**Table S1:** Summary of 10 reported *SCN1A* mutations.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Patient number | cDNA | Protein | Type of mutation | Inheritance | Previous report | ACMG-based classification | SIFT；Polyphen；Mutation taster |
| 1 | c.568T>C | p.Trp190Arg | Missense | De novo | DS1-3 | PAT | Damaging; Probably damaging; disease causing |
| 6 | c.1193C>T | p.Thr398Met | Missense | Maternal | IE4 | LP | Damaging; Probably damaging; disease causing |
| 7 | c.1277A>G | p.Tyr426Cys | Missense | De novo | DS2  Epilepsy5 | PAT | Damaging; Probably damaging; disease causing |
| 10 | c.2584C>T | p.Arg862Ter | Nonsense | De novo | GEFS+7  DS2, 8, 9 | PAT | -; -; - |
| 12 | c.2836C>T | p.Arg946Cys | Missense | De novo | DS2, 3, 8-11  Epilepsy5 | PAT | Deleterious; Probably damaging; disease causing |
| 14 | c.2959T>C | p.Phe987Leu | Missense | De novo | DS2 | PAT | Deleterious; Probably damaging; disease causing |
| 22 | c.4555C>A | p.Pro1519Thr | Missense | Paternal | DS13  Epilepsy5 | LP | Damaging; Probably damaging; disease causing |
| 24 | c.4762T>C | p.Cys1588Arg | Missense | NA | DS10, 14  EE15  Epilepsy5 | PAT | Deleterious; Probably damaging; disease causing |
| 25 | c.4853-1G>C | - | Splicing | Maternal | DS16  Epilepsy2 | PAT | ‘-; -; - |

ACMG: American College of Medical Genetics and Genomics; DS: Dravet syndrome; EE: epileptic encephalopathy; GEFS+: generalized epilepsy with febrile seizures plus; IE: intractable epilepsy; LP: likely pathogenic; NA: not available; PAT: pathogenic.

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