

Table S5. Detailed clinical features of the individuals with ZFH3 variants

Case	Variants (NM_006885.4)	Sex	Age	Onset age	Sz course	Sz-free duration	Effective AEDs	EEG	Brain MRI	Develo pment	Diagnosis
Case 1	c.314C>T/p.Pro105Leu c.2282G>C/p.Gly761Ala	M	juvenile	childhood	sGTCS, 1-2 times/yr	1 yr	LEV	Bilateral spike-slow waves with frontal dominance	Normal	Normal	PE
Case 2	c.2419G>A/p.Glu807Lys c.10853C>A/p.Pro3618Gln	F	childhood	childhood	sGTCS, 1-5 times/mo	1.5 yr	LTG	Right frontal-centro-temporal sharp-slow waves	Normal	Normal	PE
Case 3	c.2671T>C/p.Phe891Leu c.9583_9584insT/p.Pro3195LeufsTer44	M	childhood	toddler	CPS, 2-3 times/yr	1 yr	OXC	Spike-slow waves in bilateral frontal-central area with right dominance	Normal	Normal	PE
Case 4	c.2686G>A/p.Ala896Thr c.10439C>T/p.Ala3480Val	M	toddler	infant	Spasms, CPS >10 times/day	2 yr	LEV, LTG	Poly-spike-slow waves	Normal	GDD	DEE
Case 5	c.4125_4127del/p.Ala1376del c.10853C>A/p.Pro3618Gln	M	childhood	childhood	sGTCS, 3 times for 2 yrs; CPS, twice at for 1 yr	5 yr	OXC, VPA	Right temporal spike-slow waves	Normal	Normal	PE
Case 6	c.5152A>C/p.Met1718Leu c.10510G>C/p.Val3504Leu	M	childhood	toddler	Spasms 5-7 times/day for 4 mos; then CPS 0-10 times/day	9 yr	VPA, LEV, LTG	Right frontal spike-slow waves with tendency of generalization	Normal	GDD	DEE
Case 7	c.6161C>T/p.Ala2054Val c.10445G>T/p.Ser3482Ile	M	childhood	infant	FS, 3 times; sGTCS and CPS twice/week; NCSE 2-3 times for 1 yr	6 mo	VPA, PER, LEV	Left frontal, temporal, and occipital 1.5-2 Hz spike-slow waves; Diffused 1.5-2.5 Hz spike-slow waves	Normal	GDD	DEE
Case 8	c.10445G>T/p.Ser3482Ile c.10853C>A/p.Pro3618Gln	F	childhood	childhood	sGTCS, 2 times for 2 yr	1.5 yr	TPM	Bilateral occipital-temporal sharp-slow waves	Normal	Normal	PE

Abbreviations: AEDs, antiepileptic drugs; CPS, complex partial seizures; DEE, developmental epileptic encephalopathy; GDD, global developmental delay; EEG, electroencephalogram; FS, febrile seizures; LEV, levetiracetam; LTG, lamotrigine; NCSE, nonconvulsive status epilepticus; OXC, oxcarbazepine; PE, partial epilepsy; PER, perampanel; Sz, seizures; sGTCS, secondary generalized tonic-clonic seizures; TPM, topamax; VPA, valproate; mo, month; yr, year