 3.0               |

|    |   |     |      |     |     |                              |                             |                    |      |
|----|---|-----|------|-----|-----|------------------------------|-----------------------------|--------------------|------|
| 10 | M | 0.1 | 1.2  | 1.1 | 1   | FCD II B                     | Right frontal               | None               | 1.0  |
| 11 | F | 8.1 | 8.9  | 0.8 | 1   | FCD II A                     | Right frontal               | None               | 2.0  |
| 12 | M | 0.1 | 6.8  | 6.7 | 2   | FCD II A                     | Right frontal               | None               | 2.0  |
| 13 | F | 5.5 | 7.0  | 1.5 | 1   | FCD II A                     | Right frontal               | None               | 2.5  |
| 14 | F | 3.7 | 4.8  | 1.1 | 5   | FCD II B                     | Right frontal               | Febrile convulsion | 2.0  |
| 15 | F | 11  | 15   | 4.0 | 5   | FCD I B                      | Negative                    | None               | 1.0  |
| 16 | M | N/A | 37.0 | N/A | N/A | Glioblastoma                 | Splenium of corpus callosum | None               | 1.0  |
| 17 | M | N/A | 43.0 | N/A | N/A | Anaplastic oligodendroglioma | Right fronto-temporal       | None               | Loss |
| 18 | F | N/A | 55.0 | N/A | N/A | Cavernous angioma            | Right saddle-side           | None               | Loss |

The magnetic resonance imaging (MRI) staging of RE refers to the staging proposed by Pradeep et al.<sup>[1]</sup> in 2014.

**Abbreviations:** RE, rasmussen encephalitis; FCD, focal cortical dysplasia; M, male; F, female.

[1] Pradeep K, Sinha S, Saini J, et al. Evolution of MRI changes in Rasmussen's encephalitis[J]. Acta Neurologica Scandinavica, 2014, 130(4): 253-259.